



Asia-Pacific  
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# Emergency Response Travel Facilitation for Personnel, Goods and Equipment in Times of Crisis



A Stocktaking Study prepared for the  
APEC Emergency Preparedness Working Group



**Asia-Pacific  
Economic Cooperation**

Prepared for

**Asia-Pacific Economic Cooperation Secretariat**

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## Acronyms

AADMER	ASEAN Agreement on Disaster Management and Emergency Response
ABAC	APEC Business Advisory Council
ABTC	APEC Business Travel Card
ADInet	ASEAN Disaster Information Network
AEO	Authorized Economic Operator
AHA	ASEAN (Coordinating Center for) Humanitarian Assistance (on Disaster Management)
AIPA	ASEAN Inter-Parliamentary Assembly
APEC	Asia-Pacific Economic Cooperation
ARDEX	ASEAN regional disaster emergency response simulation exercises
ARF	ASEAN Regional Forum
ASEAN	Association of Southeast Asian Nations
ASGARD	(Europe's cloud-based alert-deployment tool)
ATA	(Also A.T.A) Admission Temporaire/Temporary Admission
BMG	Business Mobility Group (APEC)
BOI	Board of Investment
BR CCP	Business Resumption Communication and Coordination Plan
BSEC	Black Sea Economic Cooperation
CAPRADE	Comité Andino para la Prevención y Atención de Desastres (Andean Committee for Disaster Prevention and Response)
CAUSE	Canada-U.S. Enhanced Resiliency Experiment
CBP	Customs and Border Protection
CBSA	Canada Border Services Agency
CCC	Customs Co-operation Council
CIS	Commonwealth of Independent States
CONOPS	Concept of Operations
CSO	Civil Society Organizations
CSR	Corporate Social Responsibility
CTI	Committee on Trade and Investment (APEC)
DHL	(Private Sector: International logistics and delivery company)
DHS	Department of Homeland Security (U.S.)
DMRS	Disaster Monitoring and Response System
DOS	Department of State
DPM	Disaster Prevention and Mitigation (Act)
DRT	Disaster Response Team
EAPC	Euro-Atlantic Partnership Council
EDSA	Abenida Epifanio de los Santos

EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPWG	Emergency Preparedness Working Group
ERTF	Emergency Response Travel Facilitation
FEMA	Federal Emergency Management Agency
FERP	Federal Emergency Response Plan (Canada)
GARD	Get Airports Ready for Disaster
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
HA/DR	Humanitarian assistance and disaster relief
I/NGO	Intergovernmental and Nongovernmental Organizations
IAEA	International Atomic Energy Agency
IAS	International Assistance System
ICA	Immigration and Checkpoints Authority
ICSA	International Coordination Support Annex
IDRL	International Disaster Response Laws
IFRC	International Federation of Red Cross and Red Crescent Societies
IHAN	International Humanitarian Assistance Network
IMF	International Monetary Fund
INSARAG	International Search and Rescue Advisory Group
INSEAD	(formerly Institut Européen d'Administration des Affaires)
INZ	Immigration New Zealand
IPAWS	Integrated Public Alert and Warning System
IPU	Inter-Parliamentary Union
IT	Information Technology
JRERP	Joint Radiological Emergency Response Plan
LET	Logistics Emergency Team
MASAS	Multi-Agency Situational Awareness System
MOU	Memorandum of Understanding
MRA	Mutual Recognition Arrangement
NATO	North Atlantic Treaty Organization
NDCC	National Disaster Coordinating Council (Philippines)
NDMA	National Disaster Management Agency
NEXUS	(a Canada-U.S. border crossing program for frequent travelers)
NGO	Non-Governmental Organization(s)
NRF	National Response Framework
NVOAD	National Voluntary Organizations Active in Disaster

NZCS	New Zealand Customs Service
OCD	Office of Civil Defense
OCHA	Office for the Coordination of Humanitarian Affairs (United Nations)
OFDA	Office of Foreign Disaster Assistance
OSS	One-Stop-Shop
PDC	Pacific Disaster Center
PNEMA	Pacific Northwest Emergency Management Arrangement
PNG	Papua New Guinea
PNRC	Philippines National Red Cross
PNWBHA	Pacific North West Border Health Alliance
PS	Public Safety (Canadian Department of)
SASOP	Standard Operating Procedure for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response
SCCP	Sub-Committee on Customs and Procedures
SCEPC	Senior Civil Emergency Planning Committee
SCO	Shanghai Cooperation Organization
SEZ	Special Economic Zones
TATF	Technical Assistance and Training Facility
TFAP	Travel Facilitation Initiative and Action Plan
THB	Thai Baht
TICA	Department of Technical and Economic Operation (Thailand)
U.N.	United Nations
U.S.	United States (of America)
UH	University of Hawaii
UK	United Kingdom
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNITAR	United Nations Institute for Training and Research
UPS	(Private Sector International logistics and delivery company)
USAID	United States Agency for International Development
USAR	Urban Search and Rescue
USD	U.S. Dollars
USG	U.S. Government
WCO	World Customs Organization
WFP	World Food Programme
WTO	World Trade Organization



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## Executive Summary

In response to an increasing number of massive natural disasters around the world, and in particular in the Asia Pacific Region, APEC and other domestic and international bodies have launched a number of initiatives to better prepare for future events. In a large-scale crisis, even the most prepared and resourceful economy might find it necessary to solicit relief assistance from its international partners to urgently save human lives, assets, and the affected environment. Yet, few economies have put in place comprehensive sets of laws and regular practices to deal with the cross-border needs associated with potential disasters.

Among all the preparatory actions that are critically needed to effectively manage international disaster relief and initial recovery assistance in the aftermath of a large-scale disaster, entry facilitation of foreign responders, as well as goods and equipment appears to be one of the most challenging efforts. This critical task involves all possible aspects of disaster management and relief, including immigration and customs, professional certification and temporary recognition, safety and security of the responders and the affected people, resource allocation and distribution between domestic and international partners.

The objective of this report is twofold: 1) to understand current policies and procedures affecting the cross-border movement of emergency personnel and disaster goods and equipment within APEC economies, and 2) to identify best practices that can be used to help formulate policy recommendations to effectively deal with the international movement of emergency responders and disaster goods and equipment.

### Findings

As expected, all APEC economies have institutionalized a crisis management process that includes provisions for dealing with the entry of foreign crisis responders, relief goods and equipment. Most economies recognize that ad hoc procedures inevitably lead to bureaucratic bottlenecks, operational confusion when dealing with international assistance, and delays in rescue and recovery operations. As such, the survey confirms APEC's commitment at all levels to achieve domestic, regional, and international readiness to facilitate entry of foreign crisis responders and supplies.

Survey results also indicate significant progress in the level of awareness among various governmental agencies of the need to establish a coordinated effort in dealing with conceptual challenges and practical issues of entry facilitation. The existence of a special taskforce on entry facilitation would help materialize and speed up this effort.

A wide range of variation in the levels of preparedness and readiness among APEC economies was identified in the survey results. This process of facilitating entry for disaster personnel and goods is particularly difficult to approach for the economies that, very fortunately, have not experienced major disasters demanding international assistance in the recent past. However, when international help is requested, all economies are involved, serving as recipients or providers of assistance, or as transit points.

As evidenced by the data collected in this report, the rules, procedures, and practices of individual economies will continue to be a critical factors in providing effective facilitation and regulation of incoming international disaster relief. Thus, a sustained level of commitment and engagement by all

APEC economies is encouraged in order to continuously strengthen legal and procedural preparedness for international disaster assistance.

### **General policy recommendations**

Given the diversity of the APEC member economies, it may not be possible to propose a set of specific recommendations to better facilitate movements of relief responders, goods and equipment, and funds between assisting and receiving economies. Instead, moving forward as a community, the following activities are proposed to support emerging good practice in travel facilitation:

1. Continue to review and self-assess domestic policies and procedures with regard to providing and hosting international relief assistance.
2. Update and improve—within individual economies—current domestic legislation to align with new domestic and global realities, and with the international framework proposed by institutions such as International Federation of Red Cross and Red Crescent Societies, United Nations, APEC and ASEAN.
3. Conduct gap analyses within separate economies to identify domestic resources, capacities, and competencies in dealing with major disaster scenarios to enhance domestic preparedness baselines, and pinpoint areas that might need international assistance and collaboration.
4. Intensify partnerships among government organizations, businesses, local communities for exploring scenarios of relief coordination and recovery, with business continuity and economic and social development as the end goal.
5. If a disaster strikes outside the economy, understand when to stand down and as appropriate volunteer as an assisting economy to join the international relief effort and to put domestic institutions into action.

### **More specific recommendations from APEC survey respondents**

We have included all of these insightful suggestions from survey respondents because they address the salient issues associated with legislation, preparedness and readiness, and best practices.

Collectively, respondents offer the following recommendations:

1. Document existing response capabilities, requirements, and standards for international assistance in APEC economies.
2. Determine legal baselines and barriers in APEC member economies, given their diversity.
3. Establish a common basis for legislation, regulations, procedures, and guidelines within APEC and promote bilateral and multilateral cooperation based on such provisions.
4. Leverage and promote successful initiatives, such as the IDRL Guidelines and Model Act in the APEC economic, social, cultural, and political context.
5. Continue to undertake dialogue and dissemination activities by conducting workshops and capacity-building programs that include learning from the experiences of APEC economies affected by disasters.
6. Increase awareness and engagement of APEC economies by collaborating with other regional initiatives, including those under ASEAN and the East Asia Summit.
7. Explore the expansion and facilitate usage of the APEC Business Advisory Council (ABAC) APEC Business Travel Card (ABTC) by approved emergency response organizations or agencies.

## **I. Emergency Response Travel Facilitation Background**

## Introduction

In 2011, at the APEC High Level Policy Dialogue on Disaster Resiliency in Honolulu, Indonesia made emergency response travel facilitation a priority for its 2013 host year. A year later Indonesia presented a concept paper “Travel Facilitation for Disaster Personnel and Equipment in Times of Disasters in the Asia-Pacific Region” in Kazan, Russia, which brought together APEC’s Business Mobility Group (BMG), Sub-Committee on Customs and Procedures (SCCP), and EPWG through an initiative to facilitate emergency response travel during disasters. This commitment was reiterated in December 2012 at the Informal Senior Officials’ Meeting in Jakarta as one of Indonesia’s top APEC 2013 agenda items.

Experts and members from the EPWG, BMG, and the SCCP met again at a Policy Dialogue on Emergency Response Travel Facilitation (ERTF) in February 2013 to reiterate the importance of the ERTF initiative, and to identify opportunities and challenges for future ERTF work in APEC. Experts and policy makers agree that a timely deployment of international assistance, including the deployment of emergency responders and basic emergency supplies, is vital to saving lives in the immediate aftermath of disasters. As part of the action agenda, a number of recommendations were formulated that include 1) taking stock of procedures and policies related to delivering and receiving disaster assistance; 2) developing a work plan of activities and projects to address issues related to ERTF; 3) exploring practical cooperation to develop measures that would expedite border formalities for a limited number of emergency responders; and 4) ensuring that ERTF remains a priority agenda item in APEC and the EPWG.

Subsequently, APEC TATF was asked to support Indonesia, the APEC 2012 host, and the EPWG with the implementation of the first recommendation, the stocktaking. This document reports the findings and recommendations resulting from that effort to take stock and examine the procedures and policies that currently exist in APEC economies relevant to delivering and receiving international disaster assistance. The objectives of the report are: 1) to improve APEC’s understanding of current procedures and policies affecting the cross-border movement of emergency personnel and equipment by creating a clearer overall picture of the regional capacity for emergency relief travel facilitation; and 2) to enable APEC economies to highlight capabilities and best practices in their respective standard operating procedures for the movement of emergency responders and equipment.

The report focuses on the following key areas:

- Examination of the movement of emergency personnel by reviewing immigration policies and procedures that impact emergency responders, including a system for recognized entities whose entry is prioritized and expedited in case of a disaster.
- Review of the movement of emergency goods and equipment.

The report presents the results of the stocktaking survey and a number of case studies designed to help officials and decision makers appreciate the complexity of entry facilitation of international relief personnel, goods, and equipment. In particular, this report highlights the current state of domestic and international legislation to assist in foreign entry and the current practices among APEC economies. The report also offers consolidated recommendations for improving the current regulations and the state of preparedness for the movement of emergency responders, goods, and equipment.

## A Comprehensive Framework for Effective Entry Facilitation for International Personnel, Goods, and Equipment

Entry facilitation addresses issues and procedures related to the entry and operation of international personnel, goods, equipment, and services into an economy that requests urgent humanitarian assistance and disaster relief (HA/DR). Issues and procedures may include, but are not limited to, the readiness to issue immigration visas in a timely manner; expedited procedures to process or waive duties, tolls, and taxes on relief activities; and mechanisms to efficiently grant legal credentials to international organizations and individuals that provide immediate localized economic and humanitarian assistance. As part of the same process, it is necessary to also recognize that some personnel, goods, and equipment may be required in order to lay the foundation for a sustained economic recovery and development beyond the immediate need for HA/DR.

The definitions of “personnel” and “goods” and “equipment” have been discussed extensively<sup>1</sup>. The definitions being used in this report are provided below. At the international level, these terms tend to be broadly defined and it is important for all economies—whether requesting, providing, or facilitating assistance—to refer to these international instruments and adapt the definitions to their social, economic, and political contexts.

### Definitions for Entry Facilitation

- **Personnel:** all international visitors – professionals or volunteers – requesting to enter the disaster-affected economy for the purpose of assisting with relief and initial recovery, such as medical personnel, fire-fighters, architects, and engineers.
- **Goods:** All imported supplies intended to be offered to disaster-affected people and communities, such as food, medicines, clothes, and basic household items.
- **Equipment:** All physical items, other than consumable goods, deemed necessary for disaster relief and initial recovery assistance, such as utility vehicles, telecommunications devices, and including animals trained for rescue aid.

Perhaps the most respected and far-reaching effort to improve the effectiveness of entry facilitation is being spearheaded by the International Federation of Red Cross and Red Crescent Societies (IFRC). In their numerous initiatives, IFRC advocates the establishment of a relevant and effective set of rules and regulations, both domestic and international, for foreign entry facilitation. International Disaster Response Laws (IDRL) suggests that the *modus operandi* should be based on *three core principles*<sup>2</sup>:

1. Domestic authorities are the primary party responsible for HA/DR in times of domestic crisis. International assistance, as the name suggests, only complements domestic efforts. It should not replace or displace domestic roles and responsibilities.
2. International assistance should adhere to a minimum set of quality standards in providing aid and relief.
3. Authorities from the economy that welcomes international assistance should facilitate entry of international relief personnel, goods, and equipment by expediting visa issuance and customs

<sup>1</sup> See for example, the Revised Kyoto Convention Definition of Relief Consignments (20xx), the Istanbul Convention, the ASEAN Agreement (2005), Oslo Guidelines on Military and civil defense assets (2006), NATO MOU on “Vital Civil Cross Border Transport”

<sup>2</sup> IDRL Guidelines can be downloaded at <http://www.ifrc.org/idrl>

clearance, enabling swift relief transport, and providing legal support and protection while foreign relief personnel are on duty.

In the context of international disaster assistance within APEC, entry facilitation may involve up to three entities: the *receiving* economy, the *assisting* economy, and the *transit* economy(ies). From the perspective of territorial jurisdiction, each of the involved economies has regulatory authorities that *directly or indirectly* affect the movement of disaster relief personnel, goods, and equipment. It is important that all participating economies recognize and respect the sovereignty of all involved economies.

#### Parties involved in Entry Facilitation and their Expected Responsibilities

- **Receiving Economy:** As the party affected by the disaster, the receiving economy has the primary responsibility to take care of the affected people in its territory. Assistance can be provided directly by the economy authorities, or by facilitating assistance offered by other parties whether domestic or international. The receiving economy has the sovereign right to coordinate, regulate, and monitor the assistance effort.
- **Assisting Economy:** To assist the receiving (disaster-affected) economy, assisting economies must ensure that their efforts are provided on the basis of humanity, neutrality, impartiality, and accountability, and that the services offered are given by competent and adequately trained personnel in coordination with domestic counterparts.
- **Transit Economy:** Accomplishing the transit logistics between assisting economies and the receiving economy is a vital role. The transit economy should assist in providing timely logistic support to facilitate the safe and secure movement of disaster responders, goods, and equipment, as well as relief funds.

Therefore, implementing sound domestic and global policies to ensure effective entry facilitation requires a comprehensive approach that requires three far-reaching efforts: 1) strengthen across-the-board domestic legislation and international agreements, 2) achieve a solid level of preparedness and readiness, and 3) explore, adapt, and adopt best practices in disaster management. (See Figure 1.)

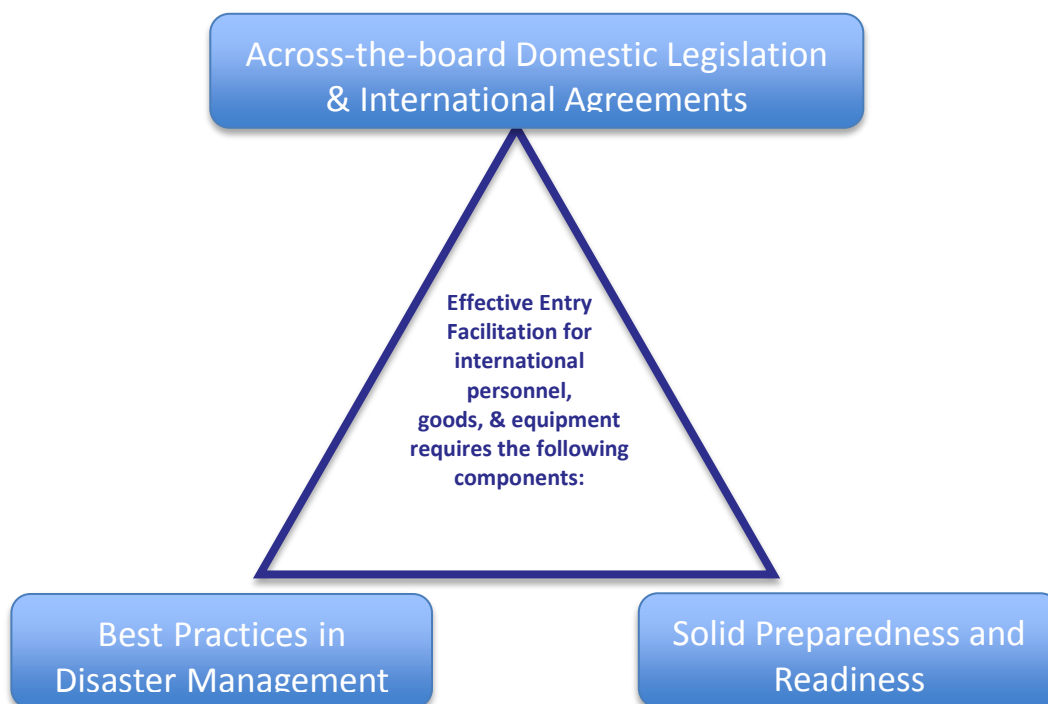


Figure 1 – A Three-Pronged Framework to Understanding the Complexity of Entry Facilitation



Table 1, below, provides a list of typical issues related to the admission of emergency responders, goods, and supplies to the receiving economy. It is necessary for each APEC economy to review its immigration, customs, and local rules-of-law to deal with the welcoming of international assistance. As preparation is essential, each economy—whether receiving, assisting, or transiting—needs to define and share its specific requirements with participating organizations.

A salient issue in the acceptance of assistance is recognition of the qualifications of relief responders. For example, Australia requires that urban search and rescue teams be accredited by the International Search and Rescue Advisory Group (INSARAG),<sup>3</sup> and medical teams be recognized or accredited by WHO, and firefighting teams by the Forest Fire Management Group.<sup>4</sup>

In terms of customs, each economy has some unique requirements and restrictions for imported goods, equipment, and currency. Customs processes sometimes have to adjust rapidly to meet needs.

Another critical aspect of entry facilitation is making sure resources and supplies being provided match the needs of the affected economy. This requires a transparent process of sharing available resources, capacities, and gaps to avoid mismatches between supplies and demands (to include relief personnel and goods). As a lesson learned from Hurricane Katrina in 2005, the United States has developed policies and procedures to accept or decline offers of formal assistance from foreign governmental or nongovernmental organizations, to receive and distribute donated goods, and to regulate the supply of relief goods and services by orderly procurement of resources not locally/domestically available.

**Table 1: Action items related to Entry Facility of International Response Personnel, Goods, and Equipment**

Source: Adapted from IFRC (2007) and expanded based on APEC-ERTF Meeting (2013)

Entry Facilitation Subjects:	Action Items for Disaster Response and Initial Recovery
Personnel <sup>5</sup>	Waive or significantly expedite visas Grant visas and work permits Temporarily recognize professional degrees and qualifications Facilitate freedom of access and movement Specify privileges and immunities to include freedom of access to/from the affected area Provision to renew visas within territory Consider bringing international personnel to help work with local staff
Goods and Equipment <sup>6</sup>	Waive or reduce inspection requirements (pre-clearance) Exemption from import/export restrictions Simplify and minimize documentation for customs clearance (export, transit, and import) Waive or reduce inspection requirements through pre-clearance, even outside business hours or at a specially designated location to minimize delays Permit re-exportation of unused goods Define responsibilities of assisting states and assisting humanitarian organizations in shipment, and address unwanted material

<sup>3</sup> A U.N. OCHA body that certifies search and rescue teams based on accepted technical qualifications.

<sup>4</sup> www.ag.gov.au

<sup>5</sup> See for example UN GA Res. 57/150; ASEAN Agreement Art 14(b), Oslo Guidelines Par 60.

<sup>6</sup> See for example Kyoto Convention, Istanbul Convention Annex B0, Tampere Convention Art 5, ASEAN Agreement Art 14.

Entry Facilitation Subjects:	Action Items for Disaster Response and Initial Recovery
Special Goods and Equipment <sup>7</sup>	Simplify procedures for foreign vessels carrying relief goods Waive or expedite telecom licenses, and waive or reduce barriers to export or import of telecom equipment Reduce barriers to import and export of medicines and medical equipment Assist with interoperability of equipment (telecommunications) Relax fumigation and food restrictions if appropriate Quarantine
Transport <sup>8</sup>	Permission for land, sea, or air vehicles, including over flight and crew visas Recognize foreign plates and registration Vehicle and third-party insurance Temporary authorization to operate within territory if needed Disposal of vehicles
Legal Issues <sup>9</sup>	Grant temporary domestic legal status Rights with regard to currency Right to hire and terminate local staff Review and issue temporal credentials and licenses Define liability in case of injury of emergency responders involving foreign personnel, equipment, or supplies. Corruption
Finance and Taxation <sup>10</sup>	Exemption from customs duties, taxes, tariffs, or governmental fees Provisions for currency exchange, money transfer Provisions for fees and charges Extension of customs duty payment deadline Refund/exemption of fees for re-issuing import certificates Use of alternate facilities for customs clearance when necessary Financial mechanism to deal with international loans and donations
Safety and security <sup>11</sup>	Provide care to responders Take measures to address safety and security of personnel Conduct public announcement of special policies and measures that affect entry facilitation

## Importance of a Sound Legislative or Policy Framework

IFRC in their most recent effort—*Strategy 2020*—asserts that when dealing with the urgent contingencies of natural disaster, well thought-out legal systems are critical to mitigating the effects of the disaster on the population. On the one hand, the absence of an established legal framework is likely to lead authorities to resort to ad hoc decisions. Those “unprepared” decisions may lead to confusion, delays, and costly consequences. On the other hand, elaborate regulations can also cause bureaucratic bottlenecks leading to the same tragic consequences. A sound legislative framework should address the key regulatory issues, but allow for sufficient flexibility to adapt to different emergency situations.

