

POLICY RESPONSES TO TRANSNATIONAL WILDLIFE CRIME
IN THE ASIA-PACIFIC

PART 2: POLICY RESPONSES AT THE NATIONAL LEVEL
AND PRELIMINARY GAP ANALYSIS

DYLAN HORNE

TRANSNATIONAL ENVIRONMENTAL CRIME PROJECT

WORKING PAPER 2/2013

Published by

Transnational Environmental Crime Project
Department of International Relations
School of International, Political & Strategic Studies
ANU College of Asia and the Pacific
Australian National University
Canberra ACT 0200
Australia
Tel: +61 (2) 6125 2166
Fax: +61 (2) 6125 8010
Email: tec@anu.edu.au
Web: ips.cap.anu.edu.au/ir/tec

Series Editor Lorraine Elliott

April 2013

© Dylan Horne

Transnational Environmental Crime Project

The Transnational Environmental Crime (TEC) Project based in the Department of International Relations at the Australian National University is funded by the Australian Research Council under its Linkage Project scheme (LP110100642). The Regulatory Compliance Policy and Practice Section of the Australian Federal government Department of Sustainability, Environment, Water, Population, and Communities is a Partner Organisation.

The project investigates emerging trends in transnational environmental crime and examines the conditions for successful regulatory and enforcement responses. It focuses on three themes:

- advancing our understanding of the ways in which environmental commodities that are either sourced illegally or destined for illegal markets are traded and the ways in which profits are then laundered into the legal economy;
- applying conceptual tools to advance our understanding of the organisation of TEC and the asset structures that sustain illicit chains of custody and profit laundering; and
- mapping and analysing existing transnational and intergovernmental practices in the areas of policy-making, compliance and enforcement.

The Project is led by three Chief Investigators:

- Professor Lorraine Elliott, Department of International Relations, The Australian National University
- Professor Greg Rose, Faculty of Law, University of Wollongong
- Julie Ayling, Fellow, Regulatory Institutions Network, The Australian National University

The Project team also includes a Research Assistant and a PhD student funded by an Australian Postgraduate Award (Industry) scholarship and an ANU HDR Merit Scholarship. Five Partner Organisation Visiting Fellows will join the project team, based at the ANU, for a period of three months each to bring specific policy and operational expertise to the research project.

Working Papers

The TEC Project's Working Paper series provides access to the Project's current research and findings. Circulation of the manuscripts as Working Papers does not preclude their subsequent publication as journal articles or book chapters.

Unless otherwise stated, publications of the Transnational Environmental Crime Project and/or the Department of International Relations are presented without endorsement as contributions to the public record and debate. Authors are responsible for their own analysis and conclusions.

Abstract

Transnational Wildlife Crime (wildlife crime) involves the trading and smuggling across borders of species in violation of the Convention on International Trade in Endangered Species (CITES). Globally, governments and international organisations have responded to the challenges of transnational environmental crime (TEC) in both operational and policy contexts. The policy context is defined as the suite of documents, plans, programs, regulatory schemes, and strategies that provide for a coordinated, coherent response to, and support for, the fight against wildlife crime. Current knowledge of the aforementioned policy context is poor. This paper is the second of two research papers intended to provide a preliminary analysis of the current wildlife crime policy context and its effectiveness. This paper contains a summary of existing wildlife crime policy responses in six Asia-Pacific countries: Australia, Fiji, New Zealand, Papua New Guinea (PNG), Thailand and Vietnam. These national-level policy responses were determined through desktop investigation of freely-available online material. The policy responses were then compared to four potential optimal policy requirements (identified in Part 1, Horne 2013), and a preliminary assessment conducted on the degree to which the potential optimal requirements are met. A number of related observations were also made. It is difficult to conclude that existing policy responses fulfil the requirement of being proactive. Policy responses generally tend to satisfy the multifaceted requirement, particularly in those countries where the existing policy response is relatively well developed, although some areas for improvement may exist. Policy responses generally tend to satisfy the multilateral requirement in Australia, New Zealand, Thailand, and Vietnam, but not in Fiji or PNG. While it was not possible to evaluate fully whether existing policy responses fulfil the monitoring and evaluation requirement, it appears that it may be less than ideal. Some possible reasons for the perceived shortcomings include lack of technological capability and appropriate data collection, inappropriate measures of success, organisational culture, a lack of sufficient implementation of measures that specifically target criminals, and ineffective operation of networks at the officer level.

About the author

Dylan Horne is currently employed as a Senior Compliance Officer in the TEC project's partner organisation, the Department of Sustainability, Environment, Water, Population and Communities. Dr Horne's experience in this role has included policy development, and operational compliance and enforcement under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

ABBREVIATIONS

AELERT	Australasian Environmental Law Enforcement and Regulators Network
AFP	Australian Federal Police
ARREST	Asia's Regional Response to Endangered Species Trafficking
ASEAN-WEN	Association of Southeast Asian Nations Wildlife Enforcement Network
BLO	Border Liaison Offices
CITES	Convention on International Trade in Endangered Species
DEC	Department of Environment and Conservation, PNG
DOC	Department of Conservation, New Zealand
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities, Australia
EPBC	Environment Protection and Biodiversity Conservation
EPS	Endangered and Protected Species
FICMA	Fiji Island CITES Management Authority
FPD	Forest Protection Department, Vietnam
ICCWC	International Consortium on Combating Wildlife Crime
Interpol	International Police Organisation
LECP	Law Enforcement Cooperation Program
MoU	memoranda of understanding
MPI	Ministry for Primary Industries, New Zealand
NGO	non-governmental organisation
PATROL	Partnership Against Transnational Crime through Regional Organized Law Enforcement
PTCN	Pacific Transnational Crime Network
PTCCC	Pacific Transnational Crime Coordination Centre
TEC	transnational environmental crime
UN	United Nations
UNCAC	United Nations Convention Against Corruption
UNTOC	United Nations Convention Against Transnational Organized Crime
UNDCO	United Nations Office on Drugs and Crime
WEG	Wildlife Enforcement Group, New Zealand
WEN	Wildlife Enforcement Network

Policy responses to transnational wildlife crime in the Asia-Pacific

Part 2: Policy responses at the national level and preliminary gap analysis

DYLAN HORNE*

INTRODUCTION

Overview

Transnational Environmental Crime [TEC] involves the trading and smuggling across borders of species, resources and pollutants in violation of prohibition or regulatory regimes established by multilateral environmental agreements and/or in contravention of national law. TEC is argued to be one of the fastest growing areas of criminal activity, globally worth many billions of dollars to criminal syndicates around the world (Elliott 2011: 2).

Globally, governments and international organisations have responded to the challenges of TEC in both operational and policy contexts (Pink forthcoming). Pink considered the operational context by examining the issue of law enforcement responses as they relate to TEC. He focused on understanding the operational and policy challenges encountered by practitioners and managers within government regulatory and enforcement agencies and how this influences and impacts upon their ability to use law enforcement responses to combat TEC. Despite some consideration of the policy challenges, Pink's findings focused largely on the operational context. For example, while some of Pink's key national informants made reference to existing policy, no reference was made to specific policies, nor was there any assessment of what constitutes the 'TEC policy setting' or the relative strengths and weaknesses of particular policy approaches (Personal communication, Pink 2012). A more detailed analysis of the TEC policy setting would complement the work of Pink (forthcoming), and provide a more comprehensive understanding of existing transnational policy and operational law enforcement responses.

The policy setting is defined as the suite of documents, plans, programs, regulatory schemes, and strategies that provide for a coordinated, coherent response to, and support for, the fight against wildlife crime. Examples could include multilateral environmental agreements, regional strategies or plans, memoranda of understanding, or relevant formalised arrangements between countries or agencies (e.g., Environmental Agencies, Customs, and Police), programs funded or coordinated by governments to fight wildlife crime (e.g., relating to education or awareness-raising, and demand reduction), or agency-specific policy or procedure documents (e.g., relating to compliance and enforcement, information sharing or cooperation with other agencies, investigations, monitoring, and prevention of corruption), among others. The important role that policy plays in the fight against wildlife crime was summarized eloquently by one of Pink's (forthcoming) key international informants who referred to the 'arrow analogy'. In this analogy, the feathers are the science [providing direction], the shaft is the management, policy and the legislation development [providing rigour and strength], and the arrow head is the operational law enforcement response [providing impact and penetration]. In short, policy is the key step in translating knowledge about the problem into action of dealing with the problem. Policy is developed to address problems that already exist – problems that, in the absence of policy, are addressed in an ad hoc or uncoordinated manner. In this sense policy can be considered as a mechanism for providing a coherent, consistent, strategic approach to a particular problem, and ensuring that the expenditure of resources is both justifiable and yields the maximum benefit.

* Any views or opinions expressed in this paper are those of the author and not those of the Australian Government of Department of Sustainability, Environment, Water, Population and Communities.

Currently, there are ‘no academic studies that map, investigate and analyze the multiple examples of regulatory, compliance and enforcement structures and strategies that have been adopted in efforts to address TEC’ (Elliott 2011: 4). As such, existing knowledge of this ‘policy context’ is poor. Filling this knowledge gap would potentially provide many benefits to governments and organisations engaged in addressing TEC, including a base from which to assess and enhance policy outcomes. Along with Horne (2013), this working paper is a contribution towards filling this knowledge gap by providing a preliminary description and assessment of the policy setting around one commodity of TEC, wildlife smuggling.