To address this lack of a legal framework that could adequately ease the way for international relief assistance, IFRC recently proposed a comprehensive guideline that it names “the Model Act.” This *legal* guideline or framework is based on an earlier effort known as the “Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance (aka The International Disaster Relief Laws, or IDRL, Guidelines).

<sup>7</sup> For example, see European Communities Regulation 881/92, ASEAN Agreement Art. 15(3), UNITAR Model Rules 12.

<sup>8</sup> See for example, UNITAR Model Rules, Oslo Guidelines Par 6,

<sup>9</sup> See for example, United Nations Convention on the Privileges and Immunities of the Specialized Agencies Art. 2, UNITAR Model Rule 13, Oslo Guidelines Par 19.

<sup>10</sup> See for example, U.N. Committee of Experts on International Cooperation in Tax Matters (205),

<sup>11</sup> See for example, UNITAR Model Rule 17, Max Planck Draft Guidelines Par. 20c.

## DOMESTIC FRAMEWORK

Citing problems related to the practice of using ad hoc solutions to common regulatory issues, the United Nations<sup>12</sup> recommends that all economies engage in formal and informal consultations between domestic agencies, humanitarian organizations, and the private sector, to develop a set of non-legally binding guidelines for the domestic regulation and facilitation of cross-border disaster relief and recovery assistance. Significant lessons can be learned about the importance of such domestic frameworks from the cases of the Indian Ocean Tsunami in Indonesia and the 2010 Haiti Earthquake, as reported by the IFRC.

At the time of the Indian Ocean Tsunami, Indonesia's laws and regulations that addressed entry of foreign organizations either did not support management of the incoming international assistance or they were ignored in response to the 2004 Indian Ocean Tsunami. Although the Indonesian government introduced ad hoc legislation and institutions quickly, confusing and extensive customs procedures, decisions about taxes and duties, and general lack of clarity regarding visas and work permits were common problems. Uncoordinated provision of international assistance could not address differences in quality and differences in demand.<sup>13</sup> In the years since, Indonesia has put into place a new legislative framework, which is the topic of one of the case studies discussed later in this report.

Although Haiti is part of several international conventions, it had to introduce emergency customs procedures in response to the enormous international response to the 2010 earthquake involving the introduction of ad hoc legislation and amended policies, the creation of new institutions, and the adjustment of disaster response mechanisms. In spite of these ad hoc *procedures* from the responsible authorities, unplanned and uncoordinated ad hoc *decisions* added to delays and bottlenecks, particularly at the airport and seaports.<sup>14</sup>

Thus, in conditions of extreme time constraint, when numerous domestic agencies and international responders are involved, a strong domestic framework could help to avoid delays in facilitating entry of the most necessary international resources and, thereby, improve the delivery of such goods to those populations and sectors of the economy most in need. It should be noted that flexibility is required within the legislation; extremes in either direction (overly strict or unregulated) can result in entry delays and may fall short in addressing problems related to quality and duplication of efforts. Without strong domestic legislation, international instruments will struggle to close the gap. A partnership of domestic and international facilitation will be required.

## INTERNATIONAL TREATIES AND AGREEMENTS

Facing an overpowering catastrophe, even the most prepared and resourceful economy might still need immediate international assistance.<sup>15</sup> Asserting that most governments are not adequately equipped with a comprehensive set of rules and procedures to ease the way for international relief assistance, IFRC recommends the laws and regulations should be more inclusive and fair to all parties involved in a disaster situation.<sup>16</sup>

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<sup>12</sup> Source: U.N. naturaldiasterfull\_report2.pdf

<sup>13</sup> IFRC (2010) "Disasters in Asia: The Case for Legal Preparedness.

<sup>14</sup> IFRC (2011) "Disasters in the Americas: The Case for Legal Preparedness"

<sup>15</sup> The United States accepted for the first time large-scale international assistance during the hurricane Katrina in 2005.

<sup>16</sup> IFRC (2010) "Disasters in Asia: The Case for Legal Preparedness.

International instruments—treaties, agreements, resolutions, and declarations—play an important role in facilitating and coordinating international response. For example, the *Kyoto Convention on the Simplification and Harmonization of Customs Procedures* includes an annex that addresses how customs of participating economies should treat relief consignments.<sup>17</sup> “Soft Law” instruments, such as United Nations General Assembly resolution 46/182, seek to strengthen coordination. For example, an Emergency Relief Coordinator was established with the purpose of improving coordination of international assistance, from receiving requests to disseminating information and being involved in humanitarian access.

Although there are many different international instruments to facilitate disaster assistance, including entry for international personnel, goods, services, and equipment, they are typically limited by the number of participating economies or regions, or by the range of international assistance and the organizations addressed. Furthermore, the vast majority of international instruments are nonbinding guidelines.<sup>18</sup> As a consequence, the implementation of these guidelines varies from one economy to another in scope and quality. It was reported at the 31<sup>st</sup> International Conference of the IFRC in 2011 that irrespective of the progress made by regional and global frameworks on international disaster relief, it is the soundness of the legislation and procedures of individual economies that is the key success factor.

One international agreement that stands out is the *ASEAN Agreement on Disaster Management and Emergency Response (AADMER)*. ASEAN Member States signed the AADMER on 26 July 2005 in Vientiane, Lao PDR, and it was ratified and entered into force on 24 December 2009. The objective of AADMER is to provide effective mechanisms to achieve substantial reduction of disaster losses in lives and in the social, economic, and environmental assets of the parties, and to jointly respond to disaster emergencies through concerted national efforts and intensified regional and international co-operation.<sup>19</sup>

ASEAN has also been able to apply the AADMER policy document, through the development of standard operating procedures. (See SASOP discussion below.) The ASEAN Standard Operating Procedure for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations (SASOP) document provides the guidance to standardize and operationalize international support mechanisms for disaster response to include the facilitation of trans-boundary movement of resources and assets.<sup>20</sup> This approach has helped to better prepare nations in the ASEAN region that are delivering, receiving, and transiting goods in support of a large disaster requiring international assistance.

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<sup>17</sup> Provide reference here for Kyoto Convention

<sup>18</sup> IFRC (2007) "Law and Legal Issues in International Disaster Response: A Desk Study"

<sup>19</sup> ASEAN (2006) Agreement on Disaster Management and Emergency Response pg 4

<sup>20</sup> ASEAN (2009) SASOP Standard Operating Procedures for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations

### **ASEAN Standard Operating Procedure for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations (SASOP)**

The ASEAN SASOP, as outlined in the AADMER Article 8.2, was designed to guide the actions of the Parties and the ASEAN Coordination Centre for Humanitarian Assistance on disaster management (AHA Centre) in implementing i) the regional standby arrangements for disaster relief and emergency response; ii) the utilization of military and civilian personnel, transportation, and communication equipment facilities, goods and services, and the facilitation of their trans-boundary movement; and iii) the coordination of joint disaster relief and emergency response operations.

The SASOP also provides i) the guides and templates to initiate the establishment of the ASEAN Standby Arrangements for Disaster Relief and Emergency Response, ii) The procedures for joint disaster relief and emergency response operations, iii) the procedures for the facilitation and utilization of military and civilian assets and capacities, and iv) the methodology for the periodic conduct of the ASEAN regional disaster emergency response simulation exercises (ARDEX) which tests the effectiveness of the procedures.

ASEAN AADMER (2006)

ASEAN SASOP (2009)

### **Public-Private Cooperation for Improved Travel Facilitation During Disasters**

During disasters, customs and other personnel involved in the facilitation of inflows of emergency response goods, equipment, and personnel can be overwhelmed by the high volume of activity, particularly when they may be dealing with devastation and tragedy in their own homes and communities. In addition to an appropriate legislative framework, it is necessary for economies to ensure their airports and other logistics hubs have the specialized knowledge and equipment needed to meet such challenges. As a part of their corporate responsibility programs, several large international organizations with relevant expertise have developed programs to help facilitate the movement of emergency goods and to provide support to logistics during natural disasters. Descriptions of three such programs follow:

**Logistics Emergency Teams (LET).** Under the aegis of the World Economic Forum, four large logistics companies—Agility, AP Møller-Maersk, TNT, and UPS—have set up Logistics Emergency Teams (LET) that are deployed on a pro-bono basis upon request from the United Nations Global Logistics Cluster. LETs provide support service that is administered under pre-agreed operating procedures, which includes: 1) logistics specialists (e.g., airport coordinators, airport managers, and warehouse managers); 2) logistics assets (e.g., warehouses, trucks, forklifts); and 3) logistics services (e.g., airlift, trucking, customs management). Between 2008 and 2012, LETs supported efforts in Mozambique, Myanmar, Haiti, Philippines, Indonesia, Pakistan, Chile, Japan, and East Africa<sup>21</sup>.

**FedEx Disaster Readiness, Relief, and Recovery.** As a part of its corporate social responsibility (CSR) program, FedEx leverages its nearly 700 planes, 75,000 trucks, and extensive transportation and logistics network to deliver critical supplies, services, and expertise to support victims of disaster. In 2012 alone, the company transported 67 loaded planes, 92 truckloads, 15 ocean transports, and one

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<sup>21</sup> Stadler, Lea and Luk N. Van Wassenhove, “The Logistics Emergency Teams: Pioneering a New Partnership Model.” INSEAD Humanitarian Research Group, October 2012. Accessed online August 2, 2013: <<http://www.logisticsemergency.org/images/inseadletcase.pdf> >.

air charter of international relief goods. They have supported efforts in the United States, Africa, Asia, Latin America, and the Caribbean<sup>2223</sup>.

**DHL Disaster Response Teams.** In cooperation with the U.N. Office for the Coordination of Humanitarian Affairs (OCHA), DHL has a global network of more than 400 specially trained volunteers who participate in their Disaster Response Teams (DRT). Deployed at the request of the United Nations, DRTs provide logistics support such as unloading cargo planes and the warehousing and inventorying of incoming relief supplies on a pro-bono basis. DHL has bilateral memoranda of understanding with 11 economies in disaster prone regions to facilitate DRT deployments without bureaucratic delays and to allow governments to request the services of DRTs directly. Since 2004, DHL has supported about 20 deployments of its DRTs in a variety of disasters. In addition, DHL has developed a training program for airports, “Get Airports Ready for Disaster (GARD),” under which its air logistics experts work with the United Nations Development Programme (UNDP) to undertake risk assessments of airports in disaster prone regions and to train airport officials and government disaster-management authorities to better manage the logistical challenges of a disaster response operation<sup>2425</sup>.

## Preparedness and Resilience

The creation of legal frameworks is only the first necessary element of an effective entry facilitation approach. Even sound legislation will not be effective unless the economy also allocates sufficient resources and develops appropriate mechanisms to implement it.

Taking a lesson from history, we see that loss of human life and damage to important economic and social assets could have been reduced if preparation had been adequate. Therefore, another key effort in establishing effective entry facilitation is for each APEC member to strengthen its domestic readiness.

It is important for each economy to review and continuously evaluate its governmental plans and procedures for disaster management, conduct gap analyses to understand the strengths and weaknesses of its capacities and competencies, and set clear domestic priorities for receiving international assistance. Each economy should be responsible for putting in place early warning systems (e.g., tsunami warning system, weather observations and predictions), and having specific provisions to authorize a pre-event warning that international assistance might be required.

As an example of preparedness that was effective, a rigorous and consistently enforced building code in Chile is credited with the fact that the economy’s losses due to the 8.8 M earthquake in 2010 were very limited.

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<sup>22</sup> FedEx 2012. “Thinking Outside the Box: 2012 Report on Global Programs in Disaster Readiness, Relief and Recovery.” Federal Express, 2012. Accessed online August 2, 2013:

<[http://about.van.fedex.com/sites/default/files/fedex\\_disaster\\_relief\\_report.pdf](http://about.van.fedex.com/sites/default/files/fedex_disaster_relief_report.pdf)>

<sup>23</sup> FedEx 2013. “Disaster Readiness, Relief and Recovery.” FedEx Website, Accessed online August 2, 2013:

<<http://about.van.fedex.com/disaster-readiness-relief-and-recovery>>

<sup>24</sup> DHL 2012. “Corporate Responsibility Report 2012: Taking on Responsibility Together.” Deutsche Post DHL, 2012.

<sup>25</sup> DHL 2013. “Disaster Response Teams providing help.” DHL Website, Deutsche Post DHL, Accessed online August 2, 2013: <[http://www.dp-dhl.com/en/responsibility/disaster-management/disaster\\_response\\_drt.html](http://www.dp-dhl.com/en/responsibility/disaster-management/disaster_response_drt.html)>

### **A View of Preparedness and Readiness from the United States**

According to a survey respondent from the United States, achieving an effective level of readiness for entry facilitation requires the economy to drill down to detailed and specific rules and procedures at the operational units:

“The primary challenges to requesting and receiving international assistance are legal issues and planning for a range of potential problems related to liability, worker’s compensation, tort claims, licensing, and credentialing. Medical issues are specially difficult challenges because they involve significant problem of certification, legal limits where foreign medical professional may practice in the U.S., the pharmaceuticals they carry or need, the standards of care that vary between nations, and public expectations” (July 2013)

## **REGIONAL PREPAREDNESS**

At the global level, a global investment effort might be needed to ensure trans-boundary preparedness and coordination. The ASEAN Coordinating Center for Humanitarian Assistance on disaster management (AHA Centre) is a concrete example of preparedness.<sup>26</sup> A key objective of the AHA Centre is to facilitate cooperation and coordination among the parties managing and responding to disasters. The Centre does this through information sharing related to risk identification and monitoring and by assisting with the mobilization of resources among relevant parties.<sup>27</sup>

### **AADMER RECENT *PREPAREDNESS* EFFORT**

- Guide and templates to initiate the establishment of the ASEAN Standby Arrangements for disaster relief and emergency response
- Procedures for joint disaster relief and emergency response operations
- Procedures for the facilitation and utilization of military and civilian assets and capacities—personnel, transportation and communication equipment, facilities, goods and services, and the facilitation of their cross-border movements.
- Methodology for the periodic conduct of the ASEAN regional disaster emergency response simulation exercises (ARDEX)

Source: <http://aseanpostnargiskm.org/about/asean-agreement-on-disaster-management-n-emergency-response/25>

<sup>26</sup> Launched at the 19<sup>th</sup> ASEAN Summit, November 17, 2011 in Bali, Indonesia.

<sup>27</sup> <http://www.ahacentre.org>

### **AHA CENTRE RECENT *READINESS* EFFORT**

- Establishment of the Disaster Monitoring and Response System (DMRS) to enhance early warning and decision support capabilities before, during and after a disaster
- Implementation and activation of the SASOP for the facilitation of international relief efforts
- Creation and maintenance of an ASEAN Emergency Rapid Assessment Team database and contact list
- Use of social media for information sharing and dissemination (e.g., [www.facebook.com/ahacentre](http://www.facebook.com/ahacentre))

Source: <http://ahacentre.org>

### **RESILIENCE OF THE IT INFRASTRUCTURE**

Information and telecommunications technology have proved to be a critical component of any relief and recovery effort. In a major crisis requiring international assistance, effective deployment of ICT remains an acute challenge. Systems are overloaded. They respond slowly, or even crash.

Application-specific systems cannot communicate with each other. At the global scale, a growing number of international IT solutions have recently been developed. Some examples include Asgard, Europe's cloud-based alert-deployment tool; the UNITAR Humanitarian Early Warning Service; Relief Web; the Virtual Onsite Operations Coordination Center, etc. These applications are still focused on a few critical aspects of disaster relief and recovery effort. Technology should include tools to model the risk, vulnerability, and response capacity of APEC members. But to our knowledge, and at the time of this writing, a global system to assist in entry facilitation has yet to be developed. At the domestic level, many economies still use stove-piped systems<sup>28</sup> with independent IT applications for immigration, customs, border patrols, and taxation, which leaves coordination in times of crisis a major bureaucratic challenge.

### **EXERCISES, TRAININGS, WORKSHOPS AND MEETINGS**

Disaster managers regularly conduct exercises and trainings to ensure that when a disaster strikes all mechanisms work seamlessly together. These regularly scheduled events are designed to improve domestic and international capacities during all phases of disaster management (mitigation, preparedness, response and recovery). However, entry facilitation is often not included as part of these activities. Entry facilitation of international relief responders, goods, and equipment require the mobilization of a large number of domestic and foreign institutions. As such training, drills, simulations, and joint exercises are needed to ensure viability and continuity of operations.

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<sup>28</sup> A stovepipe system is one that is initially designed to serve a particular business function, and it does not share the data it has to other systems. Examples of stovepipe systems are legacy systems built for immigration, customs, etc. Although all of them are needed to enforce entry policies, they are not inter-connected, making data integration a major challenge.



## **MEXICO-UNITED STATES JOINT CROSS-BORDER EFFORT**

The United States and Mexico have initiated a number of cross-border training workshops and meetings. In 2006, the U.S. Environmental Protection Agency (EPA) and Mexico's Office of Emergency Management put into practice their joint contingency plan to prepare for and respond to emergencies associated with hazardous substances on the inland border. Each economy established domestic procedures for coordination between their agencies. The two neighbor economies agreed on joint response teams, on-scene coordinators, and conducting workshops and drills. Through meetings and discussions, the two economies were able to identify a number of border-crossing challenges. They also realized that the joint contingency plan did not have customs protocols. There was a general lack of knowledge about entry requirements. Additionally, each port of entry uses different procedures, and existing processes were too cumbersome. The workshops have led to a revision of coordination between the U.S. Department of Homeland Security, Customs, and Border Protection with corresponding Mexican agencies. The numerous cross-border meetings have resulted in a 2009 Mexico-United States Joint Contingency Plan that serves as an operational handbook that includes emergency/notification procedures, notification forms, roles and responsibilities of personnel.

Sources:

[http://www.epa.gov/osweroe1/content/mexico\\_border.html](http://www.epa.gov/osweroe1/content/mexico_border.html)

<http://www.aofs.org/wp-content/uploads/2010/03/111202-FEMAs-International-Programs-and-Activities.pdf>

<http://www.fema.gov/femas-international-programs-activities>

## **II. Entry Facilitation for International Personnel, Goods, and Equipment - An APEC Stocktaking Survey**

The following section builds on the above observations of emerging good practice in the area of travel facilitation by examining the issues that are most salient to APEC economies through analysis of the outcomes of a recent survey administered through the APEC Emergency Preparedness Working Group (EPWG).

## Survey Methodology

The purpose of the survey was to take stock of the current practices and challenges within APEC economies to delivering and receiving international assistance from the perspectives of legislation and preparedness/readiness. The survey questions targeted information on current issues, best practices, and suggestions from experts who are knowledgeable about subject areas related to entry facilitation.

The scope of the survey is threefold:

1. **Current Regulations for Travel Facilitation for Disaster Personnel, Goods and Equipment:** We used the “2013 Model Act for the Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance,” which was jointly proposed by the International Federation of Red Cross Red Crescent Societies (IFRC), The United Nations Office for the Coordination of Humanitarian Affairs (OCHA), and the Inter-Parliamentary Union (IPU) in March 2013, as a framework to develop survey questions that encompass all critical legal aspects related to the cross-border movement of emergency personnel such as immigration, access to disaster sites, and acknowledgement of foreign credentials, as well as entry regulations and use restrictions of disaster goods and equipment, and transit.
2. **Practical Issues Related to Entry Facilitation:** We developed a set of survey questions that provide an overview of preparedness and readiness within APEC in the context of international collaboration, including incorporation of international instruments of agreement, training, and workshops, and the role of information technology.
3. **Entry Facilitation Best Practices:** We solicited perceptions from survey respondents regarding best practices as well as less successful efforts regarding entry facilitation, and asked for suggestions as to the most important next steps.

A 23-question survey was developed, tested, and administered through leaders of the APEC communities involved in disaster management and economic resilience (i.e., EPWG, BMG, SCCP). The full questionnaire is provided in Appendix B.

We have received responses from 19 APEC economies to date. These economies include Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Malaysia; Mexico; New Zealand; Peru; Republic of Korea; Russia; Singapore; Chinese Taipei; Thailand; United States; and Viet Nam. The majority of participating economies developed collaborative survey responses by experts in different topic areas (i.e., immigration, customs, emergency management) and submitted one combined questionnaire response. Four economies submitted questionnaires by two or more different respondents. In these cases, respondents sometimes selected contradictory responses to the factual questions in particular with regard to policies and procedures. If such a contradiction arose, we prioritized the response of the survey participant who is more knowledgeable in the specific topic area, based on the titles and professional roles of the participants. This information was provided in the demographics section of the survey.<sup>29</sup> Based on this data analysis strategy, the survey findings consider one combined response per APEC economy.

## Survey Findings

Survey findings are categorized in three sections: legislative framework on entry facilitation; practical issues and challenges derived from experiences with recent disasters, and; best practices and suggestions for APEC actions. Data are clustered from three categories of APEC economies: receiving assistance, providing relief, and assisting transit.

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<sup>29</sup> Responses of a customs official on questions related to customs procedures were prioritized over responses of an official from another agency. We combined responses to questions that requested opinions, perceptions, and suggestions.

When asked to share their experiences with entry facilitation, respondents referred to the following disasters:

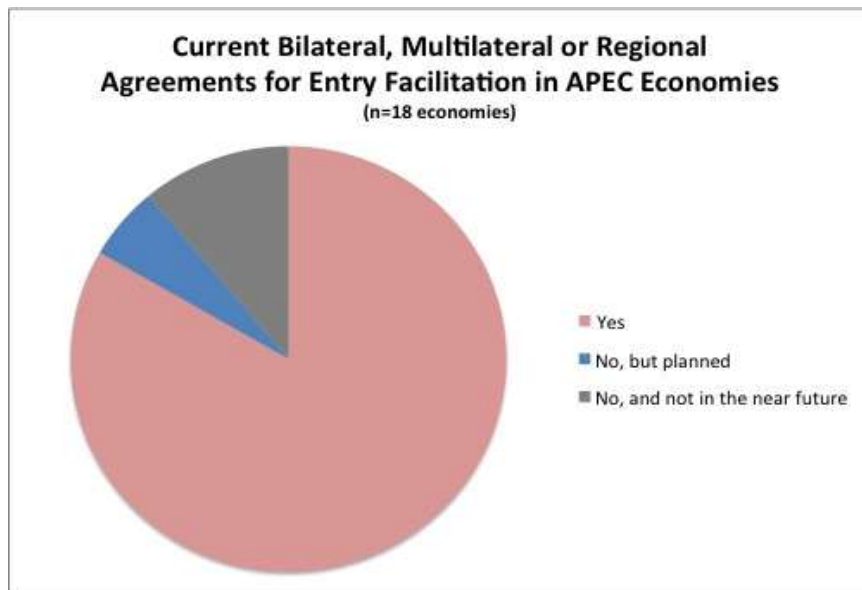
	<i>Recent disaster experienced by respondents</i>
<i>From Assisting Economies (n=14)</i>	<ul style="list-style-type: none"> <li>• Great East Japan Earthquake and Tsunami, Japan (2011)</li> <li>• Christchurch Earthquake, New Zealand (2011)</li> <li>• Indian Ocean Tsunami (2004)</li> <li>• Padang earthquake, Indonesia (2009)</li> <li>• Indonesia: Mt. Merapi Eruptions (2010)</li> <li>• Indonesia earthquake (2010)</li> <li>• Sichuan earthquake, tsunami and nuclear crisis, China (2008)</li> <li>• Chinese Taipei earthquake (1999)</li> <li>• Thailand floods (2011, 2012)</li> <li>• Russia industrial fire (2011)</li> <li>• United States: Hurricane Katrina (2005)</li> <li>• Haiti earthquake (2010)</li> <li>• Chile earthquake (2010)</li> </ul>
<i>From Receiving Economies (n=10)</i>	<ul style="list-style-type: none"> <li>• Chile earthquake and tsunami (2010), Northern Chile mining rescue</li> <li>• Indian Ocean Tsunami, Aceh, Indonesia (2004)</li> <li>• Great East Japan Earthquake (2011), Mid-Niigata Prefecture Earthquakes</li> <li>• Mexico's City Earthquakes (1985)</li> <li>• Tropical storm Stan (2005)</li> <li>• Tabasco floods (2007)</li> <li>• Hurricane Alex (2008) and Hurricane Karl (2010)</li> <li>• An H1N1 flu epidemic (2009)</li> <li>• Coahuila forest fire (2010)</li> <li>• New Zealand earthquake (2011)</li> <li>• Peru earthquake in the city of Pisco (2007)</li> <li>• Large-scale fires in Russia</li> <li>• Taipei earthquake (1999)</li> <li>• Severe flooding through the provinces of northern, northeastern, and central Thailand along the Mekong and Chao Praya River (July 2011 to mid-January 2012)</li> <li>• U.S. Hurricane Sandy (2012)</li> </ul>
<i>From economies providing transit (n=5)</i>	<ul style="list-style-type: none"> <li>• Earthquake in Haiti (2010)</li> <li>• Christchurch, New Zealand, earthquake (2011)</li> <li>• Indian Ocean Tsunami (2004)</li> </ul>

## **Legislative Framework**

### **1. International Legislative Framework and Guidelines**

#### ***Bilateral, Multilateral, and Regional Agreements***

The vast majority of economies participate in bilateral, multilateral, and/or regional treaties and agreements that address entry facilitation.

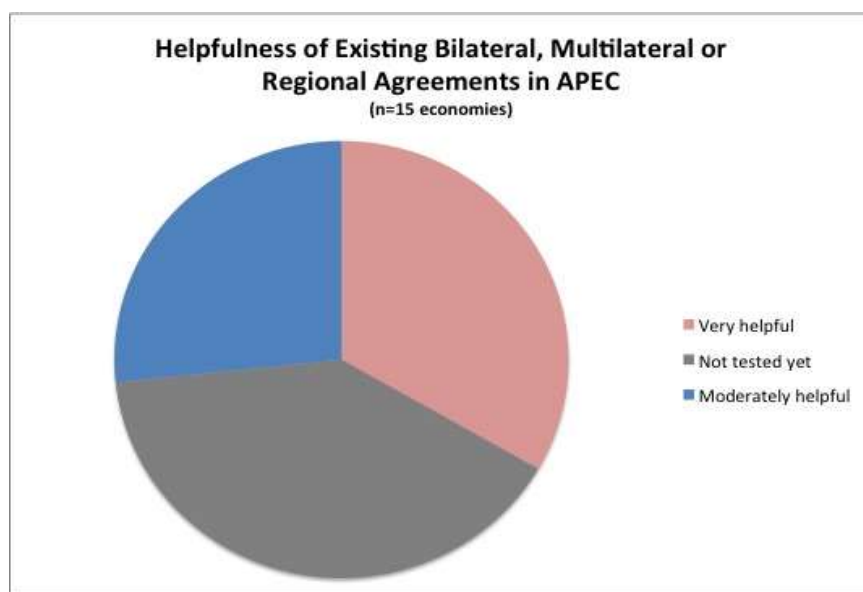


The following examples were provided by survey respondents:

- Canada-United States Framework for the Movement of Goods and People Across the Border during and following an Emergency and Canada-United States Agreement on Emergency Management Cooperation.
- Agreement between Mexico and the United States on Emergency Management Cooperation in cases of Natural Disasters and Accidents (2008).
- U.S. Customs and Border Protection (CBP) continuity planning for business resumption in the event of a disaster between United States and both Canada and Mexico.
- Multilateral MOU on the Facilitation of Vital Civil Cross Border Transport between NATO Allies and Partners.
- Bilateral regional agreements to facilitate cross-border movement of international disaster assistance between U.S. States and Canadian Provinces: International Emergency Management Assistance Memorandum of Understanding, Pacific Northwest Emergency Management Arrangement, State and Province Emergency Management Assistance Memorandum of Understanding.
- Mexico-Guatemala Agreement on prevention and attention in cases of disasters (1987).
- China-Hong Kong, China, Bilateral Agreement on a contingency plan for a nuclear power plant (Daya Bay, Guangdong Province of China), which refers to the International Atomic Energy Agency (IAEA) Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency and covers provision of cross-border assistance in case of a major emergency.
- Shanghai Cooperation Organization intergovernmental mutual aid agreement on disaster relief.
- New Zealand Customs Service Mutual Recognition Arrangement (MRA) with the U.S. Customs and Border Protection.
- Bilateral agreements on emergency management cooperation between the Russian Federation and India, China, Italy, Germany, France, Poland, Serbia, Croatia, Latvia, Peru, Commonwealth of Independent States (CIS) economies, Finland, and Sweden; as well as

multilateral agreements in the framework of CIS, Shanghai Cooperation Organization (SCO), the Barents Euro-Arctic Region.

- ASEAN Agreement On Disaster Management and Emergency Response (AADMER), ASEAN Standard Operating Procedure for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response (SASOP).
- Comité Andino para la Prevención y Atención de Desastres (CAPRADE), the Andean Committee for Disaster Prevention and Response.



Fifteen economies responded to the question whether existing treaties and agreements were helpful. Agreements that have been *tested in practice* were considered very helpful or moderately helpful. The United States highlighted the role of domestic frameworks and best practices in leveraging these agreements to their fullest potential in times of disaster. Treaties and agreements are moderately helpful in providing general guidelines. However, clarification is needed for legislation, agreements, or other documentation to really address the details necessary for facilitating entry of international disaster assistance. Specific issues include a range of potential problems related to liability, workers compensation, tort claims, licensing and credentialing, and standards of care that vary between nations, as well as public expectations.

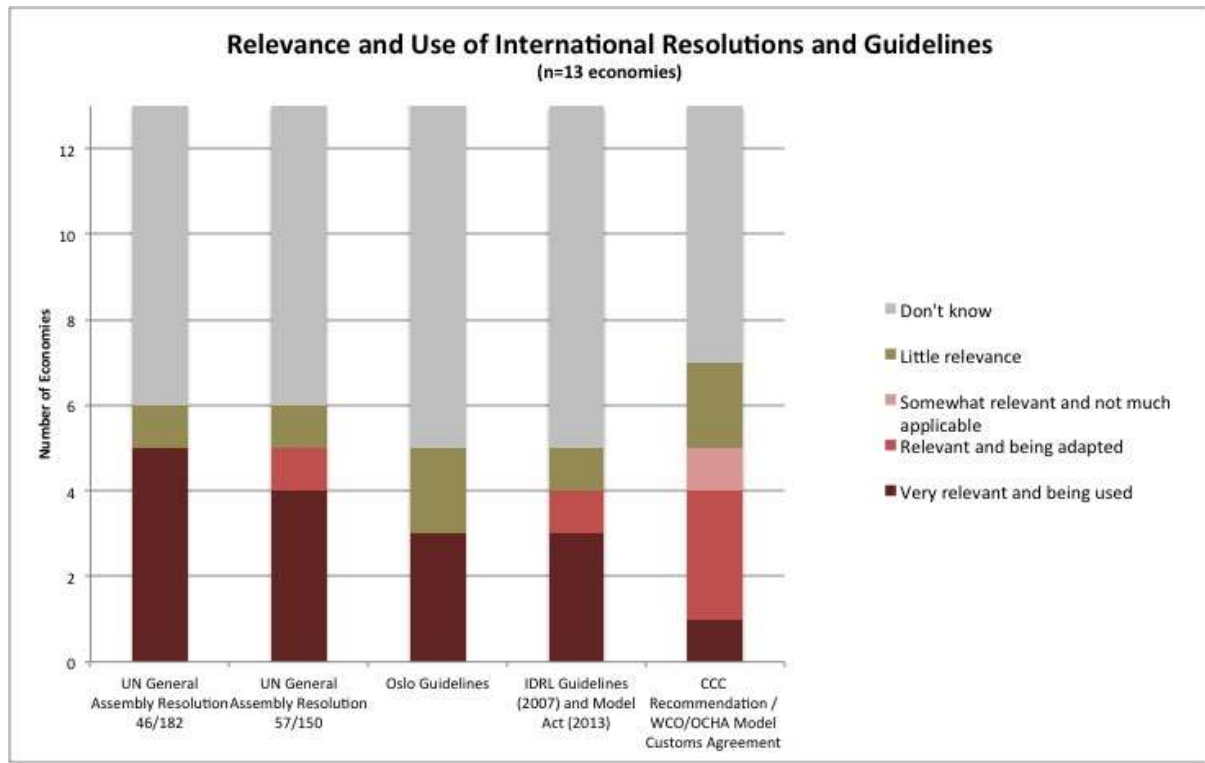
### Treaties and Conventions

The Kyoto customs convention on simplification and harmonization of customs procedures is by far the best known, most relevant, and most actively used by survey respondents. For example, New Zealand agreed to the revised Kyoto Convention in 2000 and allows goods within this convention on a Temporary Import Entry without duties and import taxes.<sup>30</sup> Other major international conventions that were listed tend to be narrower in scope and are therefore possibly perceived as less relevant.

<sup>30</sup> Annex G (Model Agreement on Customs Facilitation in International Emergency Humanitarian Assistance) in the revised convention has information on how to facilitate import of urgently needed medical, surgical and laboratory equipment and relief consignments.

## Resolutions and Guidelines

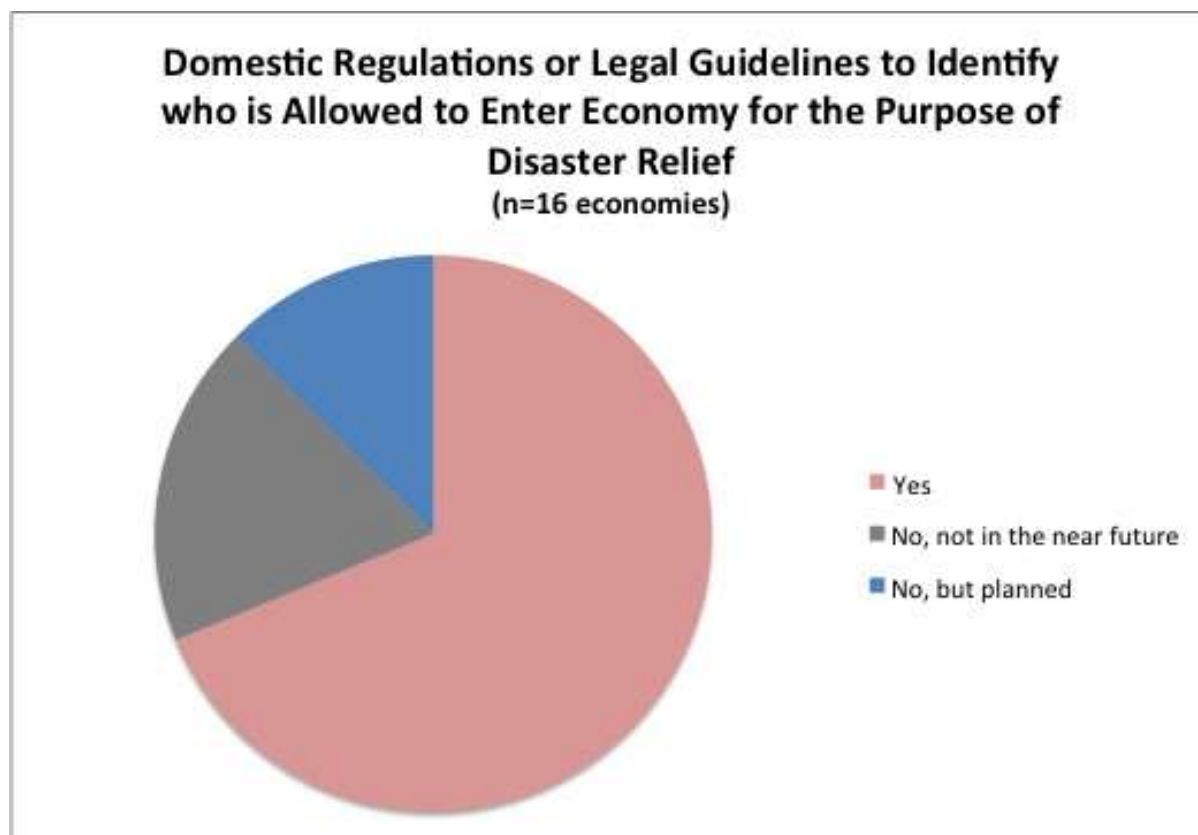
Among the major resolutions and guidelines listed, The U.N. General Assembly Resolutions were perceived by the respondents as taking the most significant role for entry facilitation among the APEC economies responding to this question. While the IFRC IDRL Guidelines and the recently published Model Act are somewhat less well-known to the survey respondents, Canada, Mexico, and Russia acknowledge these important guidelines as very relevant and have actively incorporated them.<sup>31</sup>



<sup>31</sup> Responses include only those that stated familiarity with global treaties, resolutions and guidelines that address entry facilitation in the prior introductory question. In this context, it is notable that ‘Don’t know’ is the dominant response in regard to most major international instruments listed.

## 2. Domestic Legislative Framework and Guidelines

In general, most APEC economies have specific domestic regulations and legal guidelines that address who can enter the economy for the purpose of disaster relief.



Participating economies provided the following examples of domestic regulations that address this issue:

- China's Regulation of Natural Disaster Relief, National Natural Disaster Relief Emergency Plan
- Indonesia's Law Number 24 on Disaster Management (2007) and Government Regulations Numbers 21, 22, and 28 on Implementation, Financing, and Participating of International Nongovernmental Organizations in Disaster Management (2008)
- Mexico's Law of Civil Protection, International Cooperation for Development Law, Customs Law and Migration Law.
- United States: Created to integrate foreign assistance into a domestic disaster operations, the International Assistance System (IAS) Concept of Operations (CONOPS) is a supporting document of the National Response Framework (NRF), detailing when and how the U.S. Government (USG) requests or accepts offers of assistance from foreign countries pursuant to the Stafford Act. The IAS is only activated if the government decides to request or accept international assistance.<sup>32</sup>

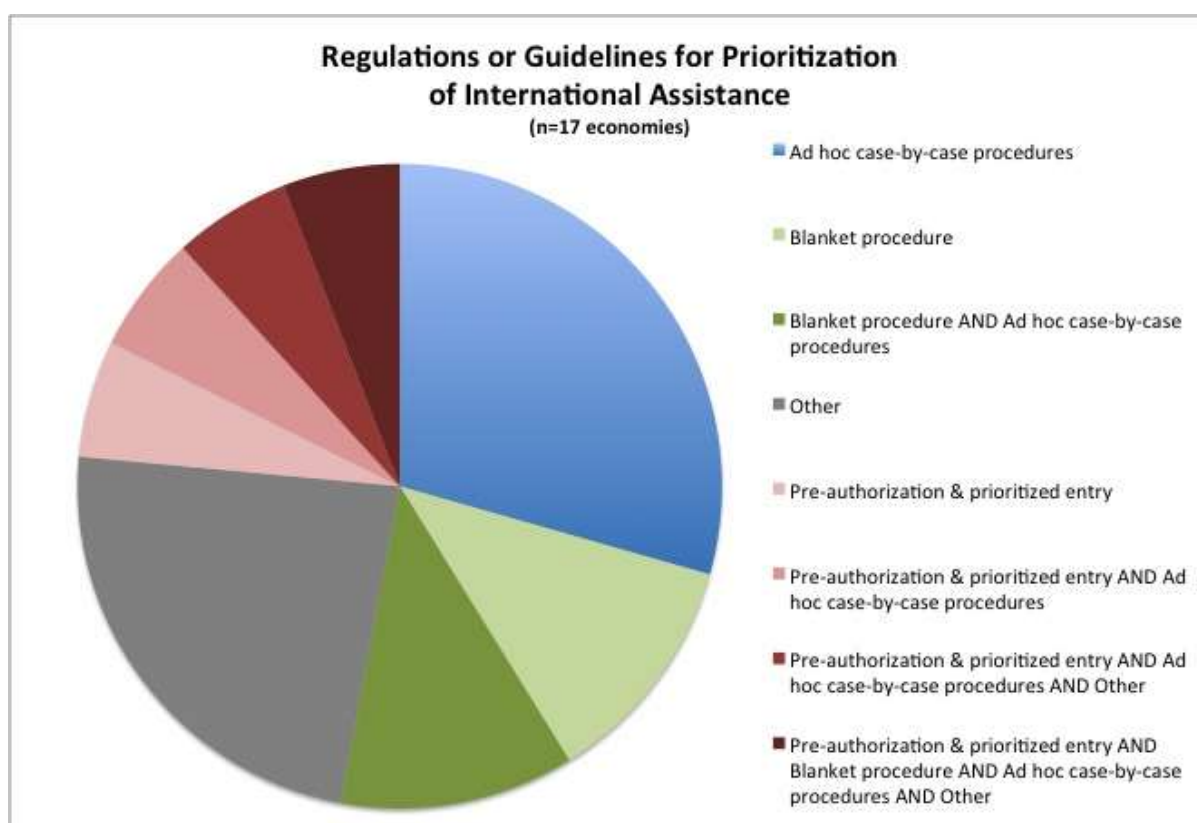
<sup>32</sup> The IAS CONOPS applies only to formal offers between foreign governments / international organizations and the United States. The IAS does not apply to international assistance accepted or requested by the private sector, such as nongovernmental disaster relief organizations or businesses, nor to disasters declared outside the Stafford Act.



Other economies take a case-by-case approach. In Singapore, domestic agencies will coordinate with one another to facilitate the movement of disaster relief persons and cargo where requests are made within existing domestic laws and policies. Viet Nam is an example of an economy with plans for such guidelines.<sup>33</sup>

### *Regulations/guidelines to prioritize international assistance*

A variety of approaches are utilized to prioritize entry of international assistance in times of disaster, from ad hoc case-by-case procedures, to blanket procedures for all responders, to pre-authorization and other approaches.



The varied responses by the economies provide little evidence of solid legislative frameworks that specify how to pre-authorize and prioritize entry of the most appropriate and highest quality international response to address the economies' needs (as recommended by the Model Act). However, it appears that APEC economies tackle the prioritization issue in the context of guidelines that may not be part of the legislative framework, as shown by the following examples:

- Australia is in the process of publishing a set of guidelines that are not part of the legislative framework, but they are expected to provide minimum standards for authorizing foreign responders working in the economy, including accreditation and equipment standards.
- The Canada-United States Plan for the Movement of People and Goods During and Following an Emergency was collaboratively developed by Public Safety Canada and the

<sup>33</sup> Viet Nam's Decree No 95 regulates how foreign search and rescue forces are authorized and operated. A guidelines circular for this Decree is being developed.

Canada Border Services Agency as an annex to Canada's Federal Emergency Response Plan under the Border Services Emergency Support Function. Through a triaging process, the Plan allows Canada to prioritize the people and goods that are most urgently needed. It also includes a process to communicate key information and decisions with stakeholders. It is not a legal/regulatory instrument, but provides policy guidelines.

#### *Authorization to manage expedited procedures and special entitlements*

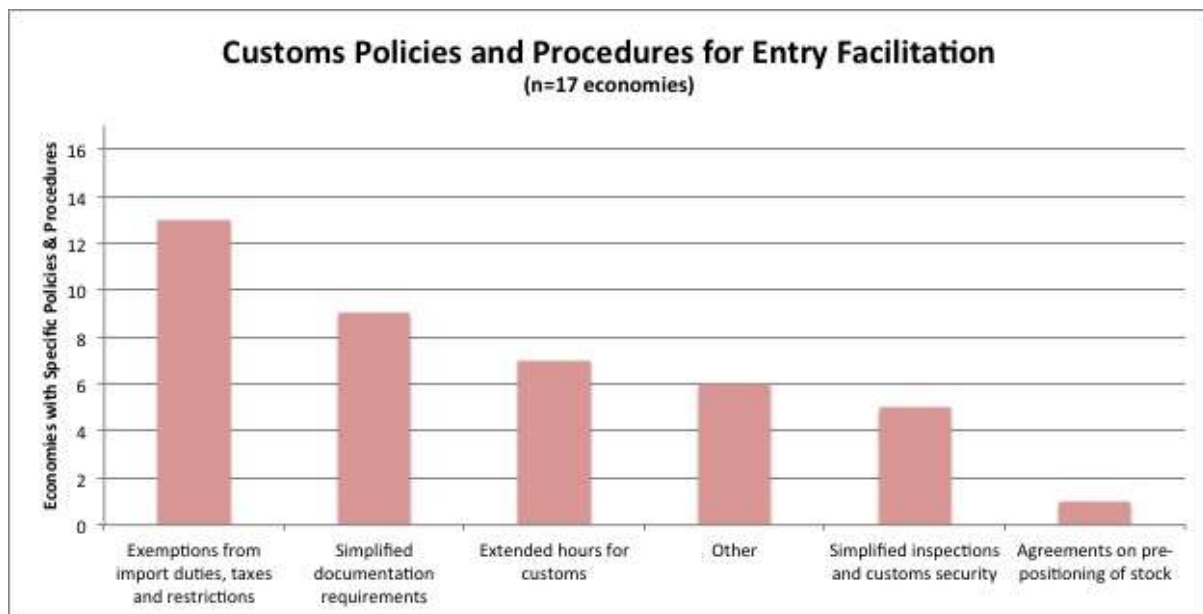
Ten economies cited several authorities (between two and eight authorities depending on the extent of international aid) are involved to manage expedited procedures and special entitlements for specified international response organizations. The interdisciplinary nature of involved authorities, combined with often ad hoc case-by-case nature of decisions, highlights the need for preparedness and identification of best practices for inter-agency collaboration for use in times of disaster.