Summary of Part 1

This paper is the second of two research papers intended to provide a preliminary analysis of the current wildlife crime policy context and its effectiveness in dealing with wildlife crime. The first paper (Horne 2013) provided a summary of the high-level (global and regional) policy context for the Asia-Pacific region as it applies to the six sample countries, and identified a potential set of ‘optimal’ requirements for wildlife crime policy at the national level based on existing literature. Policy at the global level is primarily derived from the Convention on International Trade in Endangered Species (CITES) and any subsequent resolutions or decisions, as well as resolutions from relevant United Nations (UN) bodies. Other multilateral agreements (e.g., on biological diversity or corruption) also play an indirect role. Arguably the most promising influence on wildlife crime policy at the global level was the formation in November 2010 of the International Consortium on Combating Wildlife Crime (ICWC), comprising the CITES Secretariat, the International Police Organisation (Interpol), the United Nations Office on Drugs and Crime (UNODC), the World Bank, and the World Customs Organisation. Policy at the regional level can be grouped under the headings of UN-led initiatives, Southeast Asian initiatives, and Pacific/Oceania initiatives, and consist of various programs, actions plans, cooperation agreements, and treaties. Policy responses at the national and agency levels include various strategies, plans, memoranda of understanding or relevant formalised arrangements between agencies, and programs funded or coordinated by governments to fight wildlife crime.

There are no standardised and/or accepted criteria for determining an optimal wildlife crime policy response. Possible elements of such a response, however, were determined by consolidating lessons from sources that present theories on best practice approaches to compliance and enforcement, that have discussed potential weaknesses and/or areas for improvement in current policy responses, or from novel policy responses that appear to have had some success in various settings. The potential requirements for such optimal policy are numerous, but can be broadly classified into four related categories: the optimal wildlife crime policy response must be (1) proactive and intelligence based, (2) multifaceted, addressing many aspects of the problem, (3) multilateral, involving cooperation between several actors, and (4) monitored, evaluated, and adapted as necessary.

Research objectives and scope of Part 2

The overall aim of this research was to examine and analyse existing policy responses to transnational wildlife crime (wildlife crime) for six countries in the Asia-Pacific region (Australia, Fiji, New Zealand, Papua New Guinea [PNG], Thailand, and Vietnam).

Part 2 had the following objectives:

- describe current wildlife crime policy responses at the national and agency levels in the six case study countries; and
- conduct a preliminary assessment of the degree to which current wildlife crime policy responses at the national and agency levels meets the potential requirements of an optimal policy response to identify strengths, weaknesses and areas for improvement.

The six countries were chosen because of a high-level commonality (CITES Category 1 legislation) combined with lower-level diversity (in terms of economic conditions and settings for wildlife crime) (Horne 2013). Descriptions of wildlife crime policy responses were undertaken using secondary data. It should be noted that, without understating the potential value of such an evaluation, it is not the intent of this paper to evaluate the degree to which policy is successful or has been effectively implemented (although it does appear that this may be less than ideal in some cases). The evaluation presented in this

paper is based primarily on fulfilment or otherwise of the potential requirements of an optimal policy response (Horne 2013).

NATIONAL AND AGENCY-LEVEL POLICY RESPONSES

The following sections summarise policy currently in place to address wildlife crime in each of the countries under study. Following the definition of policy outlined earlier, this includes various strategies or plans, memoranda of understanding or relevant formalised arrangements between agencies, and programs funded or coordinated by governments to fight wildlife crime (e.g., relating to education or awareness-raising, and demand reduction). Key multilateral agreements (Horne 2013) and the relevant milestone dates for each case study country are shown in Table 1. For the sake of enabling the identification of meaningful contrasts, the summary is restricted to those policy instruments that go beyond simply implementing a trade permit system, as this is common to all countries. The summary has generally also been restricted to policy currently being implemented. Because the summary has relied largely on documents available online, with some limited additional input from relevant contacts, it is possible that further information is available through direct contact with the agencies concerned.

Table 1 Key multilateral agreements

	CITES	UNCAC	UNCTOC
Australia	29 July 1976 ^r 27 October 1976 ^f	9 December 2003 ^s 7 December 2005 ^r	13 December 2000 ^s 27 May 2004 ^r
Fiji	30 September 1997 ^a 29 December 1997 ^f	14 May 2008 ^a	
New Zealand	10 May 1989a 8 August 1989f	10 December 2003 ^s	14 December 2000 ^s 19 July 2002 ^r
PNG	12 December 1975 ^a 11 March 1976 ^f	22 December 2004 ^s 16 July 2007 ^r	
Thailand	21 January 1983 ^r 21 April 1983 ^f	9 December 2003 ^s 1 March 2011 ^r	13 December 2000 ^s
Vietnam	21 January 1994 ^a 20 April 1994 ^f	10 December 2003 ^s 19 August 2009 ^r	13 December 2000 ^s 8 June 2012 ^r

Key

- ^a accession
- ^f in force
- ^r ratification
- ^s signature

UNCAC United Nations Convention Against Corruption

UNCTOC United Nations Convention Against Transnational Organized Crime

Australia

Australia first introduced laws to implement CITES in October 1976 and currently meets its obligations under the Convention through the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), administered by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC; CITES Management Authority). Other government agencies involved in conducting compliance and enforcement activities include the Australian Customs and Border Protection Service (Australian Customs) and, to a lesser extent, the Australian Quarantine and Inspection Service, the Australian Federal Police (AFP) and their state and territory counterparts. Although not commonly playing a large role in domestic enforcement, the AFP play a significant indirect role in capacity-building offshore. The relevant agencies cooperate through participation in a national Environmental Crimes Operations Group under the Australasian Environmental Law Enforcement and Regulators Network (AELERT, see below), as well as an Inter-departmental committee that meets on a 'needs' basis. Cooperation between the domestic enforcement agencies has been formalised by way of a memorandum of understanding (MoU) between DSEWPaC and

Australian Customs. The MoU essentially divides CITES investigation/enforcement responsibilities according to whether detection occurs at the border (responsibility of Australian Customs), or post-border (responsibility of DSEWPaC; see DSEWPaC 2010).

The approach taken by Australian Customs to the prevention, deterrence and detection of prohibited, harmful, and illegal goods entering Australia is broadly outlined in its *Australian Customs Annual Plan 2011-2012*. These include the application of risk assessment strategies to determine inspection priorities and ongoing capacity-building (Australian Customs 2010). Despite these measures, the priority of wildlife crime appears low compared to the range of other criminal activities and commodities. For example, illegally-smuggled wildlife or CITES requirements are not explicitly referred to in the plan and would appear to be included under the broader heading of ‘prohibited, restricted and regulated goods’ which itself includes other commodities that do warrant explicit mention (e.g., goods of counter proliferation concern, firearms and weapons, hazardous goods and consumer safety, and objectionable material; see Australian Customs 2011). Apart from enforcement, Australian Customs has undertaken limited awareness-raising programs including the production of a brochure on wildlife smuggling (Australian Customs 2007).

The compliance and enforcement approach taken by DSEWPaC to post-border violations of CITES requirements is broadly outlined in the *EPBC Act Compliance and Enforcement Policy* (DSEWPaC 2012). This policy suggests that the approach is primarily based on self-regulation and voluntary compliance, although investigations, compliance, or enforcement action can occur in cases where contraventions are detected. Reports to CITES suggest that DSEWPaC has increased its investigational capacity in an effort to tackle the issue of organised criminal networks involved in wildlife crime (DSEWPaC 2010). The policy also states DSEWPaC’s use of proactive compliance measures consisting of education, outreach and advice, and several such measures have been recently undertaken to target priority issues and audiences. Examples include targeted mail-outs of information to travel agents, Australian museums and art galleries, as well as holding information booths at various travel expositions. DSEWPaC specifically engaged with the Australian Acupuncture and Chinese Medicine Association in promoting the Endangered Species Certification Scheme. This scheme recognises efforts undertaken by traditional medicine practitioners and traders to protect endangered species – each certifying that products they use and sell do not contain parts or derivatives of protected or endangered wildlife. Beyond domestic measures, DSEWPaC has collaborated with New Zealand’s Department of Conservation to produce a series of brochures about CITES regulations. The brochures are being distributed to countries throughout the Oceania/Pacific region including Fiji, Palau, PNG, Samoa, Solomon Islands, and Tonga. Other policy responses by DSEWPaC include capacity-building programs for enforcement officers. For example, DSEWPaC has provided training, has developed or is developing matter-specific operational procedures (e.g. relating to the treatment of *Hoodia gordonii* – a succulent with medicinal properties, or to personal and household effects), and provides a 24-hour advice line for Australian Customs (DSEWPaC 2010; CITES 2012a). Finally, Australia (through DSEWPaC) is currently the chair of the Coalition Against Wildlife Trafficking, an advocacy group comprised of several governments and non-governmental organisations (NGOs) whose aim is to focus public and political attention and resources on ending wildlife crime. Australia assumed this role in May 2012 and will hold the position until 2014 (CITES 2012a).

While Australian Customs and DSEWPaC have primary responsibility for domestic enforcement, the AFP has contributed to addressing wildlife crime in the broader Pacific region through administering the Law Enforcement Cooperation Program (LECP). The LECP is aimed at assisting foreign law enforcement agencies in the Asia-Pacific region to deal with transnational crime, primarily through capacity-building projects. While the crime focus of the LECP has primarily been drugs and terrorism, the benefits could be expected to spill over into increased capacity to deal with wildlife crime. Some recent achievements include enhancement of the operational capability of a Transnational Crime Coordination Centre in Indonesia, assumed jointly between AFP International and the Indonesian National Police in July 2007; working with the Royal Thai Police to develop the Thai Transnational Crime Coordination Network; and providing funding, support, and assistance to the Thailand Transnational Crime Coordination Network and the Cambodian Transnational Crime Team, among others (AFP 2012). The AFP also sponsored the establishment of the Pacific Transnational Crime Network (PTCN) and the Pacific Transnational Crime Coordination Centre (PTCCC) (Horne 2013).