#### *Immigration policies and procedures that specify how visas are issued to foreign disaster personnel*

Economies unanimously state that they do not provide special a "disaster relief visa with temporary employment" or waive visa requirements, but they expedite the visa issuance process, with specific guidelines and procedure. As an example, the U.S. Customs and Border Protection (CBP) has the discretionary authority, pursuant to the Immigration and Nationality Act, to parole individuals into the United States on a case-by-case basis for urgent humanitarian reasons or significant public benefit. CBP has the authority to waive the passport or visa requirements of foreign individuals because of an unforeseen emergency.

#### *Customs policies and procedures for the entry of disaster goods and equipment*

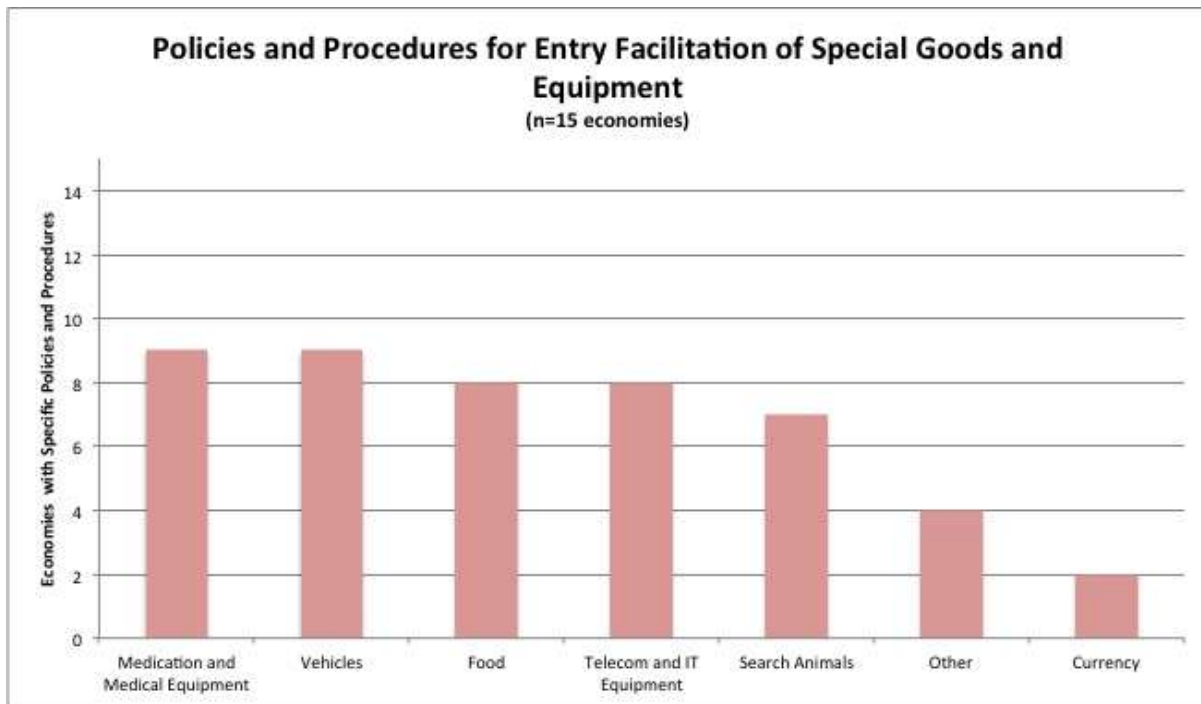
Most economies utilize a combination of customs policies and procedures to facilitate the entry of disaster goods and equipment. Eight economies state that they provide exemptions for international goods and equipment and simplify documentation requirements. Singapore has no standing arrangement to facilitate the entry of such goods and equipment but Immigration and Checkpoints Authority (ICA) will provide the appropriate clearance facilitation upon request. For controlled equipment or goods, additional approval from Controlling Agencies would also need to be obtained through the Singapore Customs TradeNet permit application system. Hong Kong City keeps customs policies and procedures to a minimum and therefore has no disaster related customs policies. Agreements on pre-positioning of stock are not common. Only Malaysia reports having such agreements in place.



*Policies and procedures to facilitate entry of the following special types of goods and equipment*

Certain types of emergency goods and equipment, which often take a crucial role in response operations and are therefore brought into the economy by international responders, pose additional challenges from a customs perspective. Because more stringent import restrictions typically apply under regular conditions, specific regulations and procedures are recommended to ensure timely availability of these assets in times of disaster.

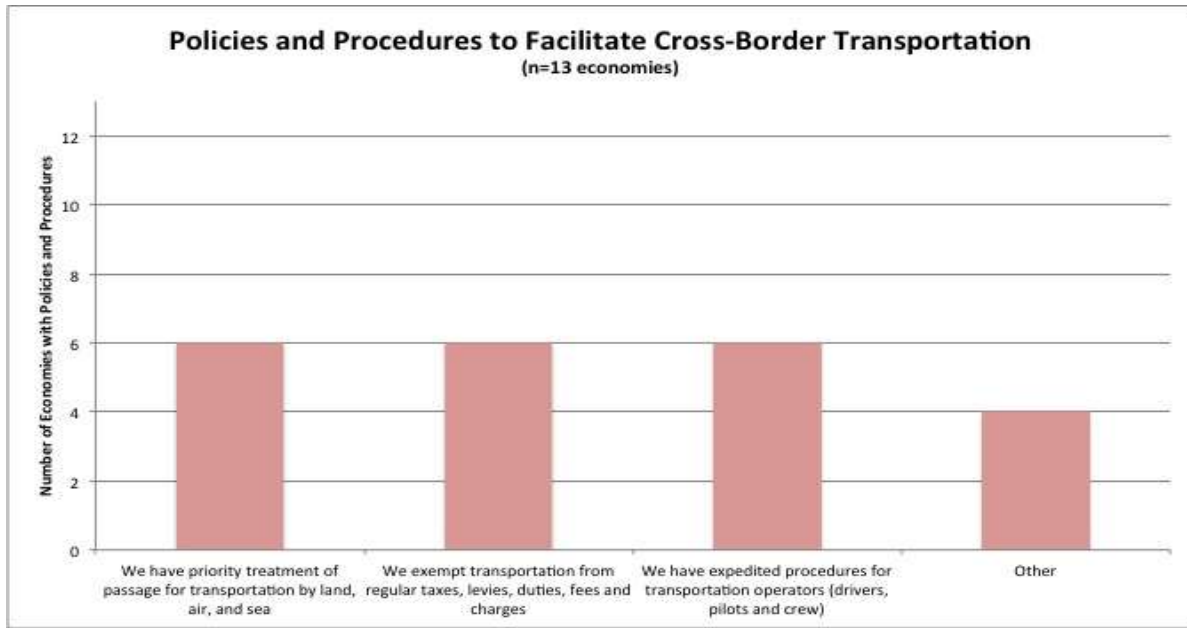
The majority of respondents have specific regulations and procedures covering medications and medical equipment, vehicles, food, and telecom and IT equipment. Other categories addressed by economies include search and rescue equipment and specialists' tools (e.g., Australia), military supplies and equipment (e.g., Canada), or clothing, footwear, tents, and premade modular houses (e.g., Peru). Even when procedures are in place, regulatory challenges could still arise.



Only four responding economies have no regulations or procedures in place for any type of special goods and equipment, again highlighting the role of case-by-case decisions. Only few economies address how to handle incoming currency. The United States offers a best practice for effective utilization of cash donations. The U.S. encourages all foreign donors to provide financial support to domestic nongovernmental organizations responding to the disaster. When international cash donations are made directly to the government, they are usually directed to the Federal Emergency Management Agency (FEMA) to meet unaddressed needs for which the existing Disaster Relief Fund cannot be used.

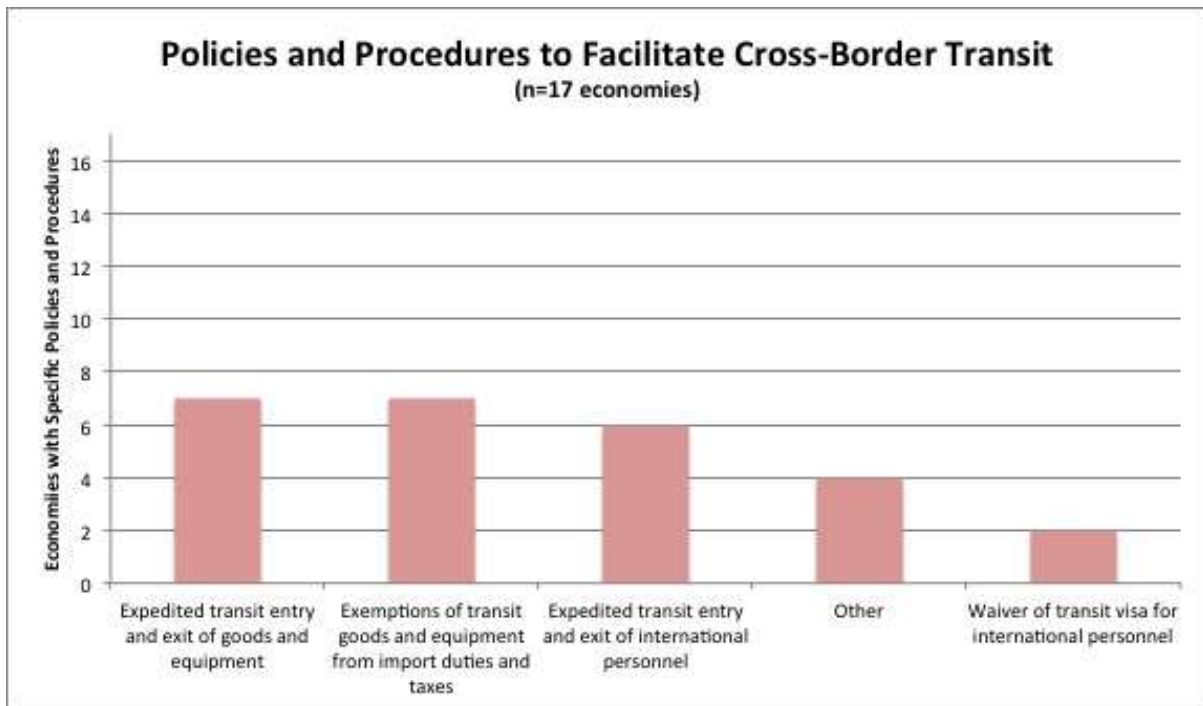
### *Policies and procedures to facilitate cross-border transportation*

Survey data show that less than half of the participating economies have specific policies and procedures in place regarding priority treatment of passage for transportation, customs exemptions, or expedited procedures for transportation operators. Canada and New Zealand facilitate cross-border transportation of international disaster response materials in all three categories. Some economies have partial regulations, such as custom exemptions of foreign registered vehicles that transport emergency goods. Other economies facilitate the transportation process on an ad hoc, case-by-case basis.

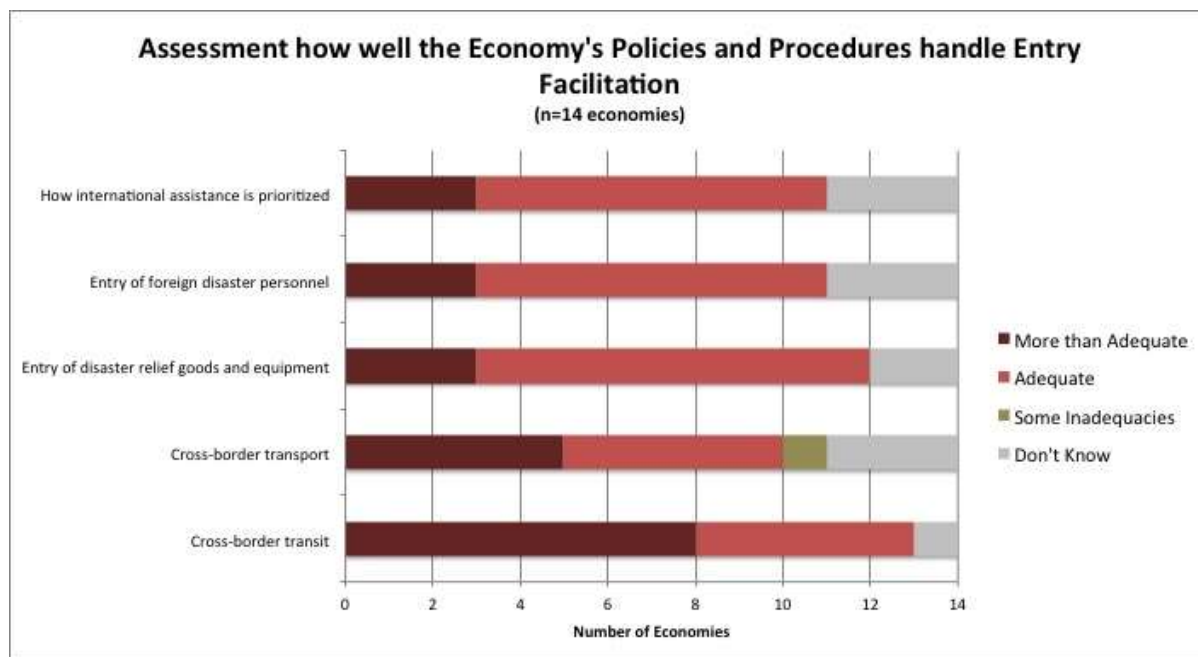


*Policies and procedures to facilitate cross-border transit*

The most commonly specified policies and procedures for transit facilitation include expedition of transit entry and exit of goods and equipment, exemptions from taxes, and provisions for transit transport. Economies have usually established a combination of these transit customs procedures. Canada provides a ‘fee-exempt’ transit visa for foreign nationals who will enter Canada for less than 48 hours. In times of urgency such as the Haiti earthquake, Canada temporarily has waived this transit visa requirement for foreign emergency response personnel.



In general, respondents consider their existing legislative frameworks and procedures to be adequate, but acknowledge room for improvement, particularly with regard to entry of personnel, goods, and equipment, and how international assistance is prioritized.

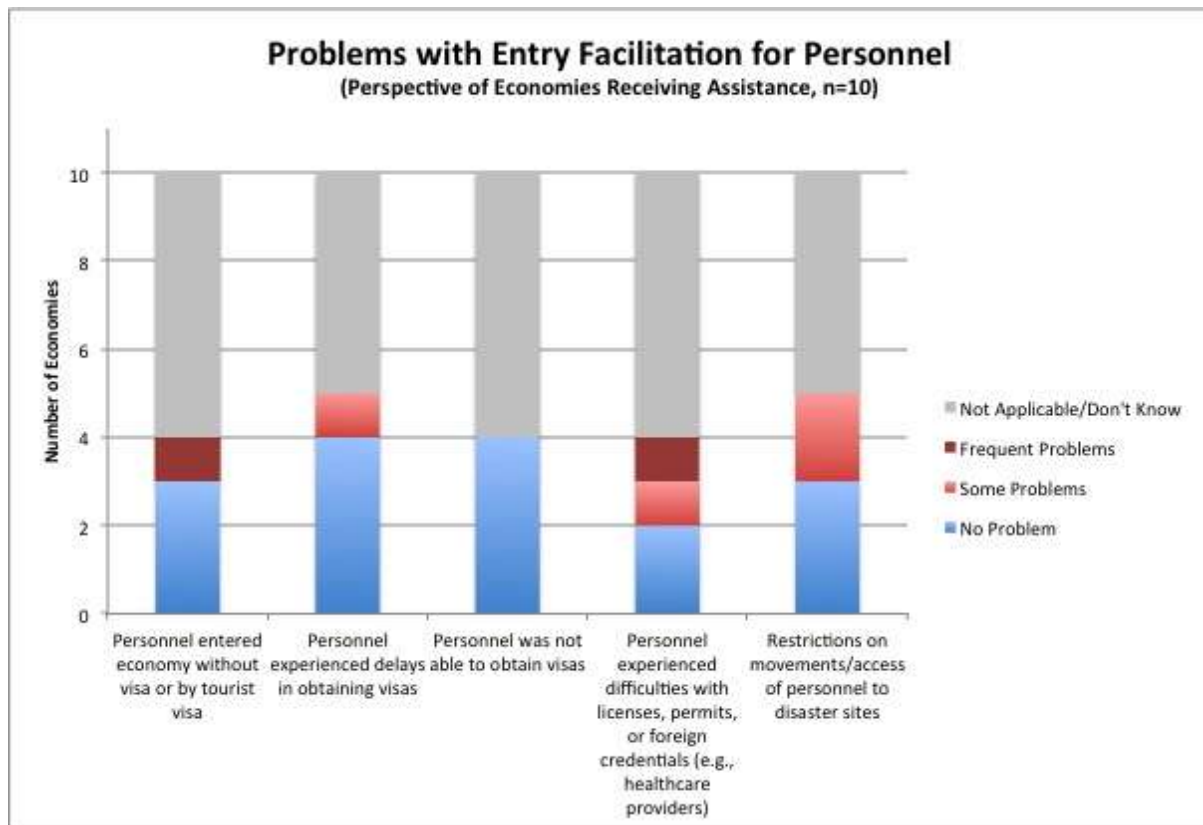


## **Practical Issues and Challenges in Times of Disaster: Experiences of APEC Economies**

### **1. Experiences of APEC Economies Receiving International Assistance**

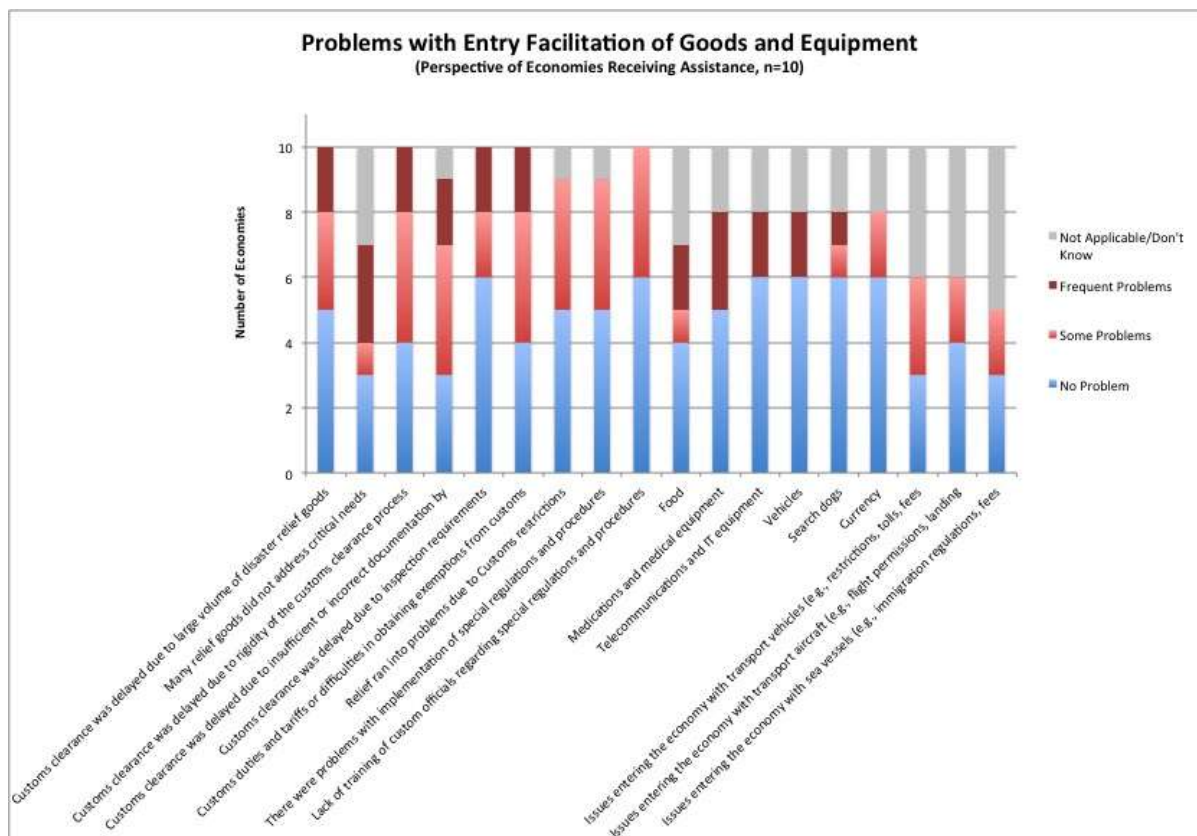
#### **Relief Personnel**

The majority of our survey respondents were not familiar with specific challenges associated with entry facilitation of international personnel in the context of disasters. However, the responses do suggest that entry of personnel functioned relatively well in regard to visa issuance. In contrast, there appeared to be problems in the areas of obtaining work permits and licenses, and in the acknowledgement of foreign credentials, as well as restrictions with regard to access to emergency locations within the economies. Issues of foreign credentials and work permits is important from the perspective of immediate humanitarian aid (e.g., medical professionals, construction workers), but also from the perspective of business continuity.



## Goods and Equipment

Frequent problems were noted for the 2007 Peru earthquake, the 2011/2012 floods in Thailand, and 2012 Hurricane Sandy. Overall, the most problematic issues include customs clearance delays due to insufficient or incorrect documentation, rigidity of customs procedures, and the large volume of relief goods. Issues were also related to specific types of goods and equipment, in particular medications and medical equipment, as well as the suitability of relief goods to address critical needs. This is a case of how pre-authorization and prioritization strategies for international assistance can provide critical improvements compared to ad hoc case-by-case decisions by the customs authorities in times of disaster.

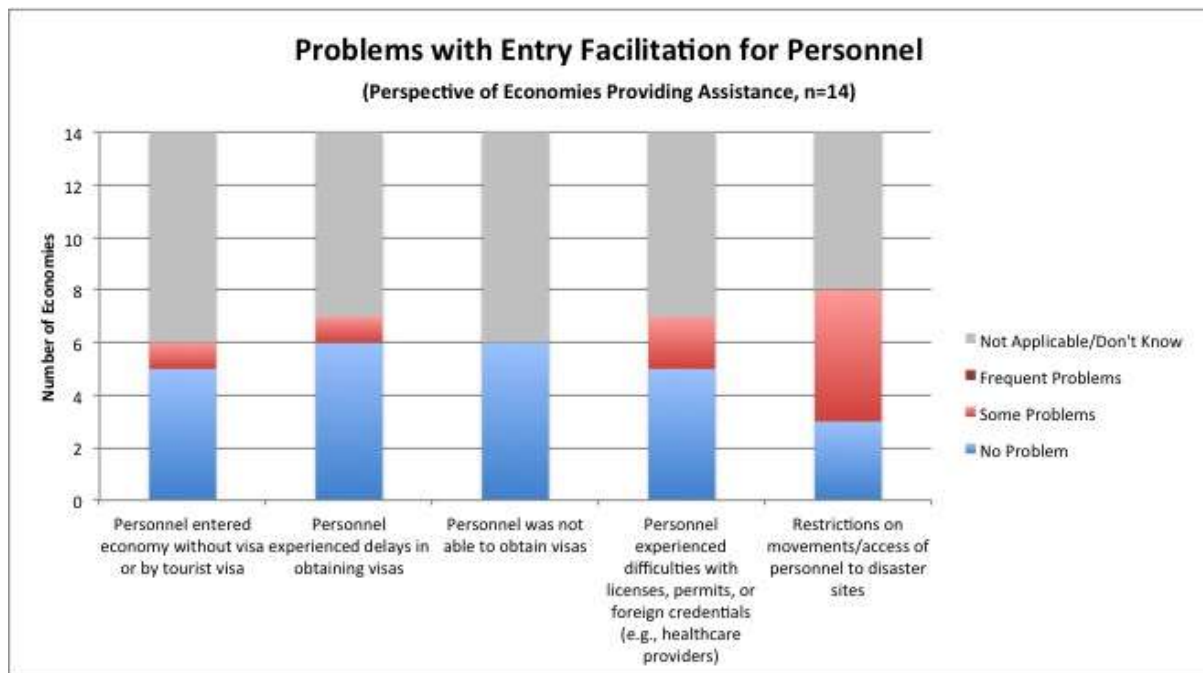


## 2. Experiences of APEC Economies Providing International Assistance

### **Relief Personnel**

Citing experiences from the earthquakes in Japan, New Zealand, and Chile; the Indian Ocean Tsunami; and Hurricane Katrina, respondents again report that restrictions of access to emergency locations, as well as obtaining work permits and licenses, and gaining acknowledgement of foreign credentials appear to pose greater challenges than visa issuance.



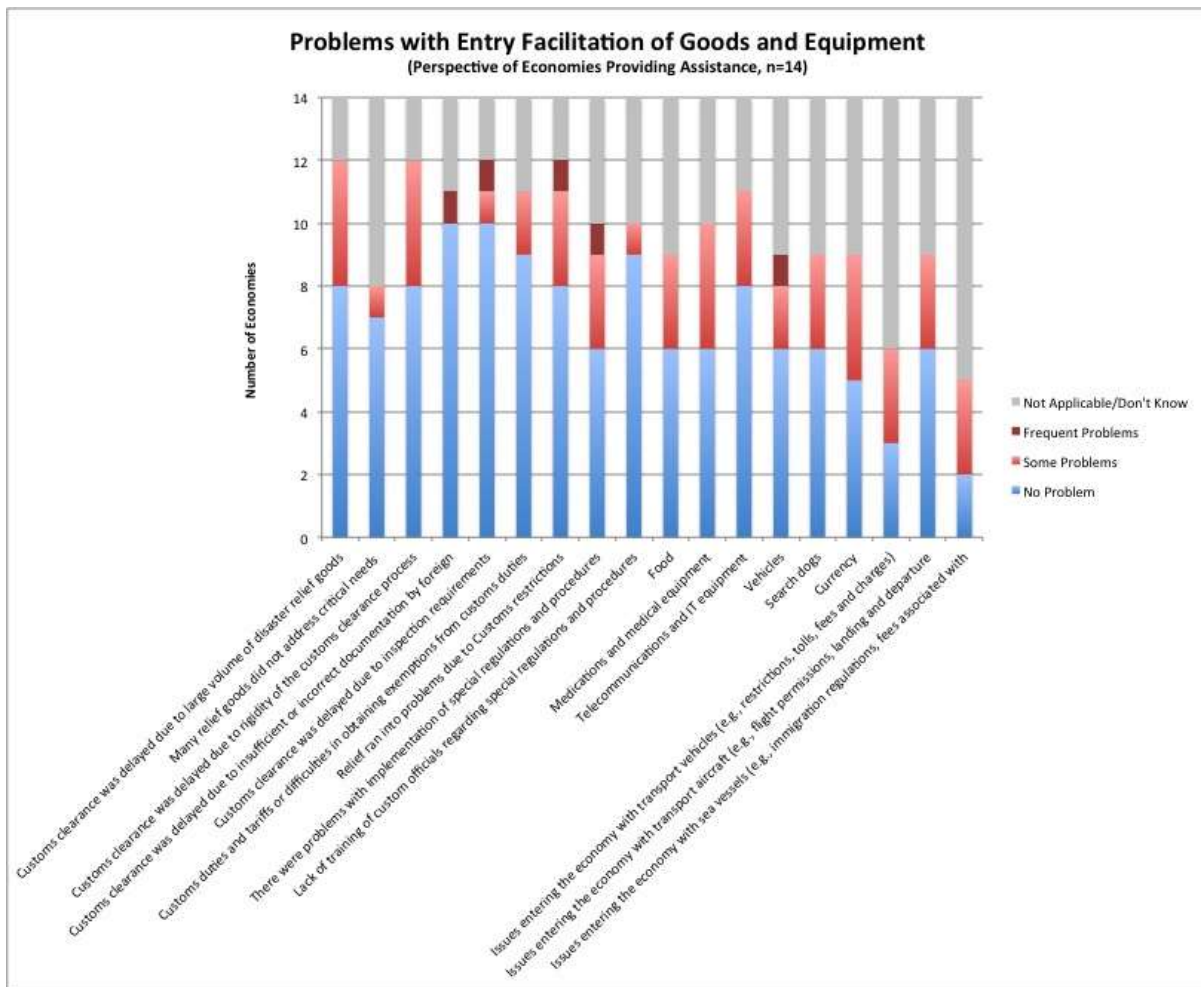


## Goods and Equipment

Some problems were experienced in most categories, including customs clearance delays due to the large number of relief goods, as well as customs delays due to the rigidity of customs procedures, customs restrictions, and the implementation of special regulations and procedures by the economy affected by the disaster.

Problems with medication/medical equipment and currency, but also with other types of imports (i.e., food, telecommunications and IT equipment, vehicles, and search dogs) were particularly noted despite the fact that approximately two thirds of economies responding to our survey have special procedures and regulations for entry facilitation of medications and medical equipment in place, which appears to be a critical best practice in the legislative framework.

Not surprisingly, *responding* economies were not aware of issues with the suitability of relief goods to address critical needs or problems or with the question of insufficient documentation of relief goods and equipment to the same extent as economies *receiving* international assistance. This creates a special opportunity for the latter to share their perceptions regarding a range of international response subjects.



**Transit**

The vast majority of respondents were not aware of transit issues, or indicated that emergency personnel, goods, and equipment did not have to transit through other economies. Of the three economies that gave an overview of their experiences with transit on the way to provide international disaster assistance, two economies (Hong Kong, China; Singapore) encountered no problems in any category. One economy (Russia) experienced some problems with transit delays of personnel, goods, and equipment.

**3. Experiences of APEC Economies Serving as a Transit Points for International Assistance**

The few responses suggest that transit is not a major concern in the context of entry facilitation. Survey respondents provided examples of how economies successfully facilitated transit of international assistance in different ways. Canada implemented a temporary ‘public policy’ to waive transit visa requirements to international emergency responders traveling to Haiti. Singapore provided locations, equipment, and transportation for the United Nations’ disaster relief operations to North Sumatra in the aftermath of the Indian Ocean Tsunami.

## **Role of Training Workshops, Partnerships and Information Technology**

Training workshops with a frequency of once or twice per year are most common at the ministerial, agency, and inter-organizational levels. Respondents who were not aware of engagement of their economies in training workshops noted the importance of agency level induction and in-service training for immigration and customs officers.

### *Training workshops with neighbor economies*

The following international workshops were reported by the survey respondents:

- APEC workshops (e.g., Honolulu 2011; Russia, 2012; Indonesia, 2013)
- ARDEX (ASEAN Regional Disaster Emergency Response Exercises, e.g., Viet Nam 2013)
- Mentawai Megathrust DiREx (e.g., Indonesia 2013-2014 International Table Top Exercises)<sup>34</sup>
- Mercosur workshops, including Simulacro Binacional Perú-Chile (November 2012), Encuentro Binacional Perú-Ecuador (January 2013), Simulacro Binacional Perú-Ecuador (March 2013), Ejercicio SIMEX América INSARAG (October 2013)
- NationLab Mexico-USA 2012
- Trilateral Table Top Exercise on Disaster Management (Japan, China, Korea; March 2013)
- WCO workshops (e.g., WCO Regional Seminar on the Roles of Customs in the Management of Humanitarian Relief Operations, Bangkok, Thailand, 2012)

### *Information Technology to assist entry of foreign relief personnel and goods and equipment*

The capability of information technology systems to connect agencies and economies in times of disaster appears to vary widely. For example, among respondents knowledgeable on the topic, economies were almost evenly split between those whose information technology systems were functional only at an agency level and those functional at the interagency and international levels of integration. A particularly positive finding is the number of respondents reporting the utilization of information systems to support the international collaboration in the area of emergency management and logistics.

	Minimum support	Functional only at primary agency level	Functional as inter-agency collaboration	Functional as an international level	Don't know
Immigration	n=0	n=3	n=2	n=3	n=8
Customs	n=0	n=5	n=6	n=3	n=2
Public Health	n=0	n=1	n=4	n=1	n=10
Emergency Management & Logistics	n=1	n=1	n=2	n=4	n=8

<sup>34</sup> Information on the Mentawai Megathrust DiREx International Table Top Exercises Indonesia 2013/2014: <http://bnpb.go.id/mmdirex2013-2014/?page=home>

*Partnerships or agreements signed with private organizations (such as cargo airlines, food manufacturers, pharmaceutical multinationals) to provide international assistance*

Eleven economies provided input on this question. Respondents from only two economies were aware of partnerships with private organizations for international assistance. Peru listed partnerships with DHL, Alicorp and Sociedad Nacional de Industrias. Russia did not provide details. Responses may have been limited to awareness of such agreements in the context of immigration and customs, based on the expertise of the survey respondents.

### **Suggestions by APEC Economies**

The following table lists topic areas identified as *most and least successful* in no particular order. The responses suggest that successes have been achieved in the areas of personnel entry and clearance of goods and equipment. For example, the APEC Travel Facilitation Initiative is perceived as very positive. It includes reaffirming support of the APEC Business Travel Card (ABTC), which allows pre-approved, facilitated, short-term entry of business travelers in the participating APEC economies.<sup>35</sup> Such provisions should be adapted for entry facilitation in times of disaster.

There also appears to be room for discussion on how to further improve efforts in the contexts of immigration, customs, and business continuity. Maybe most important, a potential lack of awareness and engagement of APEC member economies might be explored.

<b>MOST Successful Efforts of APEC in Entry Facilitation (n=7 economies)</b>	<b>LEAST Successful Efforts of APEC in Entry Facilitation (n=4 economies)</b>
APEC Business Travel Card (ABTC)	Lack of Facilitation Measures
APEC Travel Facilitation Initiative and Action Plan (TFAP I)	Awareness of APEC efforts on entry facilitation among member economies
Guidelines on the Trade Recovery Program	Visas for Transit of Personnel
Emergency Preparedness Working Group	Differences in clearance of goods
Designation of contact points for the exchange of information	Time Release Survey
Single Window	Harmonization of Data Model related to Trade
AEO (Authorized Economic Operator)	Expedite Express Courier
Customs Clearance of Goods and Equipment, IT application for Customs Procedures	Supply Chain Connectivity
Supply Chain Connectivity	

Survey respondents from nine economies shared suggestions on how APEC can promote entry facilitation in the near future. We have included all of these insightful suggestions as quotes in this

<sup>35</sup> Information on APEC Travel Facilitation Initiative and ABTC: <http://www.apec.org/about-us/about-apec/business-resources/apec-business-travel-card.aspx>

report, because we believe that they address important issues associated with legislation, preparedness and readiness, and best practices:

- Documenting existing response capabilities, requirements, and standards for international assistance in APEC economies.
- Determining legal barriers in APEC member economies.
- Establishing common guidelines, procedures and processes within APEC, and promoting bilateral and multilateral cooperation based on such provisions.
- Leveraging and promoting successful initiatives, such as the IDRL guidelines and Model Act.
- Conducting workshops and capacity-building programs that include learning from experiences of APEC economies affected by disasters.
- Increase awareness and engagement of APEC economies by collaborating with other regional initiatives, such as ASEAN.

<b>Economies</b>	<b>Suggestions</b>
Australia	“Document and promulgate member economies’ specific requirements and standards for accepting international assistance as well as the standards (such as international accreditation) that apply to assistance they may offer. This will enable providers to address or tailor their capabilities to meet specific requirements and maximize the timeliness and effectiveness of assistance offered and provided.”
Brunei	“Closer cooperation between the economies to better understand the needs and wants of different economies.”
Canada	“Any new initiative to promote the facilitated entry of international relief personnel and emergency goods/equipment should complement (and not duplicate) other initiatives currently underway to streamline access during disasters, such as the International Federation of Red Cross/Red Crescent Societies’ (IFRC) efforts to promote International Disaster Response Law (IDRL).”
Chile	“Establish an agreement on measures to facilitate international entry of relief personnel and goods; disseminate and socialize related international regulations and develop general action guidelines and most relevant aspects to facilitate the entry of aid and promote their implementation in economies, respecting the internal regulations”
Indonesia	“Cooperation and agreements between APEC economics in terms of management, disaster assistance procedures and facilities, such as workshop or capacity building program need to be developed.”
Japan	“Each USAR team is strongly required to ensure self-contained efforts on a higher level, aiming for preventing being burden for Government of the affected economy devoting emergency response.”
Korea	“Adoption of related arrangement among APEC Members”
Peru	<ol style="list-style-type: none"> <li>1. Disseminate through workshops the Trade Recovery Program.</li> <li>2. Learn experiences and good practices from economies that have attended natural disasters.</li> <li>3. Having a facilitation guide for travel of staff, goods and equipment needed for the care of natural disasters.</li> <li>4. Promote cooperation agreements between member economies to facilitate the entry or exit of relief consignments in time of disaster.”</li> </ol>
United States	<p>“Some ideas include:</p> <ul style="list-style-type: none"> <li>• identifying and cataloging existing international first responder capabilities within APEC member economies;</li> <li>• determining legal barriers to the rapid deployment of international first responders and possible legal/political remedies, and</li> <li>• establishing common guidelines, procedures and processes for incorporating foreign first responders into a domestic disaster response and recovery operation. These could serve as a launching point for additional multilateral or bilateral cooperation and agreements.</li> </ul> <p>To ensure regional collaboration it is recommended that the EPWG engage with the ASEAN Regional Forum (ARF) on the ERTF initiative. Priority Area 2 of the ARF Workplan on Disaster Relief’s Implementation Annex identifies one potential project theme of ‘Reviewing existing domestic policies, procedures and regulations to identify gaps and propose amendments as appropriate to facilitate the entry of international assistance and make it easier for the ARF participants and other assisting entities to provide assistance, if needed.’”</p>

### **III. Case Studies**

The case studies covered in this section deal with three main topic areas (1) Domestic Legislative Frameworks; (2) Issues Related to Cross-border Collaboration; and (3) Lesson Learned from Large Events.

## The Value of Case Studies

While the survey findings provide a ‘stocktaking’ overview of practices and challenges in APEC economies, the case study methodology allows a deeper view of the most important topic areas, including perspectives on how and why certain approaches qualify as best practices and what lessons can be extracted.

Based on the survey data and the feedback from the July meeting in Medan, Indonesia, we have chosen the following topic areas to illustrate particularly important challenges and best practices for entry facilitation:

- Legislative frameworks
- Cross-border collaboration
- Lessons from large events

The purpose of the case studies is to elaborate on the survey findings and illustrate in more details the critical roles of the three prongs introduced in the conceptual framework.

## Review of Domestic Legislative Frameworks: Thailand, Viet Nam and Indonesia

The purpose of this case study is to obtain a better understanding of how disaster prone economies are setting up domestic legislation to assist with the facilitation and entry of emergency personnel, goods, and equipment and how they interface with international policies and frameworks such as ASEAN AADMER.

### Brief Description

As illustrated in the three-pronged framework (see Figure 1) strong domestic and international legislative guidelines are needed to ensure economies can quickly and effectively recover after a disaster. These case studies focus on the following economies, in an effort to identify best practices that can be applied by APEC economies.

- Thailand
- Viet Nam
- Indonesia

### Domestic Legislation Overview

#### THAILAND

While Thailand has historically been seen as being relatively safe from disasters, in recent years Thailand has shown an increased susceptibility to negative impacts from a variety of natural hazards. The most frequent natural hazards include flooding, droughts, and cyclones, but the economy has also experienced devastating typhoons and tsunamis. Some recent natural disasters that necessitated humanitarian response include the 2004 Indian Ocean Tsunami and Flooding in 2010 and 2011-12.

There are current reform efforts being undertaken to improve disaster management in Thailand. Prior to the current reform effort, there were a number of other legal instruments in place to facilitate customs exemptions and to expedite entry of goods into Thailand. None of these formal agreements specifically addressed relief goods, but have been used in the past during times of crisis. These agreements were run through a number of different government bodies, and were originally designed to apply to diplomatic personnel or “foreign experts.” Major exemptions of this kind include:

- Customs exemptions for UN agencies and diplomatic missions and their personnel and goods brought into Thailand on the basis of prior written approval from the Diplomatic Privilege and Immunity Division, Department of Protocol, Ministry of Foreign Affairs stating the quantity and type of goods (Bannon 2006, 18).
- Customs exemptions through the use of Temporary Admissions (A.T.A) Carnets, for the import of “professional equipment” which are covered under the provisions of the international agreements to which Thailand has acceded. The duty and taxes are payable if the goods are not exported within the approved period. This provision covers medical equipment as well as a variety of other technical and professional equipment (Customs 2013).
- Exemptions for agencies or individuals categorized as foreign experts and registered with the Thailand International Development Cooperation Agency (TICA).



- Special exemptions granted through Agreements for Technical Cooperation programs with Foreign Donors, however these generally apply to personnel and household effects of experts working on these programs, rather than relief goods (Bannon 2006, 18).
- Exemptions through the *Florence Agreement*, administered by the Ministry of Education to allow tax and duty free imports of Educational, Scientific, and Cultural Materials.

In addition to these official arrangements, special and ad hoc exemptions were granted by the Interior Ministry during past emergencies for UN agencies, and government relief agencies such as USAID (Bannon 2006, 18).

The experience of responding to the 2004 Tsunami launched a dialogue in Thailand on how to better manage similar situations in the future. Some of the issues that arose during this period that relate to travel facilitation include:

- With respect to immigration, international relief personnel responding to the 2004 tsunami were required to exit and re-enter Thailand repeatedly in the midst of their operations in order to renew visas, at substantial loss of time and expense. (Fisher 2007, 357).
- In a related issue, there were also difficulties in this period to gain recognition of foreign professional licenses, particularly in the case of medical response personnel (Fisher 2007, 363).
- With respect to recognition of international relief organizations, many NGOs struggled with the domestic registration processes and were unsuccessful in finding information from governmental sources even months after the disaster struck (Fisher 2007, 362).
- Application of informal fees to relief supplies or long delays in processing, even in the presence of a letter of support from a government agency (Bannon 2006, 18).

The issue of travel facilitation was brought back into the spotlight in the wake of the 2011 floods. During the response to the flooding, organizations which were not recognized as ‘government organizations’ or ‘public charity organizations,’ were not exempted from paying customs duties on donated relief goods (WCO 2012, 6). According to the Thai Customs department, during the 2011 floods, entry of relief goods experienced some problems: they were delayed due to inspection requirements and further delayed obtaining exemptions from customs duties. These problems were most frequent in the case of the entry of food, medications and medical equipment, telecommunications and IT equipment, and vehicles (Srisupornphan 2013 A).

### **Current Legislation in Development**

In the years following the 2004 Tsunami, the Thai Government undertook a number of efforts to improve the domestic legal framework related to disaster management. These efforts led to the passage, in 2007, of the Disaster Prevention and Mitigation Act 2007 or DPM ACT 2007, which now serves as the legal foundation of Thailand’s disaster management system (AIPA 2012). Following on the DPM ACT 2007, Thailand also developed a *National Disaster Prevention and Mitigation Plan* for 2010-2014. As the Thai Government and domestic NGOs have typically led disaster response efforts, most of these new initiatives have been focused on the domestic procedures and structures for disaster prevention, preparedness, response, and recovery, rather than on improving facilitation of relief goods and personnel from outside.

The experience of the 2011 flooding renewed efforts to put into place policy changes to support improved travel facilitation during times of emergency. In a meeting sponsored by the World Customs Organization in 2012, customs officials from Thailand raised the issue of the lack of regulations that facilitate the clearance of relief items after disasters. The officials clarified that the current framework, consisting principally of the “Act Amending the Customs Tariff Decree,” does not list disaster relief materials as an eligible category for expedited customs clearance. The Thai Customs department is currently working with the Legal Bureau Office to amend the “Act Amending the Customs Tariff Decree” to add language to waive economic export prohibitions or restrictions on the importation of relief consignments, disaster relief personnel, and their possessions (WCO 2012, 6).

On the procedural level, Customs developed a Business Continuity Plan (BCP) in 2013 to guide processes for internal management in times of disasters in order to maintain operations and quickly recover critical business processes. This measure was partially in response to disruptions in operations at a number of customs facilities during the 2011 flooding (Srisupornphan 2013 B). In addition, Thailand is developing an action plan to accompany the policy changes to help improve the facilitation movement of relief goods and personnel during times of emergency. The box below describes the major short- and long-term goals of this action plan.

#### **Box 1 – Description of Thailand’s Action Plan**

##### **Short term:**

- Initiate the draft action plan relevant to relief consignments (in process).
- Build a virtual working group to facilitate the relief cooperation (include both domestic and international contact points, and share best practices and training).
- WCO, IFRC, and OCHA need to provide support in identifying who can address these issues at the national level.
- Appoint focal points from all concerned agencies, e.g., NDMA, Thai Red Cross, Customs/Immigration, UN/international organizations, I/NGO’s, local NGOs, etc.
- Draft/review SOPs on the facilitation of disaster relief.
- Hold a ‘lessons learned’ workshop from previous disaster experience in Thailand.