Regionally, Australia's policy response included establishing AELERT. AELERT is a network of environmental regulatory agencies from Australia and New Zealand that aims to build relationships between jurisdictions to facilitate the sharing of information and improving the regulatory compliance capacity of member agencies. Under AELERT, a national Environmental Crimes Operations Group has been formed to facilitate collaboration and consistency in approaches to managing compliance issues relating to environmental crime, including wildlife trade (AELERT 2012). Australia and Australian government officers also hold various positions in international fora. Australia is currently the CITES regional representative for Oceania. At the time of writing, a DSEWPAC officer holds the position as Vice Chair of Interpol's Environmental Crime Committee. Another DSEWPAC officer is Vice Chair of Interpol's Wildlife Crime Working Group, and yet another sits on the temporary international advisory board which will review the outcomes of the International Conference on Environmental Compliance and Enforcement and steer collective international efforts on environmental security (CITES 2011a).

Finally, other Australian policy responses relevant to wildlife crime include the development of an *Australian Public Service Code of Conduct*, which contains provisions that establish corruption as a serious misdemeanour, and the ratification of relevant treaties. Australia ratified UNCAC in December 2005 and UNCTOC in May 2004 (see Table 1).

Fiji

Fiji first introduced laws to implement CITES in December 1997 and currently meets its obligations under the Convention through the *Endangered and Protected Species Act 2002* (EPS Act), administered by the Department of Environment. Unlike any of the other case study countries where the CITES Management Authority is a government agency, the Fiji Island CITES Management Authority (FICMA) is comprised of a board that includes various government officials, as well as stakeholders (e.g., traders) and NGOs. Aside from FICMA, the government agencies involved in administering CITES legislation and conducting compliance and enforcement activities include the Department of Environment, Fiji Revenue and Customs Authority (Fiji Customs), Fiji Police Force, Fiji Navy, Forestry Department, and the Fisheries Department (CITES 2011a, 2012a). Cooperation between these agencies occurs through various meetings and training programs. While no evidence could be found indicating that agency relationships had been formalised (i.e., through an MoU or other mechanism), the establishment of MoUs between border control and enforcement authorities by 2012 was an objective of the *Implementation Framework 2010-2014 for the National Biodiversity Strategy and Action Plan 2007* (see below). Enforcement of CITES requirements and detection of wildlife crime in Fiji is primarily undertaken through inspections conducted by inspection units of Fiji Customs at the border. Inspections are based on risk profiles, although due to the volume of trade the units are only set up in the major ports of Suva and Lautoka, and Nadi Airport (Fiji Customs 2011). Domestically, FICMA also conducts inspections at stores (particularly aquarium companies) and handicraft centres. The latter, however, appears to occur relatively infrequently (e.g., during 2011, five visits were conducted which resulted in seven seizures) (CITES 2011a). To assist enforcement efforts, Fiji has conducted capacity-building programs for relevant government officers, including training on CITES enforcement and the development of a CITES guidance manual for enforcement officers. Other domestic initiatives include captive breeding programs and awareness-raising programs. The latter has included information on the implementation of the EPS Act targeting stakeholders and resource owners as well as the publication of posters for Humphead Wrasse (Varivoce), Turtle, Davui (Triton Shell), and for live rock and coral (CITES 2012a). Fiji has also benefitted from awareness-raising programs implemented by Australia and New Zealand.

There are indications that Fiji is taking steps to develop and improve its policy response. For example, Fiji's *National Biodiversity Strategy and Action Plan 2007* was developed in accordance with the Convention on Biological Diversity (Horne 2013) and is currently being implemented through the *Implementation Framework 2010-2014*. Although primarily aimed at biodiversity conservation, it does contain measures that would improve Fiji's capacity to address wildlife crime, including formalising the role of Fiji's CITES Scientific Council as an implementation working group. Beneath this, Strategy 2 of the framework aims to decrease the illegal trade of endangered and threatened species. Objectives to achieve this aim include formalising relationships/collaborations with border control and enforcement authorities through MoUs, empowering authorised officers in all relevant line ministries to enforce the EPS Act effectively, establishing administrative responsibilities and strengthening capacity within

relevant line ministries and authorities, and gazetting and training authorised officers under the EPS Act. A conservation-based and species-specific policy response in Fiji has been the enactment of a moratorium on turtle harvesting. The moratorium currently has effect until 2018 and provides for a FJS400 fine for any person who interferes with or trades in turtles of any species (Fiji Government 2012). The degree to which such measures can be considered a policy response to wildlife crime is heavily contingent on sound enforcement and some doubt has been expressed over this (Laveti and MacKay 2009). Regionally, Fiji has also taken steps towards addressing wildlife crime indirectly through a boarder policy response to transnational/organised crime. Fiji participates in the PTCN (Horne 2013) and hosted the PTCCC in Suva between May 2004 and November 2007. Fiji has also established three transnational crime units under a partnership arrangement with Police and Fiji Customs (Fiji Customs 2012; PTCN 2012).

Finally, Fiji acceded to UNCAC in May 2008 but has not yet ratified it (see Table 1). Despite this there are indications it is taking steps towards addressing corruption. For example, Fiji has established the Fiji Independent Commission Against Corruption, mandated to fight against corruption in the public sector of Fiji (FICAC 2012). Fiji is not a signatory to UNCTOC.

New Zealand

New Zealand first introduced laws to implement CITES in August 1989 and currently meets its obligations under the Convention through the *Trade in Endangered Species Act 1989*, administered by the Department of Conservation (DOC; CITES Management Authority). Other government agencies involved in conducting compliance and enforcement activities include the New Zealand Customs Service (NZ Customs) and the Ministry for Primary Industries (MPI), those two being primarily responsible for border control. The three agencies work together under terms established by various bilateral MoUs and strategies (e.g., between DOC/NZ Customs and DOC/MPI, or the *Border Sector Strategy 2008-2013* which broadly establishes the roles of NZ Customs and MPI in border enforcement), as well as regional and international networks (e.g., AELERT and Interpol Working Groups).

Most importantly, the three agencies also work in equal partnership under a Memoranda of Agreement establishing the Wildlife Enforcement Group (WEG). WEG is the primary body mandated to address wildlife crime in New Zealand. The three departments each have a defined role to play in the overall control of import, export or internal wildlife management, but collectively WEG works for all three departments. Information comes to WEG either through its own enquiries and/or informants, or from one of the three parent departments, New Zealand Police, or overseas wildlife law enforcement agencies. The intelligence is gathered and expanded to identify a *modus operandi* and to pinpoint future events or wildlife crime. Agreed protocols then decide which department is ultimately responsible for ensuring a result through prosecution or compliance. Liaison, coordination, resource, and intelligence sharing are at the forefront of their day-to-day operations (MPI 2007). WEG also cooperates with other countries through direct liaison, the Association of Southeast Asian Nations Wildlife Enforcement Network (ASEAN-WEN), and Interpol.

Aside from enforcement, WEG has undertaken domestic capacity-building programs including the development of implementation tools, improvement of national networks, and purchasing of technical equipment for monitoring/enforcement (NZ DOC 2010). Regional capacity-building efforts by WEG have included a series of workshops on prevention of illegal wildlife trade in the Pacific region with the aim of ensuring multi-agency participation in order to promote collaboration and communication among all government departments that work on CITES, wildlife, and border issues. WEG has also developed species identification and border control manuals for border agency representatives in 25 countries. Awareness-raising programs in New Zealand have included collaborating with the Australian DSEWPac to produce a series of brochures about CITES regulations for Pacific region countries, a Chinese language brochure on traditional medicines, and brochures for travellers about CITES laws (CITES 2011a, 2012a).

Finally, other New Zealand policy responses relevant to wildlife crime include the development of a *State Services Service Code of Conduct*, which contains provisions that establish corruption as a serious misdemeanour, and the ratification of relevant treaties. New Zealand has signed but not ratified UNCAC and ratified UNCTOC in July 2002 (see Table 1).

PNG

PNG introduced laws to implement CITES in March 1976 and currently meets its obligations under the Convention through the *International Trade (Fauna and Flora) Act 1979*, administered by the Department of Environment and Conservation (DEC; CITES Management Authority). Enforcement of CITES requirements and detection of wildlife crime is primarily undertaken through inspections conducted by the PNG Customs Service (PNG Customs) (CITES 2011a, 2012a) at the border. Despite both agencies playing a role in CITES implementation and enforcement, there is no evidence of a formalised relationship between DEC and PNG Customs, and DEC is not listed as a partner agency in the most recent PNG Customs Service Plan (PNG Customs 2012a). Circumstances in recent years mean it is likely that both agencies' capacity or priority to address wildlife crime is less than ideal. For example, following the 2009 establishment of PNG Customs as an individual agency, its role has been transitioning from primarily 'revenue collection' to 'active border protection' and it is still seeking to re-establish itself as a vibrant government agency (PNG Customs 2012a). Despite this ongoing transition, PNG Customs still make seizures, undertake investigations, and can subsequently refer cases to DEC (PNG Customs 2012b). Unfortunately, difficulties exist within DEC also. Funding for the CITES function in DEC has been significantly reduced over the last few years, and as well as a significant reduction in surveys related to its trade in CITES-listed crocodile skins, it is estimated that only two officers remain in the wildlife branch (CITES 2011a, 2012a). Perhaps not surprisingly therefore, CITES regulations appear to be minimally promoted or policed at present by DEC (Kinch and Burgess 2009). While constraints imposed by resource limitations and institutional change may mean that PNG's policy response to wildlife crime is limited at present, some external policy initiatives have contributed to its capacity to address wildlife crime. These include a training program on prevention of illegal wildlife trade under the auspices of the Oceania Customs Organisation Secretariat and supported by the Pacific Security Fund, and implementation of awareness-raising programs with the assistance of Australia and New Zealand (CITES 2011a, 2012a). Regionally, and as is the case in Fiji, PNG has taken steps towards addressing wildlife crime indirectly through a boarder policy response to transnational/organised crime: PNG participates in the PTCN (Horne 2013) and has established a Transnational Crime Unit (PTCN 2012).

Finally, PNG ratified UNCAC in July 2007 (see Table 1) and participates in the Community Coalition Against Corruption, a voluntary network of groups and individuals from corporate, government, and church groups that aims to engage the PNG community to promote good governance, leadership, and advocate messages of unity for PNG (Transparency International PNG 2012). PNG is not a signatory to UNCTOC.

Thailand

Thailand first introduced laws to implement CITES in April 1983 and currently meets its obligations under the Convention through two pieces of legislation: the *Wild Animal Reservation and Protection Act B.E. 2535* (1992) and the *Plant Act B.E. 2535* (1992). Five agencies play primary roles in administering CITES legislation and conducting compliance and enforcement activities: the National Park, Wildlife and Plant Conservation Department (CITES Management Authority for animal species); the Department of Agriculture (CITES Management Authority for plant species), Department of Fisheries (CITES Management Authority for marine species), Royal Thai Customs (Thai Customs), and the Royal Thai Police (Police). The latter two are primarily responsible for enforcement. NGOs also play a role in some circumstances (Chaweeapak, La-on and Khanha 2011).

In many cases, terms for cooperation between various authorities have been formalised by MoUs, particularly between CITES Management and other enforcement authorities, and networks and committee meetings also play a significant role. For example, Thailand has established a National CITES Committee comprised of representatives from the Ministry of Natural Resources and Environment, the Ministry of Agriculture and Cooperatives, the Ministry of Foreign Affairs, the Ministry of Commerce, the Department of Marine and Coastal Resources, the Royal Forest Department, Thai Customs, the Department of Livestock, the Police, and the Zoological Park Organization. It meets approximately twice a year (Thai CMAs 2010). The primary method of collaboration is the Thailand Wildlife Enforcement Network (WEN). The Thailand WEN is the national-level sub-network of the ASEAN-WEN (Horne 2013) and was established in 2007 to promote networking among relevant law enforcement agencies (e.g.

customs, police, quarantine, wildlife department, port/airport authorities, and CITES authorities) as well as to facilitate participation from local community and government to combat wildlife crime (CITES 2010a; 2011b). The network is championed as a platform for anti-poaching and enforcement teams to work together by sharing information on illegal trade issues and smuggling routes as well as joint operations (Chaweepak, La-ong and Khanha 2011). Enforcement efforts in Thailand are focused mainly on the international airport, port, and border lines, and 36 border control checkpoints have been established. Inspections conducted at these checkpoints are a major tool in Thailand's enforcement of CITES (Chaweepak, La-ong and Khanha 2011).

Much of the early work of Thailand WEN was directed at building capacity through the training of enforcement officers (Chaweepak, La-ong and Khanha 2011). Such programs included courses, workshops, and seminars conducted by both the Thai government as well as NGOs. Training programs remain regularly on the agenda of government officers (CITES 2011c). Notable examples conducted in 2011/2012 include a legal seminar on ivory and wildlife crime prosecution, wildlife trade regulation courses, a CITES virtual college for Thai Customs officers, a Thai enforcement ranger training course, a judiciary workshop on crime and prosecution, and a CITES' Elephant Trade Information System and ivory identification workshop (CITES 2011c, 2012b). Other domestic initiatives aimed at reducing wildlife crime in Thailand include the use of captive breeding programs to satisfy demand for wild specimens, the introduction of a sniffer dog program for Suvarnabumi Airport, the use of DNA testing on seized specimens to determine origin and assist investigations, offering incentives to local communities to assist in enforcement, habitat conservation, and the elimination of restaurants selling wildlife meat. Thailand also conducts extensive awareness-raising campaigns. Such campaigns have been both general and commodity-specific, targeting the public through media such as brochures, leaflets, and signage in locations that include airports, tourist spots, local markets, and hotels, as well as at wildlife check points. In particular, regular campaigns (which include a monitoring element) are conducted at Chatuchak open market in Bangkok, and a recent special campaign targeting illegal ivory trade ('Buy Ivory, Buy Trouble') occurred in 2010 at Suvarnabumi Airport (Thai CMAs 2010; CITES 2011c, 2012b).

An important national initiative was the adoption of the Thailand *National Wildlife Master Plan* in 2005. The master plan provides a framework for the systematic development of subordinate study plans and projects related to biology, population, and heredity of endangered species. Although it has been developed to address a wider range of issues than wildlife crime alone, some important components of the master plan are highly relevant. One is the 'Tiger Forever Project', launched in 2009 in conjunction with the Wildlife Conservation Society. Among other things, the Project includes measures for the introduction of a 'smart patrol' system for intervention and the establishment of a wildlife crime monitoring network (CITES 2010a), measures that have reportedly been successfully introduced along with wildlife crime units and wild meat restaurant database (CITES 2011c). In November 2010, the Thai Cabinet approved the 'Thailand Tiger Action Plan 2010-2022', intended to provide a long-term direction in tiger conservation and management for Thailand, including 'strengthening direct conservation action and enforcement' as one of its five themes (CITES 2011b).

Regionally, Thailand has played a major role in the Partnership Against Transnational Crime through Regional Organized Law Enforcement (PATROL) Program (Horne 2013) through the provision of funding for Border Liaison Offices (BLO). Thailand is one of the most significant contributors to the BLO mechanism, as indicated by the fact that it has the highest number of BLOs (18 in total), spread across the borders with Myanmar (5), Laos (8), and Cambodia (5) (UNODC 2010a). Thailand has also played a significant role in recent years in supporting other regional and international efforts to combat wildlife crime. Some recent high-profile examples include hosting major meetings and workshops including 'A Forgotten Crisis: Arresting Wildlife Depletion in Asia through Strengthened Regional Cooperation and Effective Partnerships', April 2009 in Pattaya; the 'First Asia Ministerial Conference on Tiger Conservation', January 2010 in Hua Hin (the declarations from these two were noted in Horne 2013); the 'Trans-Pacific Workshop on Combating Corruption and Illicit Trade', October 2011 in Phuket; the 'ICCWC Heads of Police and Customs Seminar on Tiger Crime', February 2012 in Bangkok; and the 23rd Interpol Wildlife Crime Working Group Meeting and 17th Pollution Crime Working Group, February 2012 in Bangkok. Thailand hosted the thirteenth meeting of the Conference of the Parties to CITES in 2004 and is set to host the sixteenth meeting of the Conference of the Parties to CITES in March 2013. Aside from hosting meetings, Thailand hosts the ASEAN-WEN base in Bangkok. Closer to

home Thailand has also fostered bilateral relations with neighbouring countries to improve the control of illegal trade. These include Laos, Indonesia, and Malaysia (CITES 2011c, 2012b).

Beyond policy specific to wildlife crime, Thailand has taken steps to address the issue of corruption. It ratified UNCAC on 1 March 2011 and has prepared a ‘National Anti Corruption Strategy’ to be implemented by the Office of the National Anti-Corruption Commission. This office is tasked to conduct investigation against public officers and employees regarding their declared assets and liabilities as well as unexplained or unusual wealth upon complaint filed against the erring officer (Thailand Law 2011). Finally, Thailand signed UNCTOC on 13 December 2000 but has yet to ratify it (see Table 1).

Vietnam

Vietnam first introduced laws to implement CITES in April 1994 and currently meets its obligations under the Convention through three legislative instruments relating to international wildlife trade and one for domestic wildlife exploitation and trade: Decree No.82/2006/NĐ-CP (relating to CITES requirements for international trade generally), Decree No.59/2005/NĐ-CP (relating to export of endangered aquatic species), Circular No.02/2006/TT-BTS (containing instructions on implementing No.59/2005/NĐ-CP), and Decree No. 32/2006/ND-CP (domestic exploitation and trade). In response to a booming illegal trade in rhino horn, Vietnam has also recently introduced stronger regulations regarding legally-imported hunting trophies from South Africa that require a CITES export permit from the country of origin, the hunting permit issued by the country of origin, a copy of the passport of the Vietnamese hunter to verify presence in the country where the rhino was hunted, and a residence certificate issued by the local police (Milliken and Shaw 2012). Several agencies play roles in administering CITES legislation and conducting compliance and enforcement activities, including the Forest Protection Department, Ministry of Agriculture and Rural Development (FPD; CITES Management Authority), Vietnam Customs, the Environmental Police and Economic Police (Ministry of Public Security), the Anti-Smuggling Department (General Department of Customs), the Market Control Authority, Forest Rangers, and the Border Army.

In many cases, terms for cooperation between various authorities have been formalised by MoUs, particularly between CITES Management authorities, Police, and NGOs, as well as through the establishment of various committees (e.g., the Inter-agency Executive Committee for Vietnam Wildlife Enforcement; CITES 2010b). As with Thailand, Vietnam has established a WEN under ASEAN-WEN. The Vietnam WEN seeks to strengthen the support and cooperation between relevant national, regional, and international authorities in response to wildlife crime. It is headed by the Vice Minister of Agriculture and Rural Development and is comprised of members representing the CITES Management Authority (Ministry of Agriculture and Rural Development), the Forest Protection Department, the Biodiversity Conservation Department, the Market Management Department, the Anti-Smuggling Investigation Department of Customs, the Environmental Police Department, the Rural-Agricultural Security Department, and the Drug Criminal Control Department of Vietnam's Defence Force (USAID 2010). Vietnam's policy response to wildlife crime includes the establishment of government bodies (e.g. a National Forest Crime Task Force and a Vietnam Standing Office on Drugs and Crime), as well as various strategies aimed at biodiversity conservation and wildlife crime (Ha et al. 2008). They include the ‘National Strategy for Environmental Protection until 2010 and Vision towards 2020’ (2003), the ‘National Action Plan on Strengthening Wildlife Trade Management by 2010’ (2004), the ‘Project on Conservation and Development of Non-timber forest products (NTFPs) for the period of 2006-2020’ (2006), the ‘National Action Plan on Biodiversity towards 2010 and Vision towards 2020’, the ‘Strategy of Forestry Development for the period of 2006-2020’ (2007), and the ‘Illegal Wildlife Trade Control Plan’ (developed by the CITES Management Authority) (Ha et al. 2008; CITES 2012b). In general, all of the action plans and strategies emphasize that wild animals and plants are national property that need to be protected and strictly managed in a sustainable way. The plans also assert the value of captive bred/artificially propagated wildlife as a way to meet market demand (Ha et al. 2008). More recently, since 2010, Vietnam has adopted the ‘National Tiger Recovery Program’, including measures to improve enforcement, communication between agencies, and implement demand reduction measures (Global Tiger Initiative 2010).