##### **Long term:**

- Improve information sharing among both international and domestic organizations in forums and meetings.
- Organize regular coordination meetings (e.g., on a quarterly basis).
- Undertake capacity building exercises (trainings, simulation exercises, study visits, and so such).
- Conduct an annual training exercise at the domestic level.
- Develop an education program for donors and receivers.
- Develop an MOU for cooperation with all relevant stakeholders.

Source: World Customs Organization (WCO), 2012, 18

## **VIET NAM**

Viet Nam has a large number of legal texts (laws, ordinances, decrees and circulars) covering different types of disaster-related activities, but no single comprehensive law on disaster management (IFRC 2009). Currently, the most comprehensive regulation still in force on states of emergency caused by disaster or communicable diseases is Decree no. 71/2002/ND-CP of 23 July 2002 issued by the government, detailing the implementation of a number of articles of the Ordinance on the State of Emergency in Case of Great Disaster or Dangerous Epidemics (IFRC 2009).

In 2007 Viet Nam approved a *National Strategy on Natural Disaster Prevention, Response and Mitigation to 2020*. This strategy focuses on developing a comprehensive disaster response plan at the

national level. It includes policies and implementation guidelines related to the UN Convention for Climate Change, the Kyoto Protocol, and the Hyogo Framework for Action. The 2007 National Strategy was strengthened by the 2009 approval of the *Implementation Plan of National Strategy for Natural Disaster Prevention, Response, and Mitigation to 2020*. This plan includes the development of regulations to establish disaster assistance organizations and to improve the efficiency of resource mobilization.

The only recognized civil society is the Red Cross Society [Decree no. 64/2008/ND-CP], however, there is no clear mechanism for coordination between the Viet Nam Red Cross and international assistance and relief organization.

Viet Nam has been working with the international community to develop an action plan to accompany the policy changes to help improve the facilitation of the movement of relief goods and personnel during times of emergency(WCO 2012). The box below describes the major short- and long-term goals of this action plan.

#### **Box 2 – Description of Viet Nam’s Action Plan**

##### **Short term:**

- Submit a report on the discussions and outcomes of the regional seminar to the leadership of the Viet Nam Red Cross and to the government.
- Organize a meeting between the Viet Nam Red Cross, the NDMA, and NCD (customs) to discuss the issues raised at the seminar.

##### **Long term:**

- Persuade the government to adopt an act or decree on disaster management, which includes provisions for expedited customs procedures and the facilitation of international disaster relief.

Source: World Customs Organization (WCO), 2012, 19

## **INDONESIA**

Indonesia is one of the most disaster-prone countries in the world. Prior to 2004, disaster management reform was discussed, although no formal actions or laws had been considered. Most disaster management action discussions were focused on emergency responses to regional conflicts and acts of terrorism. After the December 2004 tsunami, disaster management legislation reform became a priority for the Indonesian government and international humanitarian organizations. The tsunami disaster triggered legislative and executive responses to realignment of the previous disaster management framework (UNDP 2009).

The Indonesia Society of Disaster Management (MPBI) played a key role in the first drafts of the disaster management law. MPBI worked with regional and international partners including, the Indonesia Red Cross (PMI), International Federation of Red Cross and Red Crescent Societies (IFRC), scientists, and researchers. Originally the 2005 drafts gave civil societies key roles until eventually the final draft gave the government authority to “prepare for, mitigate, respond, compensate, and rebuild in the disaster management cycle.” During DM reform, OCHA and UNDP worked with UNTWG to ensure that legislation would comply with the International Disaster Response Law (IDRL) which provides for international cooperation agreements (UNDP 2009).

In 2007 the Indonesian government passed the Law of the Republic of Indonesia Number 24 of 2007 Concerning Disaster Management (Law 24/2007), this law established the National Disaster Management Agency (BNPB) and outlined procedures for relief assistance, as well as the role of International Institutions (Chapter VI Article 30). Further clarification of Law 24/2007 was provided

through subsequent government regulations, such as Government Regulation of the Republic of Indonesia Number 23 of 2008 (PP23/2008). (BNPB 2007)

Government regulations for disaster relief management are outlined as a guideline to implement the provisions of Article 30, paragraph 3 of Law Number 24 of 2007. This guideline considers the participation of international institutions and foreign nongovernmental institutions in disaster management (PP23/2008). Article 5 states that institutions and foreign nongovernmental organizations that participate in disaster management must prepare:

- Proposal – prepared through coordination between an international institution and a representative of the Republic of Indonesia abroad.
- Memorandum of understanding – joint effort between BNPB and the international institution by involving the portfolio agency responsible for foreign affairs.
- Preparation of memorandum of understanding
- Work plan – preparation of the work plan is carried out by the relevant portfolio agency and the international institution or foreign nongovernmental institution, and coordinated by BNPB.

Article 8 outlines the logistics of disaster relief. During disaster response emergencies, international organizations and governments may provide relief without going through the above procedure. To deliver relief goods and services an organization must submit either before, during, or immediately after assistance, a list of the number of personnel, logistics, equipment, and the location of activity. The head of the BNPB must grant approval based on disaster relief needs (PP23/2008).

As with Thailand and Viet Nam, Indonesia has been working with the international community to develop an action plan to accompany the policy changes to help improve the facilitation of relief goods and personnel during times of emergency(WCO 2012). The box below describes the major short- and long-term goals of this action plan.

### **Box 3 – Description of Indonesia’s Action Plan**

#### **Short term:**

- Conduct an integrated regional workshop and tabletop exercise.
- Review and revise current SOPs for receiving international disaster relief goods.
- Formulate a decree from the Finance Minister about tax/duty exemptions on international assistance.
- Familiarize relevant stakeholders with procedures for customs clearance.

#### **Long term:**

- Advocate to the government to ratify the Istanbul Convention and the Revised Kyoto Convention.

Source: World Customs Organization (WCO), 2012, 13

## **Summary & Conclusions**

In addition to the domestic policy changes currently underway in all three economies, they have all actively participated in activities under the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), particularly the Standard Operating Procedure for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations (SASOP) and joint exercises (ASEAN 2010).

The regional engagement under ASEAN, which has been ratified by all three economies, has helped to put in place the appropriate mechanisms to facilitate the movement of goods and services. The

recent efforts to improve travel facilitation in all three economies has grown out of larger efforts to improve the legal framework for disaster management more generally and regional efforts at improving the coordination of disaster preparedness, resilience, and response, most notably through AADMER. As Thailand, Viet Nam, and Indonesia work to strengthen their legal frameworks to better address issues of travel facilitation, regional partners are watching carefully to see what lessons learned might be garnered from their experience.

## Sources

AIPA. "Thailand: Country Report on Disaster Management." Presented at the ASEAN INTER-PARLIAMENTARY ASSEMBLY. The 4th AIPA Caucus, 30 April – 3 May 2012, Bangkok, Thailand.

ASEAN 2010. "Thailand Disaster Management Structure and Links to the ASEAN Agreement on Disaster Management and Emergency Response and Beyond." ASEAN DEFENCE ESTABLISHMENTS AND CIVIL SOCIETY ORGANISATIONS (CSOs) COOPERATION ON NON-TRADITIONAL SECURITY ( Disaster Management ). 28 June 2010, Royal Orchid Sheraton Hotel & Towers, Bangkok .

BNPB. Law of the Republic of Indonesia. Concerning Disaster Management. Number 24 of 2007.

Customs 2013. "A.T.A. CARNET," Thai Customs Department. Accessed July 24, 2013.  
<<http://www.customs.go.th/wps/wcm/connect/custen/traders+and+business/specific+customs+procedures/ata+carnet/atacarnet>>

Fisher, David. "Domestic regulation of international humanitarian relief in disasters and armed conflict: a comparative analysis." *International Review of the Red Cross*. Volume 89 Number 866 June 2007, pp. 345-372.

GOV. 2007. National Strategy for Natural Disaster Prevention, Response, and Mitigation to 2020. Socialist Republic of Viet Nam (Decision 172/2007/QD-TTg). Hanoi.

GOV. 2008. On mobilization, receipt, distribution and use of sources of voluntary donations for people to overcome difficulties cause by natural disasters, fires, or serious incidents and for terminally ill patients (Decree 64/2008/ND-CP).

IFRC/ADB. *Legal Preparedness for Responding to Disasters and Communicable Disease Emergences in Viet Nam* (2009)

PP23/2008. Government Regulation of Republic of Indonesia. Number 23 of 2008. Concerning Participation of International Institutions and Foreign Non-governmental Institutions in Disaster Management.

Srisupornphan, Thipsuda, A. Response to APEC EPWG Survey: Emergency Response Travel Facilitation for Personnel and Equipment in the Asia-Pacific Region in Times of Disaster," May 2013.

Srisupornphan, Thipsuda, B. Correspondence with the Authors, July 2013.

United Nations. Programme Coordination Group on Natural Disasters and Emergencies. Accessible: [http://www.preventionweb.net/files/globalplatform/entry\\_bg\\_paper~VietNameaflet01.pdf](http://www.preventionweb.net/files/globalplatform/entry_bg_paper~VietNameaflet01.pdf) (2008).

UNDP. Lessons Learned: Disaster Management Legal Reform. *The Indonesian Experience*. <http://www.undp.or.id/pubs/docs/Lessons%20Learned%20Disaster%20Management%20Legal%20Reform.pdf>. 2009. Jakarta

WCO 2012. "Seminar Report." Regional Seminar on the Role of Customs in Natural Disaster Relief. World Customs Organization (WCO), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and the International Federation of Red Cross and Red Crescent Societies (IFRC), May 8-10, 2012 Bangkok, Thailand. Accessed July 23, 2013. Available: [www.wcoomd.org/en/topics/facilitation/activities-and-programmes/~media/WCO/Public/Global/PDF/Topics/Facilitation/Activities%20and%20Programmes/Natural%20Disaster/Asia%20Pacific%20Regional%20Customs%20Seminar%20-%20Report.ashx](http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/~media/WCO/Public/Global/PDF/Topics/Facilitation/Activities%20and%20Programmes/Natural%20Disaster/Asia%20Pacific%20Regional%20Customs%20Seminar%20-%20Report.ashx)

## United States and Canada Cross-border Collaboration

This case study reports examples of cross-border collaboration between the United States and Canada to facilitate entry of personnel, goods, and equipment in times of emergencies. Cross-border collaboration is an important factor for facilitating the movement of personnel, goods, and equipment between economies in times of disaster. Economies also benefit from cross-border collaboration in that such connectedness improves the preparedness of neighbor economies for emergencies with shared impact.

### Brief Description

The United States and Canada share a long history of collaboration. The two economies share the longest border in the world with 5,525 miles across 13 U.S. states and eight Canadian provinces. The border supports the largest bilateral trade relationship in the world, with 300,000 people crossing the border in both directions each day (Public Safety Canada (A)).

### General Immigration and Customs Provisions

The United States and Canada facilitate entry of foreign personnel in times of disasters. Canadian personnel can enter the United States on the basis of case-by-case decisions by U.S. Customs and Border Protection agency (U.S. Immigration and Nationality Act). U.S. personnel can enter Canada after a Canadian emergency response agency notifies border protection and confirms the need for entry (Immigration and Refugee Protection Regulations, Paragraph 186 t) (DHS (A)). The U.S. and Canada also have the joint NEXUS program for faster processing of pre-screened travelers, which may be helpful for enrolled responders (DHS (B)).

The United States and Canada have established customs provisions to facilitate entry of goods and equipment in times of disaster. Both economies waive customs duties and taxes for emergency equipment and supplies. The United States requires certain information about the equipment in advance (United States Code §1322(b), Title 19), while Canada accepts required information by equipment operators at the point of entry (D-Memorandum D 8-1-1, Temporary Importation Regulation, Goods for Emergency Use Remission Order). (DHS (A))

### ECONOMY-LEVEL COLLABORATION

Based on their long history of collaboration, the two economies have established a variety of bilateral acts, agreements, and plans on the economy level for all hazards generally, as well as for specific hazards.

Examples of bilateral tools for emergency preparedness and response include:

- Agreement between the Government of Canada and the Government of the United States of America on Emergency Management Cooperation (2008).
- Canada-United States Action Plan for Critical Infrastructure (2010).
- Canada-United States Framework for the Movement of Goods and People across the Border During and Following an Emergency (2009) and Maritime Annex (2011).
- Joint Canada Border Services Agency (CBSA)/U.S. Customs and Border Protection (CBP) Business Resumption Communication and Coordination Plan (BR CCP) (2007).
- Canada-U.S. Marine Pollution Contingency Plan (1983, last update 2003) and Joint Inland Contingency Plan (1985, last update 2009).

- Canada-U.S. Reciprocal Forest Fire Fighting Arrangement and operating plan (1982, updated 2011).

A complete list of bilateral tools can be found in the Compendium of U.S.-Canada Emergency Management Assistance Mechanisms, 2012 (DHS (A)).

The Agreement between the Government of Canada and the Government of the United States of America on Emergency Management Cooperation (signed 2008, entered into force July 7, 2009) sets the framework for federal-level collaboration on emergency management and identifies general principles of cooperation as a guide for civil emergency authorities, consistent with domestic laws. These principles include facilitation of movement of evacuees, emergency personnel, and equipment; information sharing; and joint efforts for management of emerging threats. (DHS (A); Canada Treaty Information).

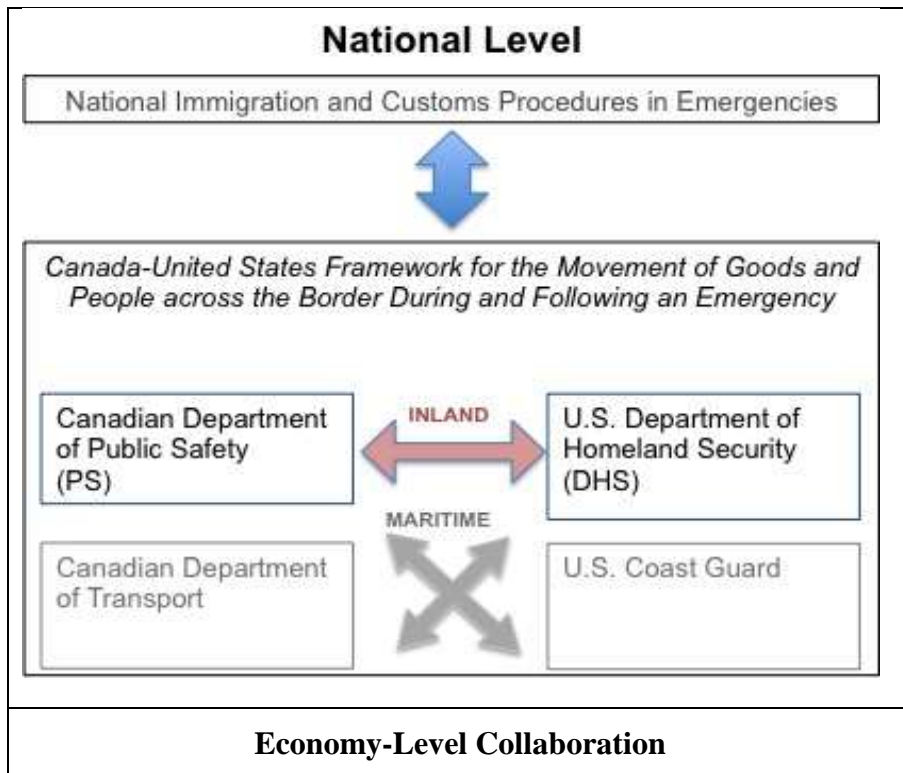
An Emergency Management Consultative Group (EMCG) was established to translate these goals into practice. The group created four working groups in 2009 (i.e., federal-to-federal assistance, joint training and exercises, cyber-security, critical infrastructure) and developed the nonbinding Canada-United States Action Plan for Critical Infrastructure (2010). One of the objectives is improvement of sector-specific cross-border collaboration and information sharing during and following incidents. (DOS; Public Safety Canada (B)).

The two economies have also established a specific Canada-United States Framework for the Movement of Goods and People across the Border During and Following an Emergency (2009) and the associated Maritime Annex to the Canada-United States Framework (2011) (DHS (A), DHS (C), Public Safety (C), Public Safety (D)).

This framework facilitates cross-border movement of people and goods during or after emergencies with significant border disruption or necessity of economy-level engagement (i.e., terrorist attacks, critical infrastructure emergencies, requests for economy-level assistance).

The figure below shows the collaboration between U.S. and Canadian agencies in the context of general immigration and customs provisions of the two economies.





The framework specifies the collaborating agencies as Canadian Department of Public Safety (PS) and U.S. Department of Homeland Security (DHS), with the addition of the Canadian Department of Transport and U.S. Coast Guard in the event of a maritime emergency. In particular, the Deputy Secretary of DHS and Deputy Minister of PS Canada and their officials take the lead in sharing incident information, communicating domestic priorities, facilitating joint messaging, and liaising with the U.S. Department of State and the Canadian Department of Foreign Affairs and International Trade. The purpose is the facilitation of coordinated, cooperative, timely decision-making to mitigate impacts on citizens and economies (DOS).

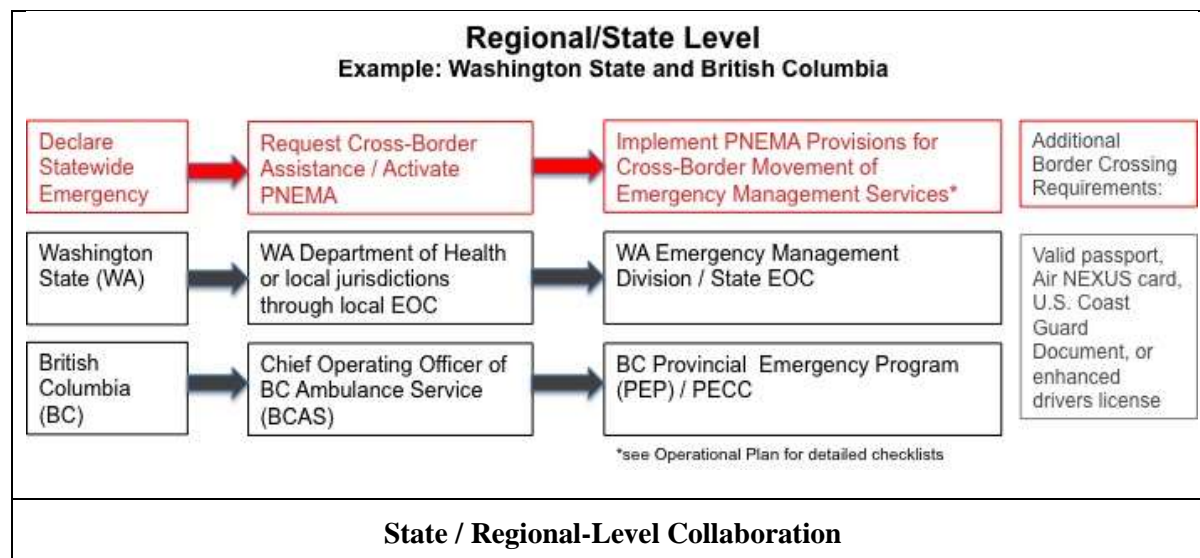
The framework is intended to be consistent with domestic policies and other joint plans, including the *Joint CBP/CBSA Business Resumption Communication & Coordination Plan*, which addresses communication between the economies regarding a trade disruption or increase of an economy's security level.

**STATE-LEVEL COLLABORATION**

The bordering economies have established collaboration agreements with detailed procedures for disaster response. One example is the Pacific North West Border Health Alliance, which includes the Canadian provinces Yukon Territory, British Columbia, and the U.S. states Alaska, Washington, Montana, Idaho, and Oregon (PNWBHA (A), PNWBHA (B)).

They hold an annual Cross Border Public Health Preparedness Workshop and have established *Operational Guidelines for Moving Emergency Medical Services Staff and Resources Across the Canada and United States Border*. The purpose of the guidelines is to facilitate timely and efficient movement of personnel, goods, and equipment across the border in a declared emergency or mass casualty incident that requires a response beyond state or provincial capacity. In such emergency situations, participating states or provinces request activation of the Pacific Northwest Emergency Management Arrangement (PNEMA) (PNWBHA (C)).

The figure below shows a specific example of how two neighbor states (Washington State and British Columbia) activate and implement the PNEMA provision to facilitate cross-border movement of emergency personnel, goods, and equipment. Detailed procedures and checklists can be accessed in the Operational Plan for cross-border movement (PNWBHA (D)).



## ENSURING CONTINUING PROGRESS AND SUCCESS OF CROSS-BORDER COLLABORATION

The two economies continuously work on strengthening their emergency response collaboration in practice. A recent example is the Canada-U.S. Enhanced Resiliency Experiment (CAUSE) by Public Safety Canada, the U.S. Department of Homeland Security, and the Province of New Brunswick. The participants demonstrated interoperability of the Canadian Multi-Agency Situational Awareness System (MASAS) and the U.S. Integrated Public Alert and Warning System (IPAWS). The purpose of the interoperable systems is improvement of response coordination during disasters through real-time shared alerts, warnings, and incident information (Public Safety Canada (E)).

### LESSONS LEARNED/RECOMMENDATIONS:

1. Unless a natural or man-made emergency impacts large numbers of citizens or critical infrastructure of domestic interest, cross-border preparedness to deploy coordinated, cooperative, timely decision-making to mitigate impacts on citizens and economies should be done at the regional level.
2. Any cross-border agreement should be consistent with, and comply with international treaties, domestic policies, and other joint plans. However, given the complexity and multi-faceted natures of these treaties and agreements, the cross-border agreement should be reduced to a simple checklist and operational procedures.
3. When a disaster strikes in a region shared by two neighboring economies, severe damage might impact both sides of the border. Acknowledging that global treaties are needed to lay a solid foundation of international HA/DR, *local* planning and implementation is most helpful for immediate assistance. A provision such as the Pacific Northwest Emergency Management (PNEMA) between the U.S. State of Washington and the Canadian province of British

Columbia, specifying detailed and implementable operational procedures is invaluable. (cf. Appendix C: Emergency Medical Services Staff and Resources Cross-border Movement Process Checklist / p. 12)

4. Regular cross-border workshops, training sessions, and exercises are recommended. Topics should focus on, but not be limited to public health and comparison of support functions between the two economies to deal with port of entry and border crossing issues. Whenever appropriate, emergency management partners, public health professionals and border agencies should be involved.

## SOURCES

Canada Treaty Information “Agreement between the Government of Canada and the Government of the United States of America on Emergency Management Cooperation” Canada Treaty Information Website. <http://www.treaty-accord.gc.ca/text-texte.aspx?id=105173> (accessed June 5, 2013).