The various action plans and policy instruments have translated to a range of ‘on-the-ground’ measures to combat wildlife crime. As with Thailand, CITES enforcement primarily occurs through inspections

conducted at border crossings and ports. Other measures include the 2007 establishment by the FPD of a National Forest Crime Task Force with a roaming remit to investigate and settle forest crimes across the country. In addition, the FPD has established three regional offices (north, central, and south) with mobile units that will also have a roaming remit across their regions to investigate forest crimes (CITES 2010c). Reports also suggest that in recent years, Vietnam Customs has increased their efforts at detecting illegal wildlife entering Vietnam (ASEAN-WEN 2012). An example of a specific enforcement initiative was a two-year pilot project aimed at reducing illegal wildlife trade in the biodiversity-rich Central Annamites region of Vietnam, a hotspot for wildlife crime in the country. The project involved key government agencies such as the provincial Environmental Police and FPD and was supported by World Wide Fund for Nature and TRAFFIC International. The project targeted one major trade route known as the Hai Van pass, which creates a trade 'bottleneck' where enforcement efforts could be targeted, and reportedly had positive results (TRAFFIC 2011a).

To assist enforcement efforts, Vietnam conducts and participates in regular capacity-building programs for relevant government agencies. These have resulted in the development of a number of species and product identification guides for enforcement officers, and a bi-annual CITES implementation training course for about 80 custom officers (CITES 2010c, 2011c). Other domestic initiatives aimed at reducing wildlife crime in Vietnam include the use of captive breeding programs to satisfy demand for wild specimens, a recent genetic analysis of captive tigers to clarify their origin, offering rewards to local communities for intelligence information, and conducting awareness-raising campaigns (CITES 2011c, 2012b, TRAFFIC 2011b; ASEAN-WEN 2012). Awareness-raising campaigns have included press releases, conferences and presentations, newspaper articles, radio/television appearances, the distribution of brochures and leaflets, and the provision of information at border crossing points, and in some cases have been conducted in collaboration with NGOs (CITES 2010c, 2011c, 2012b).

Vietnam has also taken steps towards monitoring and evaluating its policy approaches. An international workshop aiming at establishing monitoring for the 'National Tiger Recovery Program' was held in August 2011, a monitoring program focusing on aquatic species was conducted in December 2011, and stock-checking against the status of legally-imported hunting trophy specimens was conducted in April and May 2012 (CITES 2012b). Regionally, Vietnam has played a role in the PATROL Program (Horne 2013) through the provision of funding for BLO. As of late 2010, Vietnam had established nine BLOs spread across the borders of Cambodia (3), Laos (4), and China (2) (UNODC 2010b). Beyond this enforcement initiative, Vietnam has fostered bilateral relations with several neighbours. MoUs have been established at the provincial and national levels on strengthening cross-border collaboration on wildlife trade control with Cambodia and Laos, and on biodiversity conservation (including measures to improve enforcement) with Indonesia. It is also in the process of establishing an MoU with South Africa on controlling legal import of rhino specimens in compliance to CITES regulations for anticipated signing in late 2012 (CITES 2010c, 2011c, 2012b; MARD 2010; ASEAN-WEN 2012).

In a similar fashion to Thailand, Vietnam has taken steps to address the issue of corruption. It ratified UNCAC in August 2009 and has initiated a government crackdown on corruption amongst public officials. As part of this crackdown Vietnam has signed a MoU with Thailand's National Anti-Corruption Commission. The MoU outlines plans for the two countries to share experiences and provide mutual assistance in the training of anti-corruption personnel (Vietnam News 2012). Vietnam also ratified UNCTOC in June 2012 (see Table 1).

PRELIMINARY ASSESSMENT AND DISCUSSION

It is clear that a vast array of policy responses to wildlife crime have been developed at the global, regional, national, and agency levels (Horne 2013). All this policy ultimately has the aim, articulated in one way or another, of reducing the proliferation of wildlife crime. The degree or not to which existing policy has succeeded in achieving its aim of reducing the proliferation of wildlife crime (i.e., the degree to which it has been effectively implemented) is a topic that could be discussed at length, and is not within the scope of this paper to consider in detail. In any case, the fact that wildlife crime continues to proliferate (Elliott 2011; CITES 2012b; Nowell 2012; Scanlon 2012) means it is reasonable to conclude that wildlife crime policy responses have had limited success in achieving their aim, and appropriate to pose questions as to why this might have been the case. The following discussion attempts to address such questions in a preliminary sense. It does this by considering the degree to

which existing policy responses at the national and agency levels might fulfil four potential requirements of an optimal policy response (Horne 2013) as well as presenting some observations on related issues (including, but not limited, to policy implementation). To briefly recap, the four potential requirements of an optimal wildlife crime policy response at the national level are that it must be (1) proactive and intelligence based, (2) multifaceted, addressing many aspects of the problem, (3) multilateral, involving cooperation between several actors, and (4) monitored, evaluated, and adapted as necessary (Horne 2013).

Some brief words on the scope of this discussion are necessary. First, the fact that the policy investigation was based on widely available online information means that in most cases the descriptions of the policy responses are very broad. This issue, combined with lack of knowledge regarding success or otherwise of policy *implementation* (as opposed to simply policy *existence*), means that it is difficult to translate the suite of responses into likely outcomes ‘on-the-ground’, and the discussion is therefore necessarily preliminary in nature. Nonetheless, several observations are possible. Second, it is recognised that governments may be taking actions that are not articulated in policy. In such cases it is possible that some of the requirements below are being fulfilled, but that no evidence is available to indicate this. It is likely that such an issue would become apparent to government officers upon reading this paper and may constitute an area for potential policy improvement.

Proactive and intelligence based

A proactive policy approach will be strategic and intelligence-based, seeking to address intractable problems that cannot be addressed in a reactive, case-by-case manner (Horne 2013). A range of policy measures could potentially address such a requirement in some way, and several such measures appear to have been implemented, particularly by individual agencies. The most promising example appears to be from the NZ WEG, who have publically stated that intelligence is gathered and expanded to identify a *modus operandi* and to pinpoint future events or wildlife crime (MPI 2007). Other examples include the use of risk-based interventions by Customs and other border control authorities (e.g., Australia and New Zealand, although it seems likely that some sort of risk-assessment strategy would be applied in most Customs operations; see World Customs Organisation 2012), the implementation of projects to improve intelligence-gathering (e.g., the introduction of a ‘smart patrol’ system for intervention and the establishment of a wildlife crime monitoring network in Thailand under the 2009 ‘Tiger Forever Project’), or the use of captive breeding programs as a way to satisfy demand for wild-sourced commodities (e.g., Thailand and Vietnam). Beyond enforcement, other proactive measures that have been undertaken to some extent in each country are awareness-raising campaigns targeting the public and relevant stakeholders. While these examples represent a move beyond reactive case-by-case enforcement, the degree to which they can be considered truly proactive (based on the description in Horne 2013) remains questionable, primarily due to a lack of evidence. For example, the Australian DSEWPac’s emphasis on awareness-raising and education as constituting its proactive approach (DSEWPac 2012) suggests possible room for improvement. While evidence of proactive approaches is also lacking for Fiji, PNG, Thailand, and Vietnam, a lack of technological capability in these countries may be a barrier to developing them.

A proactive response relies heavily on effective collection and analysis of intelligence to develop a strategic response (Horne 2013). It is difficult to envisage such a task being undertaken effectively in the absence of appropriate technological resources (e.g., databases and/or access to the internet). Unfortunately, access to/ability to use such resources in Fiji, PNG, Thailand, and Vietnam may be limited (DSEWPac 2010; UNODC 2010a, 2010b). For example, training needs assessments conducted in 2010 for a range of border control officers in Thailand and Vietnam revealed that among the officers from Thailand, the use of intelligence databases was identified as the most useful piece of equipment to conduct their daily activities on crime-detection. When asked about their perceived training needs, however, 75 per cent of respondents indicated that they had not received, or required more, computer training, and 90 per cent indicated that they had not received, or required more, transnational crime intelligence collection and analysis training (UNODC 2010a). The statistics are similar for Vietnam, with 90 per cent of officers indicating they had not received, or required more, computer training, and 88 per cent indicating they had not received, or required more, transnational crime intelligence collection and analysis training (UNODC 2010b). More generally, Thailand has reported that data on illegal trade is not monitored and reported (Thai CMAs 2010). In light of these statistics, it is difficult to envisage that

existing policy responses in these countries are capable of being proactive and intelligence-based as described in Horne (2013). Further evidence for such a claim may appear in the frequency of reports from border control officers in those countries on cases of wildlife trade –up to 85 per cent of Vietnamese officers had rarely or never observed wildlife trade across their border checkpoint, and in Thailand such cases were reported as occurring ‘rarely’ (UNODC 2010a, 2010b). Given that border checkpoints are a major tool against wildlife crime in those countries, such a statistic suggests that many wildlife crime cases may be undetected, and further that any proactive policy measures in place may be ineffective and/or not being implemented effectively.

While technological capability may indeed be a reason for a lack evidence of proactive approaches, the fact that this issue is far less important for Australia (CITES 2011a, 2012a) suggests other factors may be at play. Two potential candidates are current measures of success and organisational culture. First on current measures of success, it is possible that the use of seizure data for this purpose could facilitate reactive enforcement. In at least one case, seizure numbers have been directly stated as representing a ‘significant portion of wildlife crime’ (ASEAN-WEN 2012), and more generally many countries appear to use seizure numbers as evidence that they are implementing CITES successfully (CITES 2010c, 2012b). While such data indicates that enforcement agencies are doing *work*, it does not indicate that any such work is *successful* (i.e., is reducing the proliferation of wildlife crime). The reason for this is that without knowledge on the amount of actual crime that occurs (detected + undetected), it is impossible to know what proportion of illegal activity is prevented through enforcement activity. While it is recognised that obtaining such data may be very difficult, it is equally important to recognise that assuming ‘seizures = success’ could easily lead to a situation where enforcement managers believe their current approach is successful and therefore have little impetus to improve policy approaches proactively.

Second, the potential actor organisational culture involves issues related to the adoption of the ‘enforcement’ role by environmental regulatory agencies that have hitherto been policy and program focused (Horne 2013). For example, in Pink’s (forthcoming) interview with a key international informant, it was essentially suggested that public servants (which in the context of this discussion means ‘less experienced environmental regulators’) may tend to start from the status quo that ‘people do the right thing’, whereas police officers tend to start from the idea that ‘people do the wrong thing’. If the regulatory status quo of agencies addressing wildlife crime is ‘people do the right thing’, it may result in a situation where enforcement officers believe that ‘no cases’ means there is ‘no work to do’, or that ‘quiet periods’ indicate that ‘less crime is occurring’. In short, such a mindset may provide very little impetus to identify and address wildlife crime in a proactive way. It is possible that DSEWPac’s partiality towards self-regulation and voluntary compliance (DSEWPac 2012) represents a policy manifestation of this issue, and the Department’s reactive approach to environmental enforcement has been noted by other authors (Lipman 2010).

Multifaceted, addressing many aspects of the problem

A multifaceted policy response will employ a range of instruments that target different aspects of the problem and at different points in the supply chain (Horne 2013). Generally speaking, the requirement for multifaceted policy responses appears to be fulfilled in most case study countries, particularly Australia, New Zealand, Thailand, and Vietnam where policy responses are more developed. The different measures implemented by these four countries include awareness-raising programs (aiming to overcome lack of awareness of relevant laws), capacity-building programs (to improve the ability of enforcement officers to address wildlife crime), the development of government networks (to facilitate cooperation and information sharing), and targeting enforcement efforts at more than one point in the supply chain (primarily at borders, but also at the poaching source and markets). The policy responses in Fiji and PNG tend to contain fewer ‘facets’, possibly due to the perceived seriousness of wildlife crime in regional policy spheres or a lack of resources. It is promising to note that while Fiji, PNG, Thailand, and Vietnam have been rated as having relatively high levels of corruption in the public sector (Transparency International 2011), an issue that is known to contribute to the proliferation of wildlife crime (Horne 2013), all have implemented policy responses attempting to address it. This could be considered another facet of the overall policy response to wildlife crime.

While existing policy responses tend generally to fulfil the multifaceted requirement, comparison of what is currently being implemented with a broader list of potential approaches (Horne 2013) reveals that

existing policy responses have the potential to be more multifaceted and address a wider range of issues. Examples include the development and enhancement of informant networks (although there is some evidence that this is occurring in Thailand and Vietnam), the perception amongst law enforcement officers or the judiciary that wildlife crime is low-priority, having appropriate penalties for adequate deterrence, or the implementation of demand-reduction strategies (Vietnam's *National Tiger Recovery Program* would appear to contain the only reference to demand reduction in available policy documents). The absence of the latter is particularly concerning given the strong link between supply and demand of wildlife crime commodities (Horne 2013), although it is acknowledged that preliminary steps are being taken at the international (CITES 2012c) and regional (e.g. Asia's Regional Response to Endangered Species Networking [ARREST] program; Horne 2013) policy levels.

In developing a multifaceted wildlife crime policy, it should be recognised that different facets have different capacities to affect the behaviour of different actors. A policy facet common to most of the case study countries, for example, is awareness-raising programs. While such programs may be successful in preventing low-level CITES breaches due to lack of knowledge (e.g., tourists), they would have very little influence on criminals who operate with full knowledge of the illegality of their actions. The same can be said for reactive enforcement in general – it will have very little capacity to target organised criminal organisations who invest significant resources into concealment and illicit transit methods. Conceptually, the difference may arise between implementing a *trade* policy and implementing a *crime* policy, and as history has shown us simply implementing a trade policy (i.e., CITES) has not prevented the proliferation of wildlife crime (e.g., Elliott 2011; CITES 2012b; Nowell 2012; Scanlon 2012). One reason may be that the measures implemented thus far have had limited capability of affecting the behaviour of organised criminals. In the long run, the only way to do this may be to acknowledge that to truly implement a *crime* policy, nations must direct resources towards affecting the behaviour of *criminals*. In this context, the most important facets (i.e., those which have the biggest potential to affect the behaviour of the criminals) could be argued as strategies for demand reduction and proactive enforcement. Although measures to increase enforcement capacity are highly important, in the absence of an overarching proactive approach it is difficult to envisage them being successful. The importance of developing policy responses to target specific issues also highlights the importance of defining the problem in the most appropriate way, an issue also considered by Sparrow (2008). Descriptions of wildlife crime, particularly at the international and regional levels, that provide frameworks for national and agency level policy, have tended to be simply in terms of the existence of the problem and its impacts, while factors driving the problem (e.g., demand) have received less attention (ICCWC 2010; resolutions of various UN bodies described in Horne 2013). It is possible that at these higher levels, framing the 'problem' in terms of its drivers (e.g., stating that the 'problem' is the existence of demand, or of factors that encourage participation in wildlife crime, rather than wildlife crime and its impacts *per se*) would facilitate the development of more targeted policy responses at the national and agency levels. While this is occurring for some individual species (CITES 2012c), it could be applied in a much broader sense.

Finally, it is also important to recognise possible interactions between different policy facets, including the potential for conflict. For example, a common policy response to wildlife crime appears to be the establishment of captive breeding programs to satisfy market demand for wild-sourced products, particularly in Thailand and Vietnam. A similar issue exists regarding Vietnam's policy of allowing legal importation of rhino horn trophies (Milliken and Shaw 2012). It has been suggested by some that such policies actually serve to generate demand and in many cases facilitate 'laundering' of wild-caught specimens through the legitimate market (Nowell 2012; Milliken and Shaw 2012). Another example of potentially conflicting policy facets may be found in the conservation policy response of establishing reserves for endangered species (CITES 2010a, 2010c, 2011c). In the context of trying also to address wildlife crime, it is likely that success of such a policy would increase the amount of wild animals available to poach (WILD 2013), and in the absence of proportional increases to enforcement effort this may undermine efforts to reduce wildlife crime.

Multilateral involving cooperation between several actors

A multilateral policy response is one that provides for and encourages cooperation and collaboration between different nations, agencies, and actors. Across the six case study countries, this requirement is met in different ways. In terms of domestic cooperation, policy responses in Australia, New Zealand, Thailand, and Vietnam all contain formalised instruments in place to provide for collaboration between

various agencies who deal with wildlife crime, mainly in the form of MoUs or similar instruments. Furthermore, all of these countries have established various bodies, committees or networks to facilitate this interaction (i.e., AELERT, NZ WEG, Thailand WEN, and Vietnam WEN respectively). Such formalised agreements at this level of interaction do not appear to currently exist in Fiji or PNG. The level of cooperation is likely to be higher in Fiji, however, due to the fact that the Fiji Government was aiming to develop an MoU between relevant enforcement agencies by 2012, and also because the CITES Management authority is comprised of various officials and stakeholders (which in effect may achieve a similar outcome as a formal MoU). In terms of regional/international collaboration, the Southeast Asian countries do so through various formalised instruments (e.g., MoUs with neighbouring countries), bilateral meetings, regional multilateral networks (e.g., ASEAN-WEN) and programs (e.g., ARREST; Home 2013), as well as through other international networks. Regional/international collaboration in Australia/New Zealand includes participation in regional (e.g., AELERT) and international (e.g., the International Network for Environmental Compliance and Enforcement, and Interpol) networks, as well as providing capacity-building and awareness-raising to Pacific Island nations.

Despite an apparent abundance of policy that provides for and encourages cooperation and collaboration between different nations, agencies, and actors, there is evidence that the implementation and/or success of such policy may be less than ideal. In Vietnam, for example, border control officers have reported limited knowledge of which authority is responsible to determine the legality of wildlife, and also that such officers are not practiced in conducting regular meetings at district, cross-border, or national level (UNODC 2010b). A similar picture arose for officers in Thailand (UNODC 2010a). Furthermore, a questionnaire conducted at a 2012 meeting organised by ICCWC (which included participants from Thailand and Vietnam) indicated a general belief among participants that communication and inter-agency cooperation were one of the most significant challenges to effective enforcement (CITES 2012c). More generally, in recent reports provided to CITES, the improvement of national networks was rated as a high priority activity for Vietnam, and medium priority for New Zealand and Thailand (NZ DOC 2010; Thai CMAs 2010; MARD 2010). Clearly, therefore, the existence of policy that provides for and encourages cooperation and collaboration between different nations, agencies, and actors does not necessarily mean that effective collaboration will occur.