DHS (A). “Compendium of U.S.-Canada Emergency Management Assistance Mechanisms” U.S. Department of Homeland Security Website. <http://www.dhs.gov/xlibrary/assets/policy/btb-compendium-of-us-canada-emergency-management-assistance-mechanisms.pdf> (accessed June 5, 2013).

DHS (B). “Nexus Program” U.S. Customs and Border Protection Website. [http://www.cbp.gov/xp/cgov/travel/trusted\\_traveler/nexus\\_prog/](http://www.cbp.gov/xp/cgov/travel/trusted_traveler/nexus_prog/) (accessed June 5, 2013).

DHS (C). “Canada – United States Framework for the Movement of Goods and People across the Border during and following an Emergency” U.S. Department of Homeland Security Website. [http://www.dhs.gov/xlibrary/assets/border\\_management\\_framework\\_2009-05-27.pdf](http://www.dhs.gov/xlibrary/assets/border_management_framework_2009-05-27.pdf) (accessed June 5, 2013).

DOS. “First Meeting of the U.S. – Canada Consultative Group for Emergency Management Cooperation” U.S. Department of State Website. <http://www.state.gov/r/pa/prs/ps/2009/oct/130760.htm> (accessed June 5, 2013).

PNWBHA (A). “Agreements and Arrangements” Pacific Northwest Border Health Alliance Website. [http://www.pnwbha.org/?page\\_id=11](http://www.pnwbha.org/?page_id=11) (accessed June 5, 2013).

PNWBHA (B). “Cross-Border Collaboration 2003-2010 Report” Pacific Northwest Border Health Alliance Website. <http://www.pnwbha.org/wp-content/uploads/2010/07/PNW-Cross-Border-Collaboration-Report-2003-2010.pdf> (accessed June 5, 2013).

PNWBHA (C). “Operational Guidelines for Moving Emergency Medical Services Staff and Resources across the Canada and United States Border” Pacific Northwest Border Health Alliance Website. <http://www.pnwbha.org/wp-content/uploads/2012/11/EMS-Border-Guidelines-v3.pdf> (accessed June 5, 2013).

PNWBHA (D). “Operational Plan for Moving Emergency Medical Services Staff and Resources Across the Washington and British Columbia Border” Pacific Northwest Border Health Alliance Website. <http://www.pnwbha.org/wp-content/uploads/2010/04/WA-BC-EMS-Border-Crossing-Plan.pdf> (accessed June 5, 2013).

Public Safety Canada (A). “Considerations for United States – Canada Border Disruption Management 2012” Public Safety Canada Website. <http://www.publicsafety.gc.ca/prg/ns/ci/btdm-eng.aspx> (accessed June 5, 2013).

Public Safety Canada (B). “Canada – United States Action Plan for Critical Infrastructure” Public Safety Canada Website. <http://www.publicsafety.gc.ca/prg/ns/ci/cnus-ct-pln-eng.aspx> (accessed June 5, 2013).

Public Safety Canada (C). “Canada – United States Framework for the Movement of Goods and People across the Border during and Following an Emergency” Public Safety Canada Website. <http://www.publicsafety.gc.ca/prg/le/bs/mgpfrm-eng.aspx> (accessed June 5, 2013).

Public Safety Canada (D). “Maritime Annex to the Canada – United States Framework for the Movement of Goods and People across the Border during and Following an Emergency” Public Safety Canada Website. <http://www.publicsafety.gc.ca/prg/ns/ci/marann-eng.aspx> (accessed June 5, 2013).

Public Safety Canada (E). “Technology Demonstration Focuses on Harmonizing Cross-Border Emergency Communication Efforts” Public Safety Canada Website. <http://www.publicsafety.gc.ca/media/nr/2013/nr20130306-1-eng.aspx> (accessed June 5, 2013).

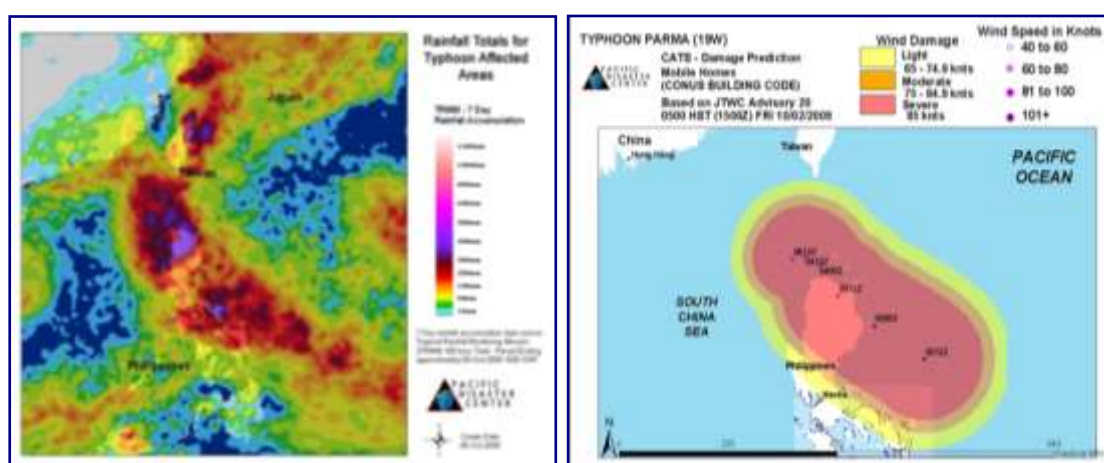
## **IV. Lessons from Large Events**

The case studies in this section provide insight into how the Philippines, Chile, and Thailand managed large disaster events that required international assistance.

## Typhoons Ketsana (Ondoy), Parma (Pepeng), and Mirinae (Santi), Philippines

### BRIEF DESCRIPTION OF EVENT

On September 26, 2009, Typhoon Ketsana (known as Ondoy in the Philippines) made landfall in the Philippines on the border between Aurora and Quezon provinces. The storm brought wind gusts up to 100 km/hour and rain as heavy as 454.9 mm (17.9 inches) in a single day. Flooding in affected areas was reported as from knee deep to rooftop deep. The storm led to major disruptions in power, communication, and water systems (Santos, 2009). It also led to the closure of Manila’s international airport for almost a full day; and closure of Abenida Epifanio de los Santos (EDSA), a major transportation artery leading through much of the Manila Region. By September 26, an overall “state of calamity” was declared in 29 provinces, including Metro Manila, per Presidential Proclamation No 1891: 27, for Ketsana/Ondoy. In October 2009, the Philippines was hit by two other storms: Parma (Pepeng) on October 3 and Mirinae (Santi) on October 30.<sup>36</sup>



Typhoon Parma 7-day rainfall totals (left) and Consequence Assessment Tool Set model of wind damage.

### HUMANITARIAN IMPACTS

The Philippine National Disaster Coordinating Council (NDCC) estimates that the combined effects of the three typhoons contributed to almost a thousand deaths and over 700 injuries. Overall, more than 10 million people were affected with over 46,000 houses destroyed and 260,000 damaged. As many as 23,160 families were displaced from their homes and received shelter in over 350 evacuation centers.<sup>1</sup>

**Table 2: Casualties and Damage caused by Philippine Typhoons, Fall 2009**

Details	Ketsana (Ondoy)	Parma (Pepeng)	Mirinae (Santi)	Total
Deaths	464	465	34	963
Injured	529	207	20	756
Missing	37	47	5	89
No. of people affected	985,732 families (4,869,326 people)	995,245 families (4,641,692 people)	184,578 families (795,074 people)	2,145,555 families (10,308,092 people)
Houses damaged	154,922	48,120	57,43	260,885
Houses destroyed	30,082	6,253	9,868	46,203

Source: National Disaster Coordinating Council

<sup>36</sup> OFDA 2010, 4

A number of domestic and international donors supported relief efforts. Contributions in cash or in kind were received from Australia, Canada, China, Japan, the European Union, Germany, Israel, Malaysia, New Zealand, Singapore, South Korea, Chinese Taipei, Thailand, and the United States. The entry of the humanitarian aid was triggered by the Philippine government's Flash Appeal for Assistance from the international community for support to respond to the effects of Ondoy, Parma, and Santi. The government request was based on a joint rapid needs assessment in affected areas by the National Disaster Coordinating Council (NDCC) through the Office of Civil Defense (OCD). The geographic coverage of the assessments was expanded because of Tropical Cyclone Parma, which came in only a week after Ondoy.

## PRIVATE SECTOR IMPACTS

As demonstrated in Table 3, approximately 90 percent of total damage and losses from the storms accrued within the private sector, compared to 10 percent to the public sector. When considering the productive sectors affected, industry, commerce, and tourism experienced the greatest impacts, with US \$447.6 million (PHP 22.4 billion) in damage and US \$1.89 billion (PHP 88.9 billion) in losses of sales. The particularly high losses experienced by the commercial sector are due to the timing of the flooding. Traders had been stocking up on goods to meet the anticipated high demand for those products during the end-of-year sales. Much of this unsold inventory was destroyed or damaged by the floods.

**Table 3 - Damage and Losses by Sector and Type of Ownership (in PHP millions)**

Sector	Damage	Losses	Total	Public	Private	Total
Productive Sectors	26,214.30	125,100.70	151,315.00	4,010.70	147,304.30	151,315.00
Agriculture *	3,765.00	36,152.00	39,917.00	4,010.70	35,906.30	39,917.00
Industry	9,832.00	9,122.80	18,954.80	-	18,954.80	18,954.80
Commerce	12,041.30	77,288.60	89,329.90	-	89,329.90	89,329.90
Tourism	576.00	2,537.30	3,113.30	-	3,113.30	3,113.30
Social Sectors	33,207.30	9,986.90	43,194.20	8,812.20	34,382.00	43,194.20
Housing	25,453.80	8,872.10	34,325.90	4,203.10	30,122.80	34,325.90
Education	2,515.70	229.50	2,745.20	2,149.30	595.90	2,745.20
Cultural Heritage	279.80	25.60	305.40	305.40	-	305.40
Health	4,958.00	859.70	5,817.70	2,154.40	3,663.30	5,817.70
Infrastructure	8,512.60	2,641.70	11,154.40	7,807.60	3,346.70	11,154.40
Electricity	713.10	878.50	1,591.60		1,591.60	1,591.60
Water and Sanitation	372.50	768.60	1,141.10	497.30	643.80	1,141.10
Flood Control, Drainage and Dam Management	716.90	-	716.90	716.90	-	716.90
Transport	6,517.10	994.70	7,511.80	6,593.40	918.30	7,511.80
Telecommunication	193.00		193.00		193.00	193.00
Cross-Sectoral	294.20	41.00	335.20	335.20	-	335.20
Local Government	294.20	41.00	335.20	335.20	-	335.20
<b>Total</b>	<b>68,228.40</b>	<b>137,770.30</b>	<b>205,998.70</b>	<b>20,965.70</b>	<b>185,033.00</b>	<b>205,998.70</b>
<b>Total in USD million</b>	<b>1,451.70</b>	<b>2,931.30</b>	<b>4,383.00</b>	<b>446.10</b>	<b>3,936.90</b>	<b>4,383.00</b>

Note: 1 USD = 47 PHP

Source: GFDRR, 2010, 12

## LESSONS LEARNED AND POTENTIAL FOR REPLICATION

With respect to the humanitarian response, one effective tool used was a public-private collaboration with DHL, the international express delivery company, to help handle the large influx of humanitarian supplies. In 2007, DHL signed a Memorandum of Understanding with the Philippine government to send a Disaster Response Team (DRT) in the event of a disaster. During a three week deployment, 20 DHL DRT volunteers supported logistical operations at Manila Airport. During this time, they helped with the unloading of 450 tons of relief goods, including food, hygiene articles, water purification units, tents, and tarpaulins from aid organizations such as the U.N. World Food Program (WFP), USAID, the Red Cross, and Doctors Without Borders. This “surge capacity” from DHL helped support customs at a time when many customs employees were dealing with their own flooded homes (DHL 2009). On the basis of DHL’s experience working in more than 20 disaster deployments, the company has developed a program to improve the readiness of airports to operate in the case of a disaster. It was anticipated that the Philippines would participate in a training on this methodology, called Get Airports Ready for Disaster (GARD), in 2013. A description of this new program is included in **Box 1**.

Additionally, the response effort launched during Ondoy, Pepeng, and Santi provided an opportunity to pilot a “one-stop-shop” (OSS) mechanism for entry of humanitarian response supplies during crises. Before the OSS mechanism was established, there was already the International Humanitarian Assistance Network (IHAN) that facilitated the entry foreign responders; and Presidential Memo Order #36 that facilitated the entry of donated goods, including equipment. The OSS consolidated these two mechanisms to facilitate, fast track, and improve the process of entry of both donated goods and emergency personnel. As a result of the combined tasks, the OSS is composed of a number of concerned agencies, including Civil Defense, Social Welfare, Health, Customs, and Immigration. In the initial iteration of this process, one major constraint was the management of the goods going from the airport to the next destination, or identification of a warehousing facility, especially if there was no consignee. Given the multiple agencies involved, another area of concern was to determine which agency should be taking the lead in coordinating the process (i.e., OCD, Department of Social Welfare and Development, or Customs), and what the roles of the various agencies were at the OSS desk at the airport. Over the course of the typhoon response, some of these procedural issues were worked out. The initiative was deemed successful, and it was used in the aftermath of major disasters that hit the Philippines in 2011 and 2012. Similar approaches might be considered by other APEC economies, although the experience of the Philippines shows the importance of ensuring that roles and responsibilities of the various agencies involved should be clearly specified to avoid confusion during the activation of such mechanisms.

### **Box 1 - DHL’s Get Airports Ready for Disaster (GARD) Program**

Building on its DRT experience and in order to increase the surge capacity of airports DHL established GARD, which:

- is designed specifically for airports located in disaster hot-spot areas,
- guides local communities in identifying surge capacity gaps as part of their disaster response mechanisms,
- provides professional trainers from DHL Aviation to hold the training,
- is a hands-on approach to disaster preparedness,
- includes mixing classroom elements and on-site assessment work, and
- yields an Airport Surge Capacity Assessment Report, a tool to understand the surge capacity of an airport for disaster relief operations.

Source: Adapted from DHL 2012



A third important lesson learned is that, if local markets are functioning and supplies are sufficient, there are many benefits to sourcing relief supplies locally. Under the terms of its OFDA grant, the American Red Cross was responsible for procurement of its relief supplies. Usually, the ARC would procure these supplies from international sources and ship packages to the affected areas. In this case, the Philippines National Red Cross (PNRC) requested to use local procurement to meet as much as possible of the need for supplies. The PNRC was also able to arrange warehousing. When possible, using local sources for the purchase of emergency supplies can help to reduce the burden on customs for processing increased imports during an emergency. NGOs and international humanitarian organizations should, however, be cognizant of the availability of key goods, so as not to create shortage situations.

## **SOURCES**

Santos, Jose Bimbo. "Metro Manila, surrounding areas' power, water supply still below normal" Business World Online, September 29, 2009, Accessed July 1, 2013 <<http://www.bworldonline.com/BW092909/content.php?src=3&id=072>>

Arquiza, Yasmin. "Both rich and poor suffered from Ondoy's wrath" GMA News, September 28, 2009 , Accessed July 1, 2013 <<http://www.gmanews.tv/story/173294/both-rich-and-poor-suffered-from-ondoys-wrath>>.

Balido Jr., Reynaldo B. Correspondence with the authors. July 11, 2013.

DHL 2009, "Deployments in 2009." DHL Homepage: Responsibility: Disaster management: Disaster Response (DRT), Accessed July 3, 2013. <[http://www.dp-dhl.com/en/responsibility/disaster-management/disaster\\_response\\_drt.html](http://www.dp-dhl.com/en/responsibility/disaster-management/disaster_response_drt.html)>

DHL 2012. "GoHelp: Disaster Management at DPDHL." Corporate Communications & Responsibility – GoHelp, Standard presentation, Bonn, August 2012. Accessed online July 5, 2013. <<http://www.trailblazer.eu/files/201663198.pdf>>

GFDRR 2010. "TYPHOONS ONDOY AND PEPENG: Post-Disaster Needs Assessment -MAIN REPORT." Global Facility for Disaster Reduction and Recovery, World Bank, 2010. Accessed online July 1, 2013. <[http://gfdrr.org/docs/PDNA\\_Philippines\\_MainReport.pdf](http://gfdrr.org/docs/PDNA_Philippines_MainReport.pdf)>

Leithead, Alastair. "Devastation in Manila flood zone" BBC News, September 28, 2009, Accessed July 1, 2013 <<http://news.bbc.co.uk/2/hi/asia-pacific/8278818.stm>> BBC News.

OFDA 2010. "EMERGENCY RESPONSE TO TYPHOON KETSANA IN THE PHILIPPINES- Final Report." American Red Cross, 2010. Accessed online July 1, 2013. <[pdf.usaid.gov/pdf\\_docs/PDACQ727.pdf](http://pdf.usaid.gov/pdf_docs/PDACQ727.pdf)>

Todesillas, Ellen. "Customs' one-stop shop for tax-free donations elicits outcry." GMA Network, October 4, 2009. Accessed July 5, 2013. <<http://www.gmanetwork.com/news/story/173778/news/nation/customs-one-stop-shop-for-tax-free-donations-elicits-outcry>>

Todesillas, Ellen. "One-stop shop for donations causes confusion." ABS-CBN News, October 5, 2009. Accessed July 5, 2009. <<http://www.abs-cbnnews.com/nation/10/05/09/one-stop-shop-donations-causes-confusion>>

Gonzalez, Iris. "DOF orders creation of one-stop shop for release of foreign donations." PhilStar, October 5, 2009. Accessed July 5, 2013. <<http://www.philstar.com/headlines/510970/dof-orders-creation-one-stop-shop-release-foreign-donations>>

## February 2010 Earthquake in Cobquecura, Chile

### BRIEF DESCRIPTION OF EVENT

On February 27, 2010, at 3:34 in the morning local time, an earthquake occurred in Chile with a magnitude of 8.8 on the moment magnitude scale. This event ranks as the sixth strongest earthquake on record anywhere in the world. The epicenter of the earthquake was 43 kilometers southwest of Cobquecura (Ñuble Province, Biobío Región). About 3 minutes in duration, the earthquake affected six regions and 75 percent of the Chilean population. The earthquake led to the destruction of large tracts of Chile's infrastructure, including the collapse of several bridges along major transportation arteries. It resulted in a temporary failure of communications linkages (Pesse 2013). The earthquake triggered a series of tsunami waves that impacted a 435-mile (700-kilometer) stretch of the coastline, causing significant damage to homes and killing several people (Aon Benfield 2010, 10).

### HUMANITARIAN IMPACTS

The earthquake had significant impacts across Chile. More than 500 people lost their lives, more than 50 others were missing, and about 12,000 injured (Araneda et al, 2010, 1). Approximately 370,000 homes were damaged or destroyed, thereby displacing more than 800,000 people. More than 3,000 schools were damaged or destroyed, affecting more than 3 million students (Pesse 2013).

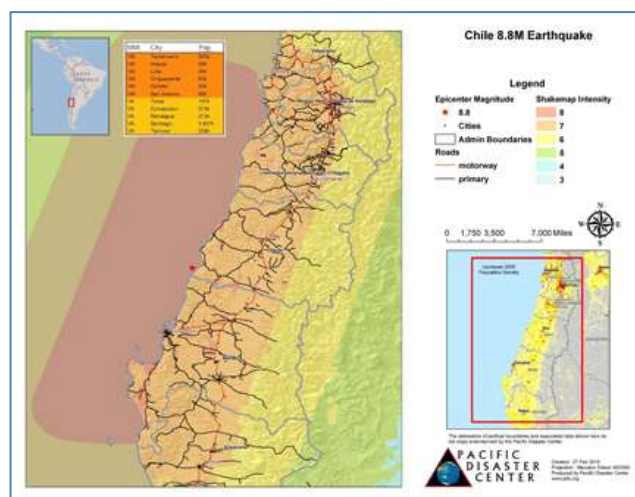
In the wake of this disaster, Chile received a significant outpouring of aid. Over 40 economies contributed to response and recovery efforts with over US\$66 million in official contributions and US\$7 million in private donations. Initially, this large volume of donations led to logistical difficulties in managing the entry, sorting, storage, and distribution of items. During the first 24 hours, distribution was complicated by the lack of information regarding the needs of communities in affected regions, and by the destruction of key parts of the infrastructure, including damage at ports and on major road-transport arteries (Pesse 2013).

### PRIVATE SECTOR IMPACT

The earthquake struck at Chile's economic core, including Chile's main seaports and airports. The overall cost of the earthquake is estimated at about US\$30 billion, which represents about 18 percent of Chile's GDP. About 90 thousand people lost their livelihoods (Pesse 2013).

Infrastructure was severely impacted, with damage or destruction of facilities including 53 port facilities, hundreds of roads, and more than 200 bridges (Pesse 2013). Damage was reported for a number of portions of Chile's major road route, the north-south Pan American Highway, which connects Chile's road system to surrounding countries. The earthquake caused the closure of the Comodoro Arturo Merino Benítez International Airport in Santiago for 24 hours, during which time significant damage to the main passenger terminal was assessed. Fortunately, the runways were

### Visualization of initial damage done by the 2010 Biobío, Chile, Earthquake



largely unaffected. Although ports close to the epicenter were destroyed or damaged, imports and exports were successfully re-routed to ports further north of the epicenter (Punter 2013, 34).

Provision of utilities was also disrupted. More than two million households lost power after the main earthquake. Electricity was successfully restored to most of the affected areas within five days as the main power grid did not suffer extensive damage. Landline and mobile phone networks were also disrupted by the earthquake, and higher than normal demand for the limited signals that were available resulted in network overload (Punter 2013, 34).

### **Collapsed Bridge Following 2010 Earthquake**



Source: Pesse, 2013

The earthquake led to a temporary decline in the productive capacity of several industrial sectors, particularly in the mineral, paper mill, and fishing industries. Chile produces more than a third of the world's copper. During the earthquake, several mines sustained damage and others were shut down temporarily due to the loss of power. In all, about one-fifth of Chile's total copper production capacity was impacted, and shipments were delayed due to the damage to roads and ports. Chile's two oil refineries were also affected (Punter 2013, 34). In the lumber industry, the earthquake disrupted as much as 8 percent of global pulp production, leading to dramatic price increases. Prices in the U.S. increased between 25 and 35 percent, as half of all pine lumber and moldings come from Chile. The fishing industry sustained damage, as millions of fish were killed during the tsunami and farm-raised salmon could not be transported to the seaports due to the damage to the Pan American Highway (Punter 2013, 34). There was a decline of 31.2 percent in the industrial production index in the Regions of Maule and Biobío (VII and VIII). Recovery began in the second half of the year, and by the end of 2010 activities had nearly reached normal levels (Pesse 2013).