A possible reason for this is that measures to encourage collaboration (i.e., at the agency level) may not be appropriate for the level at which the collaboration commonly occurs (i.e., at the officer level). In the context of Australian law enforcement officers providing training to officers in the Pacific Islands, McLeod and Dinnen (2007) advocated the importance of developing strong person-to-person relationships. Such relationships are likely to be important in any situation where people with different backgrounds (e.g. officers from different agencies or countries) must cooperate to achieve a common goal. Evidence for the importance of relationships at the officer level is also found in descriptions of the way that inter-agency collaboration can occur *in the absence of* formalised arrangements (Schlegel 2000; Pink 2010). Such relationships are important to consider in the network context, because most of the collaborative policy measures in place across the case study countries appear to have effect at the agency level (e.g., MoUs between agencies or provincial offices, or participation in regional networks). While such measures may be successful in creating a network of *agencies*, the degree to which it creates a network of *officers* may be far less, because any officer wishing to participate in the agency network would likely have to navigate a certain degree of 'hierarchy' within their agency to do so. Overall, this may lead to either disconnection between the network and the officer, or introduce some of the purported drawbacks with hierarchical structures into the way the network functions. Either way, the consequence would be a reduced capacity for the network to operate as effectively as it otherwise might.

Monitored, evaluated, and adapted as necessary

The final potential requirement of an optimal wildlife crime policy response is that it must incorporate measures for ongoing monitoring and evaluation, and must be updated as necessary. Evaluating the degree to which existing policy responses meet this requirement is more difficult than the other requirements simply due to a lack of appropriate evidence. While there is little evidence to evaluate how the requirement is met *per se*, some observations are possible on the type of data collected by government agencies and legislative/enforcement/independent reviews. For example, in the most recent CITES biennial reports, parties provided basic information on the type of data monitored and

recent improvement programs. Australia, Thailand, and Vietnam (but not New Zealand) indicated that they had recently undertaken reviews or assessments of the effectiveness of CITES legislation and CITES-related enforcement. In Australia at least, these reviews appeared to translate into improvements in legislative effectiveness and compliance and enforcement planning and capability. Australia, New Zealand, and Vietnam (but not Thailand) indicated that illegal trade data was monitored and reported. Thailand and Vietnam have also indicated the existence or development of various commodity-specific monitoring programs (e.g., as part of Tiger conservation plans/strategies, aquatic species, or legally-imported hunting trophies). While this indicates that existing policy responses generally tend to incorporate some level of monitoring and/or evaluation, evidence also exists of potentially significant gaps. For example, there is reasonable evidence to conclude that Thailand and Vietnam's capacity to collect and analyse illegal trade data may be limited due to lack of technological capability to implement them. It has been noted that similar difficulties in accessing electronic resources are likely to be present in Fiji and PNG (DSEWPac 2010). In light of these difficulties, it is likely that the degree of monitoring and evaluation of policy approaches occurring in any of these countries is less than ideal. In Vietnam at least, such a conclusion is echoed in a recent trade policy review, which concluded that there is no mechanism for monitoring and evaluating the implementation of the various action plans and strategies that seek to address wildlife crime in some way (Ha et al. 2008).

CONCLUSION

The fact that wildlife crime continues to proliferate suggests that policy responses to this point have had limited success in preventing wildlife crime, and questions followed as to why this may be the case. The discussion attempted to address such questions in a preliminary sense by considering the degree to which existing policy responses at the national and agency levels fulfil the four broad requirements of an optimal policy response (proactive, multifaceted, multilateral, and monitored, evaluated, and adapted as necessary), as well as presenting some observations on related issues. The discussion revealed variation in the degree to which the four requirements are being met. Regarding the proactive requirement, it appears that there are some proactive elements in existing policy responses, particularly in individual agencies and countries with more resources and/or technological capacity. Overall, however, it is difficult to conclude that existing policy responses fulfil the requirement of being proactive. This is primarily due to a lack of evidence of proactive approaches, and likely related to a lack of technological capability in many countries. It is possible that inappropriate measures of success and agency culture also contribute to a lack of proactive approaches. Policy responses generally tend to satisfy the multifaceted requirement, particularly in those countries where the existing policy response is relatively developed (i.e., Australia, New Zealand, Thailand, and Vietnam). Despite this, it also appears that some relatively important facets are largely unaddressed at present and would be prime candidates for being incorporated into a wider multifaceted policy response. These include the development and enhancement of informant networks, the perception amongst law enforcement officers or the judiciary that wildlife crime is low-priority, appropriate penalties for adequate deterrence, or the implementation of demand-reduction strategies. Finally, in developing any multifaceted policy response it is essential to recognise that different facets have different capacities to affect the behaviour of different actors (i.e., not all are capable of targeting the 'criminals'), and also to consider potential conflicts between the various facets. Policy responses generally tend to satisfy the multilateral requirement in Australia, New Zealand, Thailand, and Vietnam. In Fiji and PNG this has not yet occurred, although Fiji appears to be taking steps towards it. Despite the amount of policy instruments that may provide for collaboration, there is evidence that the implementation and/or success of such policy may be less than ideal. A possible reason for this is that the various instruments tend to create networks of agencies rather than networks of officers, which impacts the ability of officers to participate as fully as they otherwise might. While it was not possible to evaluate fully whether existing policy responses fulfil the monitoring and evaluation requirement, it appears that it may be less than ideal. This is primarily due to a lack of technological capability or appropriate data collection in Fiji, PNG, Thailand, and Vietnam.

RECOMMENDATIONS AND FURTHER RESEARCH FROM THE TWO PAPERS

In light of the findings presented in this paper and Horne (2013), the following recommendations are possible:

- Agencies should undertake their own assessments of existing policy responses to determine the degree to which existing policy responses fulfil the four potential requirements identified in this paper, and identify possible areas for improvement.
- In order to improve fulfilment of the proactive requirement:
 - Governments should ensure that any existing lack of technological capability, particularly the capacity to collect and analyse data on illegal trade, is addressed as a priority in countries where wildlife crime is a major issue. This recommendation also applies to the ‘monitoring and evaluated’ requirement.
 - Agencies should assess the appropriateness of current measures of success and take steps to determine the degree to which seizure data reflects either the *amount of crime occurring* or simply *enforcement effort*.
 - Where appropriate, agencies should implement measures to develop a more critical mindset amongst environmental regulators to lessen their susceptibility to criminal deception.
- In order to improve the ‘multifaceted’ requirement:
 - Consider the use of more novel policy responses to wildlife crime on both the ‘offender’ and ‘government’ sides (Horne 2013). This is particularly warranted given that current responses have had limited success.
 - Recognise that different facets have different capacities to affect the behaviour of different actors and take steps to implement those facets that are more likely to target ‘criminals’, for example:
 - the development and enhancement of informant networks;
 - address the perception amongst law enforcement officers or the judiciary that wildlife crime is low-priority;
 - appropriate penalties for adequate deterrence; and
 - demand-reduction strategies.
 - Consider potential conflicts between the various facets and take steps to minimise any impact.
- In order to improve the ‘multilateral’ requirement:
 - Take steps to ensure that existing networks are accessible to, and function at the level of, individual officers as well as agencies.
- In order to improve the ‘monitored and evaluated requirement:
 - See above (proactive).

In light of the findings presented in this paper and Horne (2013), possible avenues for further research include:

- Conducting further literature review to identify a more comprehensive list of potential requirements for an optimal policy response.
- Undertaking a more thorough assessment of existing policy responses at the national and agency levels through the use of semi-structured interviews. This would ensure that any ‘gaps’ in the data are minimised and would enable a more thorough assessment of the degree to which existing policy responses meet the potential optimal requirements.
- Assessing any possible gaps between existence of policy and its implementation. Anecdotal evidence during the course of the research suggests that a significant gap may exist in many cases.

REFERENCES

- AELERT (Australasian Environmental Law Enforcement and Regulators Network) 2012, 'Operations Cluster – Projects and Resources', AELERT, aelert.net/?page_id=427 (accessed 30 October 2012).
- AFP (Australian Federal Police), 2012, 'Law Enforcement Cooperation Program', www.afp.gov.au/policing/international-liaison/law-enforcement-cooperation-program.aspx (accessed 26 October 2012).
- ASEAN-WEN (Association of Southeast Asian Nations Wildlife Enforcement Network), 2012, 'Viet Nam CITES MA Response to WWF Report on Wildlife Crime Scorecard', 30 July, www.asean-wen.org/index.php?option=com_content&view=article&id=312:viet-nam-cites-ma-response-to-wwf-report-on-wildlife-crime-scorecard&catid=45:press-releases&Itemid=89 (accessed 26 October 2012).
- Australian Customs 2007, 'Wildlife Smuggling', April, www.customs.gov.au/webdata/resources/files/wildlife_smuggling_fact_sheet.pdf (accessed 7 March 2013)..
- 2010, *Annual Report 2009–10* (Canberra: Australian Customs and Border Protection Service, October).
- 2011, *Annual Plan 2011–2012* (Canberra: Australian Customs and Border Protection Service).
- Chawepak, S., La-ong, S. and Khanha, N., 2011, 'Country Report of Thailand for CITES Asian Snake Trade workshop', Guangzhou, China, 11–14 April.
- CITES (Convention on International Trade in Endangered Species), 2010a, *Conservation of and Trade in Tigers and Other Appendix-1 Asian Big Cat Species, (Thailand)*, CoP15 Inf. 4 Annex, Official document of the 15th meeting of the Conference of the Parties (CoP15), Doha, 13–25 March.
- 2010b, *Rhino Horn Trade Management in Viet Nam, Including Legally Acquired Horns From Trophy Hunting*, CoP15 Doc. 62, Official document of the 15th meeting of the Conference of the Parties (CoP), Doha, 13–25 March.
- 2010c, *Conservation of and Trade in Tigers and Other Appendix-1 Asian Big Cat Species (Viet Nam)*, CoP15 Inf. 7 Annex, Official document of the 15th meeting of the Conference of the Parties (CoP15), Doha, 13–25 March.
- 2011a, *Reports of Regional Representatives: Oceania*, SC61 Doc. 56.6, Official document of the 61st meeting of the Standing Committee, Geneva, 15–19 August.
- 2011b, *Conservation of and Trade in Tigers and other Appendix-1 Asian Big Cat Species (Thailand)*, SC61 Doc. 41 Annex 3, Official document of the 61st meeting of the CITES Standing Committee, Geneva, 15–19 August.
- 2011c, *Reports of Regional Representatives: Asia*, SC61 Doc. 56.2 (Rev. 1), Official document of the 61st meeting of the Standing Committee, Geneva, 15–19 August.
- 2012a, *Reports of Regional Representatives: Oceania*, SC62 Doc. 55.6, Official document of the 62nd meeting of the Standing Committee, Geneva, 23–27 July.
- 2012b, *Reports of Regional Representatives: Asia*, SC62 Doc. 55.2 (Rev. 1), Official document of the 62nd meeting of the Standing Committee, Geneva, 23–27 July.
- 2012c, *Note and Conclusions of the Rhino Working Group Meeting*, SC62 Inf. 13, Official document of the 62nd meeting of the Standing Committee, Geneva, 23–27 July.
- DSEWPac (Department of Sustainability, Environment, Water, Population and Communities), 2010, *Biennial report* submitted pursuant to Resolution Conf. 11.17 (Rev. CoP14) on *National reports*. Department of Sustainability, Environment, Water, Population and Communities.
- 2012, *EPBC Act Compliance and Enforcement Policy*, Department of Sustainability, Environment, Water, Population and Communities.
- Elliott, L., 2011, 'Transnational Environmental Crime: Applying Network Theory to an Investigation of Illegal Trade, Criminal Activity and Law Enforcement Responses', Transnational Environmental Crime Project Working Paper 1/2011 (Canberra: Department of International Relations, Australian National University).
- FICAC (Fiji Independent Commission Against Corruption), 2012, 'Mission Statement', www.ficac.org.fj/index.php?option=com_content&view=article&id=68&Itemid=157 (accessed 26 October 2012).
- Fiji Customs 2011, *Annual Report*. Fiji Islands Revenue and Customs Authority, August.
- 2012, 'Fiji Revenue and Customs Authority', www.frca.org.fj/docs/firca/firca-risk_compliance%20-%20Customs.htm (accessed 30 October 2012).

- Fiji Government, 2012, 'Turtle Recovery Workshop to Address Turtle Migration', www.fiji.gov.fj/index.php?option=com_content&view=article&id=6446:turtle-recovery-workshop-to-address-turtle-migration&catid=71:press-releases&Itemid=155 (accessed 15 October 2012).
- Global Tiger Initiative, 2010, *National Tiger Recovery Program – Viet Nam* (Global Tiger Initiative, June).
- Ha, N. M., Dung, V. V., Song, N. V., Thang, H. V., Dung, N. H., Tuan, P. N., Hoa, T. T. and Canh, D. 2008, 'Report on the Review of Vietnam's Wildlife Trade Policy' (Hanoi: CITES Authorities of Vietnam).
- Horne, D. 2013, 'Policy Responses to Transnational Wildlife Crime in the Asia-Pacific Region, Part 1: Global and Regional Policy Context and a Potential Framework for Optimal National Policy', Transnational Environmental Crime Project Working Paper 1/2013 (Canberra: Department of International Relations Australian National University).
- ICCWC (International Consortium on Combating Wildlife Crime), 2010, 'Letter of Understanding Establishing the International Consortium on Combating Wildlife Crime', Signed at the International Tiger Forum, Saint Petersburg, November.
- Laveti, M. and MacKay, K.T., 2009, 'Does Fiji's Turtle Moratorium Work?' *Marine Turtle Newsletter*, 123: 12–15.
- Kinch, J. and Burgess, E.A., 2009, 'An Assessment of the Trade in Hawksbill Turtles in Papua New Guinea', *Traffic Bulletin*, 22(2): 62–72.
- Lipman, Z., 2010, 'An Evaluation of Compliance and Enforcement Mechanisms in the Environment Protection and Biodiversity Conservation Act 1999 (Cth) and Their Application by the Commonwealth', *Environmental and Planning Law Journal*, 27(2): 98–112.
- MARD (Ministry of Agriculture and Rural Development), 2010, 'Biennial Report', Submitted Pursuant to Resolution Conf. 11.17 (Rev. CoP14) on National Reports, Ministry of Agriculture and Rural Development.
- McLeod, A. and Dinnen, S., 2007, 'Police Building in the Southwest Pacific – New Directions in Australian Regional Policing', in A. Goldsmith and J. Sheptycki, eds, *Crafting Transnational Policing: Police Capacity-Building and Global Policing Reform* (Portland: Hart), pp. 295–328.
- Milliken, T. and Shaw, J., 2012, *The South Africa–Viet Nam Rhino Horn Trade Nexus: A Deadly Combination of Institutional Lapses, Corrupt Wildlife Industry Professionals and Asian Crime Syndicates* (Johannesburg: TRAFFIC).
- MPI (Ministry for Primary Industries), 2007, 'Multi-agency Effort to Catch Wildlife Criminals', New Zealand Ministry for Primary Industries, *Biosecurity Magazine*, 74, 15 March, www.biosecurity.govt.nz/publications/biosecurity-magazine/issue-74 (accessed 30 October 2012).
- Nowell, K., 2012, *Wildlife Crime Scorecard: Assessing Compliance with and Enforcement of CITES Commitments for Tigers, Rhinos and Elephants* (World Wildlife Fund).
- NZ DOC (New Zealand Department of Conservation), 2010, 'Biennial Report', Submitted Pursuant to Resolution Conf. 11.17 (Rev. CoP14) on National Reports, New Zealand Department of Conservation.
- Pink, G., 2010, 'Environmental Enforcement Networks: A Qualitative Analysis', 7 December, ssrn.com/abstract=1803179 (accessed 14 December 2012).
- forthcoming, 'Law Enforcement Responses to Transnational Environmental Crime', Transnational Environmental Crime Working Paper **NO?** (Canberra: Department of International Relations, Australian National University).
- PNG Customs, 2012a, *Customs Service Plan 2010–2012* (Post Moresby: Papua New Guinea Customs Service).
- 2012b, 'Customs Detect and Prevent Birds and Corals From Being Smuggled', www.customs.gov.pg/02_what_is_happening/09_PNG_Customs_prevent_bird_smuggling.php (accessed 15 October 2012).
- PTCN (Pacific Transnational Crime Network), 2012, Pacific Transnational Crime Network, www.ptcn.ws/ (accessed 16 October 2012).
- Scanlon, J.E., 2012, 'Ivory and Insecurity: The Global Implications of Poaching in Africa', written testimony of John E. Scanlon, Secretary-General of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) 24 May, Washington, DC.
- Schlegel, K., 2000, 'Transnational Crime: Implications for Local Law Enforcement', *Journal of Contemporary Criminal Justice*, 16(4): 365–85.

- Sparrow, M., 2008, *The Character of Harms: Operational Challenges in Control* (New York: Cambridge University Press).
- Thai CMAs (Thai CITES Management Authorities), 2010, 'Biennial report', Submitted Pursuant to Resolution Conf. 11.17 (Rev. CoP14) on National Reports, CITES Management Authorities of Thailand.
- Thailand Law, 2011, 'Anti-Corruption Legislation', www.thailandlaw.org/anti-corruption-legislation-thailand/ (accessed 12 October 2012).
- Transparency International, 2011, 'Corruption Perceptions Index 2011', www.transparency.org/cpi2011/results (accessed 7 March 2013).
- Transparency International PNG, 2012, 'Community Coalition Against Corruption', www.transparencypng.org.pg/index.php/coalitions/community-coalition-against-corruption (accessed 7 March 2013).
- TRAFFIC, 2011a, 'Targeting Bottleneck Proves Effective in Curbing Illicit Trade', 29 June, www.traffic.org/home/2011/6/29/targeting-bottleneck-proves-effective-in-curbing-illicit-tra.html (accessed 12 October 2012).
- 2011b, 'Wildlife Law Enforcers Build Skills to Combat Illegal Wildlife Trade', 21–23 February, www.traffic.org/home/2011/2/21/wildlife-law-enforcers-build-skills-to-combat-illegal-wildli.html (accessed 29 October 2012).
- UNODC (United Nations Office on Drugs and Crime), 2010a, 'Baseline Survey and Training Needs Assessment in Thailand', Partnership against Transnational Crime through Regional Organized Law Enforcement (PATROL) (Bangkok: UNODC, 17-21 December).
- 2010b, 'Baseline Survey and Training Needs Assessment In Viet Nam', Partnership against Transnational Crime through Regional Organized Law Enforcement (PATROL) (Bangkok: UNODC, 17-19 August).
- USAID 2010, Vietnam Launches Wildlife Enforcement Network to Support Regional Fight Against Wildlife Crime', 31 August, vietnam.usaid.gov/?q=node/229 (accessed 12 October 2012).
- 2011, 'LMI: Asia's Regional Response to Endangered Species Trafficking (ARREST)', Fact Sheet, October.
- Vietnam News, 2012, 'Government to Continue Anti-Corruption Crackdown', 22 September, vietnamnews.vnagency.com.vn/politics-laws/230463/government-to-continue-anti-corruption-crackdown.html (accessed 12 October 2012).
- World Customs Organisation, 2012, 'Enforcement and Compliance: Overview: What is Customs Enforcement and Compliance?' www.wcoomd.org/en/topics/enforcement-and-compliance/overview.aspx (accessed 24 October 2012).