### **LESSONS LEARNED AND POTENTIAL FOR REPLICATION**

In the early days of emergency response, international donations proved cumbersome, with a large volume of contributions of donated bulk foodstuffs (e.g., sugar, flour, milk). Limited space in warehousing facilities, as well as major disruptions in the transportation corridors to distribute the goods created major roadblocks to moving emergency response supplies to the populations impacted by the disaster, particularly during the first 48 hours.

As Chile sought to respond effectively to the needs of its population after the earthquake, it adapted its military planning model for operations other than war to better organize relief and recovery efforts, and adapt to emerging needs. An emergency committee formed under this model included a broad range of representatives from every level of government, under the direction of the regional defense chief. This committee was tasked with a variety of responsibilities included restoring and monitoring basic services and transportation, resolving shortages of fuel, food, and water; imposing law and order; clearing and collecting debris; and organizing emergency shelters, among others. Chile also created a Logistic Coordination Center to ensure the distribution of supplies from the government and international donations.

Some of the strategies enacted during the first weeks to improve the efficiency and targeting of disaster response and recovery efforts include:

- Mapping of disaster needs, transportation routes, warehouses, and response resources on gridded map to improve the coordination of response efforts.
- Standardization of requested and distributed items, including the creation of a standard family box, with basic food supplies for a family of four for four days.
- Reduction of central warehousing needs by implementing mixed distribution strategies.
- Decentralization of reception of supplies in the distribution centers, and direct delivery by local authorities in 30 counties from second week.
- Training of Town Hall staff and appointing delegates to supervise the distribution.
- Agreement and regulation to issue prompt purchase orders.

Lessons learned from the use of these adaptive strategies and procedures have been institutionalized post-disaster to help to better prepare for similar situations in the future. Specifically, the following measures have been taken:

- Standardization of procedures for the distribution of basic supplies, including: i) definition of macro zones, ii) creation of the standard family box model and emergency housing, iii) maintaining a reserve stock of emergency supplies as state policy (3000 units being held with private suppliers).
- Training on logistics for emergency response personnel at central, regional, and local levels through an official course for civil and military authorities at the Army War Academy.
- Identifying and communicating with key warehouse facilities and distribution points for emergency supplies.
- Setting procedures with suppliers, based on lessons learned during the disaster.
- Design of procedures to direct donations and international aid at customs facilities to the most critical areas during emergencies.
- Use of communication channels with media to inform citizens about the procedures, times, and places for distribution.
- Development of a web-based nationwide Emergency Information System to assist public and private sectors with better decision making

These new policies and strategies have been tested and have proved to be effective to respond to emergencies stemming from volcanic eruptions in the South of Chile in 2012 and 2013 (Pesse 2013).

## **SOURCES**

Araneda, J.C., Rudnick, H., Mocarquer, S, Miguel, P. “Lessons from the 2010 Chilean Earthquake and its Impact on Electricity Supply.” Paper submitted to the 2010 International Power System Technology (Powercon 2010), Hangzhou China, October 24–28, 2010.

Pesse, Bosco Lt. Gen. “Earthquake and Tsunami – February 27th 2010: Chile’s Disaster Experience, Preparedness, Response and Recovery Efforts.” APEC Supply Chain Resilience Workshop, Emergency Preparedness Working Group and Transportation Working Group, Medan, Indonesia, June 2013.

Pesse, Bosco Lt. Gen. Personal correspondence with the authors. July 2013.

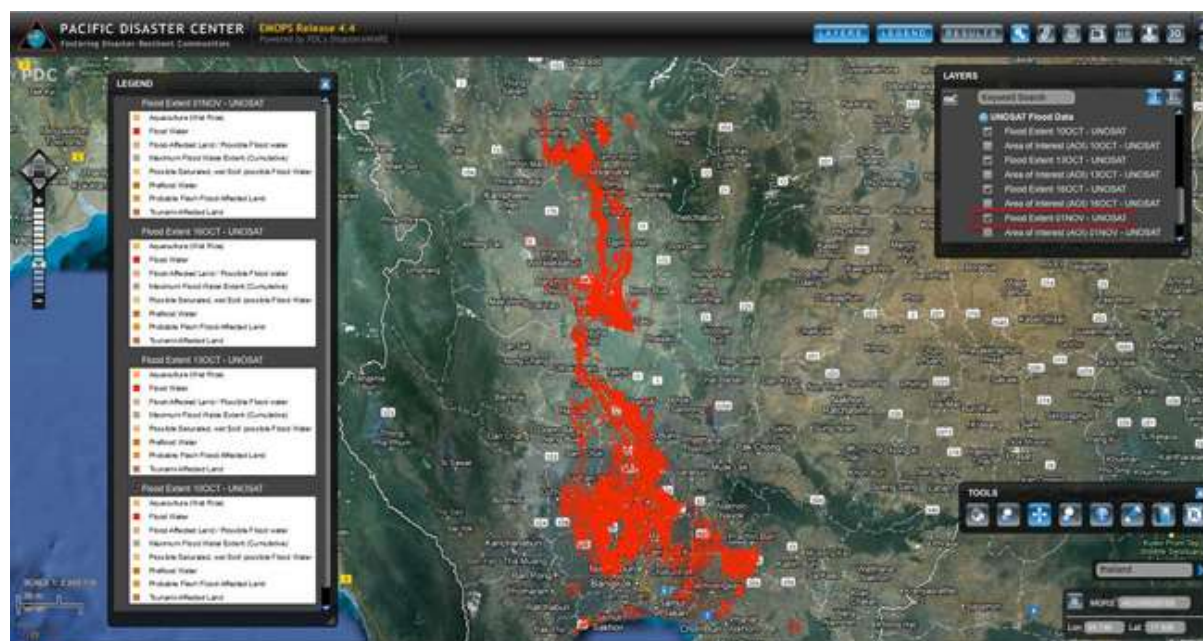
Punter, Alan. "Supply Chain Failures: A Study on the Nature, Causes, and Complexity of Supply Chain Disruptions." Airmic Technical, 2013. Accessed online July 7, 2013  
<[http://www.airmic.com/sites/default/files/supply\\_chain\\_failures\\_2013\\_FINAL\\_web.pdf](http://www.airmic.com/sites/default/files/supply_chain_failures_2013_FINAL_web.pdf)>

Aon Benfield. "Event Recap Report: 02/27/10 Chile Earthquake," Aon Benfield, 201. Accessed online July 7, 2013.  
<[http://www.aon.com/attachments/reinsurance/201003\\_ab\\_if\\_event\\_recap\\_chile\\_earthquake\\_impact\\_forecasting.pdf](http://www.aon.com/attachments/reinsurance/201003_ab_if_event_recap_chile_earthquake_impact_forecasting.pdf)>

## 2011 Flooding, Thailand

### BRIEF DESCRIPTION OF EVENT

Thailand experienced its worst flooding in roughly 50 years in 2011. The worst of the flooding took place from late July to early December, and impacted 65 of Thailand's 77 provinces. The World Bank estimates that economic losses associated with the flooding amounted to THB 1.4 trillion (about USD \$45.7 billion), making these floods one of the top-five costliest natural disaster events in modern history (Aon Benfield 2012). As a result of the flooding, GDP growth forecasts for 2011 were revised down from 2.6 percent to 1.0 percent (Bank of Thailand, 2012, 1).



### HUMANITARIAN IMPACTS

The impacts of the flood were widely felt, with over five million flood-affected people at the height of the flooding in mid-November when large parts of Bangkok were flooded. The flooding killed as many as 680 people, most of which died by drowning. More than 165,000 people were displaced from their homes, and housed in approximately 2,600 shelters. The flooding also contributed to a number of medical issues. Due to leaking of waste and sewage into the flood waters, water-borne diseases become a serious concern for Thailand. Furthermore, the flooding contributed to an increase in mental health issues, including stress, depression, and suicide (Human Development Forum, 2011, 5).

### PRIVATE SECTOR IMPACTS

The floods that hit Thailand in 2010 resulted in significant impacts on private sector activities. Streams of water created safety hazards that inhibited workers from reaching their workplaces. Moreover, factories and warehouses were flooded, stalling production and damaging valuable equipment (Banomyong 2013, 1). Over a thousand factories were closed, leading to disruptions in the global supply chain.

This impact was felt acutely in the manufacturing sector, which accounts for more than 35 percent of Thailand's GDP and about 20 percent of employment (World Development Indicators, 2011). Major manufacturing industries affected include automakers (Ford, Mazda, Hino, Isuzu, Mitsubishi, and Nissan) and electronics products (especially hard drives and camera components) (Human

Development Forum 2011). According to a survey conducted by the Bank of Thailand in 2012, overall 97 percent of businesses in the manufacturing sector were adversely affected with approximately 56 percent of firms reporting that the impact of the flooding on their businesses was “severe” or “very severe.” The location of Thailand’s major industrial zones leaves the manufacturing sector particularly vulnerable to flooding—more than 90 percent of facilities are located in just seven provinces that are in a river valley area that is susceptible to flooding (UNESCAP 2012, 16).

Moreover, Thai firms tend to be involved in the final assembly portion of the global manufacturing supply chain, assembling final products using capital-intensive intermediate inputs from developed economies (UNESCAP 2012, 16). Therefore, a disruption in the ability to import and distribute inputs due to flooding conditions would lead to disruptions in areas not directly affected by flooding.

Agricultural production was also disrupted as a result of the flooding. Thailand, a major producer of rice, lost more than 10 percent of its arable land. The decrease in production added pressure to already rising world food prices (Human Development Forum 2011, 5). The crops that were most affected by the flooding were rice, sugar cane, cassava, sweet corn, maize, vegetables, and tree fruit (e.g., milk banana, guava, mango) . More than 680,000 farmers were affected, with estimated damages topping THB 5.6 billion and losses over THB 34.7 billion (World Bank 2012, 20-21).

**Flooded Industrial Estates in Thailand**



Source: U.S. Marine Corp, 2011

## **LESSONS LEARNED AND POTENTIAL FOR REPLICATION**

The case of the Thailand flooding provides a useful lesson on providing a flexible regulatory environment during and following a natural disaster to enable businesses to maintain operations and recover quickly. The Thai economy is highly reliant on the manufacturing sector, which accounts for more than 35 percent of Thailand’s GDP and about 20 percent of employment. This sector has a high level of foreign direct investment, particularly in a number of special economic zones (SEZ), which offer favorable tax and other incentives to locate operations in Thailand.

The Thai Government took a number of measures to minimize the impact of the flooding on the manufacturing sector, and to accommodate flexibility in the regulatory regime to help firms recover quickly. Some of special measures include:

- Businesses operating in special economic zones (SEZ)<sup>37</sup> affected by flooding were able move goods, domestic raw materials, machinery, and equipment or components out of those zones into a temporary workplace without performing of customs formalities or submitting requests to transfer their goods. Customs should be notified of the location of the temporary facility.
- Operations of these businesses in the temporary locations were treated as if they had occurred within the SEZ.
- SEZ businesses operating in temporary workplaces remained eligible for Customs incentives schemes, including duty exemptions granted under customs incentives schemes.

<sup>37</sup>Applied to I-EAT Free zone, Customs Free zone or Bonded Warehouse



- The special measures also described the processes for relocation back to the original facilities located in the SEZ (Thai Customs 2011, 1-5).

These measures helped businesses mitigate the disruptions to production caused by the flooding, and helped to maintain the confidence of foreign investors operating in Thailand. This short-term flexibility is being paired with an ambitious investment agenda by the Thai government to improve the resilience of the economic infrastructure to future flooding.

This approach helped to quell the concerns of investors. By December 2011, manufacturing output surged, although the pace of recovery across industries varied. Additionally, business confidence indicators had almost reached their pre-flood levels by end 2011 (IMF 2012). The Board of Investment (BOI) reported that despite the flooding, the value of investment applications in Thailand for the year through the end of December 2011 increased 61 percent from the previous year, and foreign bids increased 67 percent (Reuters 2011).

## **SOURCES**

Banomyong, Ruth and Salilathip Thippayakraison. Business Continuity Management: Experiences from the 2011 Thai Floods. Unpublished Manuscript, 2013.

Bank of Thailand, 2012. "Thailand floods 2011: Impact and recovery from business survey". Bangkok. Available at [www.bot.or.th/English/EconomicConditions/Thai/BLP/Documents/ThaiFloodSurvey2011\\_Eng.pdf](http://www.bot.or.th/English/EconomicConditions/Thai/BLP/Documents/ThaiFloodSurvey2011_Eng.pdf)

IMF, 2012. "Public Information Notice: 2012 Article IV Consultation." International Monetary Fund, May 10, 2012. Accessed July 11, 2013: <<http://www.imf.org/external/pubs/ft/scr/2012/cr12124.pdf>>

Maurer, Cpl. Robert J. U.S. Marine Corp, Defense Video & Imagery Distribution System: III Marine Expeditionary Force / Marine Corps Installation Pacific, 16 October 2011

Reuters 2011. "Investment requests in Thailand jump despite flood-BOI." December 29, 2011. Accessed July 11, 2013. <<http://www.reuters.com/article/2011/12/29/thailand-economy-investment-idUSL3E7NT58H20111229>>

Thai Customs. "Special Customs Measures for Flood Relief." Thailand Customs Department October-November 2011.

World Bank, 2012. Rapid Assessment for Resilient Recovery and Reconstruction Planning. Global Facility for Disaster Reduction and Recovery, 2012.

## **V. Conclusion and Recommendations**

## A Summary of Entry Facilitation Stocktaking

When international assistance is needed to deal with a large-scale time-critical disaster that threatens human lives and economic assets, entry facilitation of foreign personnel, goods, and equipment is of paramount importance.

Acknowledging that the international disaster community has grown enormously in recent years, involving an increasing number of people and organizations with diverse capacities, this report seeks to conduct a stocktaking exercise of the status of entry facilitation within the APEC community, with a focus on East and South East Asia. These regions have in the recent past been hit by a number of massive disasters.

Experience has shown that a lack of preparedness in terms of entry facilitation has led to bureaucratic bottlenecks in immigration, customs, transportation/transit, medical services, engineering, and other related disaster relief services.

Entry facilitation can be seen as effective when international relief personnel, goods, and equipment are admitted to the disaster area in a manner that results in affected people being served in a timely, safe, effective, and efficient manner.

This report advocates a three-pronged concept in establishing an effective facilitation of entry of international personnel, goods, and equipment in times of crisis.

1. A sound legislative framework both at the domestic and international level,
2. A high-level of preparedness and readiness for all involved parties, and
3. Adoption of best practices in entry facilitation at all levels.

As expected, all economies have institutionalized a crisis management process that includes provisions for dealing with entry of foreign crisis responders, as well as relief goods and equipment. Most economies recognize that ad hoc procedures inevitably lead to bureaucratic bottlenecks and to operational confusion when dealing with international assistance. These effects delay rescue and recovery operations. As such, the survey confirms APEC commitment at all levels to achieve a domestic, regional, and international level of readiness to facilitate entry of foreign crisis respondents and supplies.

We also acknowledge significant progress in the level of awareness among various governmental agencies of the value of a coordinated effort in dealing with conceptual challenges and practical issues of entry facilitation. The establishment of a special taskforce on entry facilitation would help materialize and accelerate this effort.

We recognize the wide spectrum in the levels of preparedness and readiness among APEC economies. This process of facilitating entry for disaster personnel and goods is particularly difficult to approach for the economies that, very fortunately, have not experienced major disasters demanding international assistance in recent past. However, when international help is requested, all economies are involved, serving as recipients or providers of assistance, or as transit points.

As evidenced by the data collected in this report, the rules, procedures, and practices of individual economies will continue to be a critical factor in providing effective facilitation and regulation of incoming international disaster relief.

Thus, a sustained level of commitment and engagement by all APEC economies is encouraged in order to continuously strengthen legal and procedural preparedness for international disaster assistance.

## **A Proposed Agenda for Action**

### **GENERAL RECOMMENDATIONS**

Given the diversity of the APEC member economies, it appears presumptuous to propose a set of specific recommendations to better facilitate movements of relief responders, goods, equipment, and funds between assisting and receiving economies. Instead, moving forward as a community, the following activities are proposed to support emerging good practice in travel facilitation:

1. Continue to review and self-assess domestic policies and procedures with regard to providing and hosting international relief assistance.
2. Update and improve—within individual economies—current domestic legislation to align with new domestic and global realities, and with the international framework proposed by institutions such as International Federation of Red Cross and Red Crescent Societies, United Nations, APEC and ASEAN.
3. Conduct gap analyses within separate economies to identify domestic resources, capacities, and competencies in dealing with major disaster scenarios to enhance domestic preparedness baselines, and pinpoint areas that might need international assistance and collaboration.
4. Intensify partnerships among government organizations, businesses, local communities for exploring scenarios of relief coordination and recovery, with business continuity and economic and social development as the end goal.
5. If a disaster strikes outside the economy, understand when to stand down and as appropriate volunteer as an assisting economy to join the international relief effort and to put domestic institutions into action.

### **MORE SPECIFIC RECOMMENDATIONS FROM APEC SURVEY RESPONDENTS**

We have included all of these insightful suggestions from survey respondents because they address the salient issues associated with legislation, preparedness, readiness, and best practices. Collectively, respondents offer the following recommendations:

1. Document existing response capabilities, requirements, and standards for international assistance in APEC economies.
2. Determine legal baselines and barriers in APEC member economies, given their diversity.
3. Establish common legislation, regulations, procedures, and guidelines within APEC and promote bilateral and multilateral cooperation based on such provisions.
4. Leverage and promote successful initiatives, such as the IDRL Guidelines and Model Act in the APEC economic, social, cultural, and political context.
5. Continue to undertake dialogue and dissemination activities by conducting workshops and capacity-building programs that include learning from the experiences of APEC economies affected by disasters.

6. Increase awareness and engagement of APEC economies by collaborating with other regional initiatives, including those under ASEAN and the East Asia Summit..
7. Explore the expansion and facilitate usage of the APEC Business Advisory Council (ABAC) APEC Business Travel Card (ABTC) by approved emergency response organizations or agencies.

#### **APEC Business Travel Card (ABTC)**

The APEC Business Travel Card (ABTC) provides an interesting model that could be used to facilitate the movement of emergency responders between APEC economies to support international relief and response work. The ABTC was developed to help business people gain streamlined entry to the economies of the Asia-Pacific region in order to explore new business opportunities, attend meetings, and conduct trade and investment activities. More specifically, the ABTC accord pre-cleared business travelers with the following benefits:

- Fast-track entry and exit through special APEC lanes at major airports, and multiple short-term entry to these economies for a minimum of 59 days stay each visit.
- No need to individually apply for visas or entry permits each time one travels to any of the participating APEC economies as the card is your visa.
- Cards are valid for three years from date of issue.

The ABTC was first developed in the late 1990s, and since its creation 21 economies have joined the ABTC Scheme: Australia; Brunei Darussalam; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; PNG; Peru; the Philippines; Singapore; Chinese Taipei; Thailand; and Viet Nam. Canada, the Russian Federation, and the United States are currently Transitional Members of the scheme, which allow cardholders from all participating economies to use “fast-track” immigration lanes (currently designated for air-crew) at major international airports.<sup>38</sup> The ABTC scheme is managed by the APEC Business Mobility Group (BMG), one of the sub-fora working groups of the APEC Committee on Trade and Investment (CTI).

A similar arrangement could be considered not only to facilitate the entry of approved emergency personnel, but to document the credentials of specialized personnel such as trained medical responders.

Source: “APEC Business Travel Card,” <http://travel.apec.org/general-information.html> (accessed Aug. 2, 2013)

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<sup>38</sup> Cardholders still need to present valid passports and visas if required by existing United States and/or Canadian law, although expedited visa interview scheduling will be provided to APEC Cardholders at United States and Canadian embassies and consulates in APEC economies in cases where a visa is required for the Cardholder to travel to the United States and/or Canada.

## Appendix A. Selected Web-Based Resources of Information on Entry Facilitation

### *APEC Resources:*

APEC Emergency Preparedness Working Group and upcoming workshops:

<http://www.apec.org/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation/Working-Groups/Emergency-Preparedness.aspx>

<http://www.apec-epwg.org>

Information on APEC Travel Facilitation Initiative and ABTC:

<http://www.apec.org/Press/Features/2009/~//media/Files/Press/Features/2009/2007Par0013Filev1.ashx>

<http://www.apec.org/about-us/about-apec/business-resources/apec-business-travel-card.aspx>

APEC Trade Facilitation through Customs Procedures – Assessment of APEC’s Progress 2011:

[http://publications.apec.org/publication-detail.php?pub\\_id=1213](http://publications.apec.org/publication-detail.php?pub_id=1213)

APEC Trade Recovery Programme: [http://publications.apec.org/publication-detail.php?pub\\_id=151](http://publications.apec.org/publication-detail.php?pub_id=151)

### *ASEAN Resources:*

ASEAN Agreement on Disaster Management and Emergency Response (AADMER):

<http://www.asean.org/communities/asean-socio-cultural-community/item/the-asean-agreement-on-disaster-management-and-emergency-response>

<http://aseanpostnargiskm.org/about/asean-agreement-on-disaster-management-n-emergency-response/25>

<http://www.ifrc.org/docs/IDRL/SASOP.pdf>

AADMER Work Programme 2010-2015: <http://www.asean.org/resources/publications/asean-publications/item/asean-agreement-on-disaster-management-and-emergency-responce-work-programme-for-2010-2015>

ASEAN Committee on Disaster Management: <http://www.acdm-online.net>

ASEAN Regional Forum Work Plan on Disaster Relief 2012-2014:

[http://aseanregionalforum.asean.org/files/References/ARF%20Work%20Plan%20on%20Disaster%20Relief%202012-2014%20\(FINAL\).pdf](http://aseanregionalforum.asean.org/files/References/ARF%20Work%20Plan%20on%20Disaster%20Relief%202012-2014%20(FINAL).pdf)

### *IFRC Resources:*

#### IDRL Guidelines

Introduction to the Guidelines: <http://www.ifrc.org/en/what-we-do/idrl/about-disaster-law/international-disaster-response-laws-rules-and-principles/>

Interactive Introduction to IDRL (Online Learning Module): <http://www.ifrc.org/en/what-we-do/idrl/research-tools-and-publications/idrl-interactive-online-training-module/>

States that have adopted new policies and regulations drawing on IDRL: <http://www.ifrc.org/en/what-we-do/idrl/idrl-guidelines/new-legislation-adopted-on-idrl/>

Disaster Law News in the Asia-Pacific Region: <http://www.ifrc.org/en/what-we-do/idrl/idrl-around-the-world/idrl-around-the-world-asia-and-the-pacific/>

IDRL Country and Regional Studies Page: <http://www.ifrc.org/en/what-we-do/idrl/research-tools-and-publications/country-and-regional-studies/>

Disaster Law Publications (country studies): <http://www.ifrc.org/en/what-we-do/idrl/research-tools-and-publications/disaster-law-publications/>

2013 Model Act:

Introduction to the Model Act <http://www.ifrc.org/en/what-we-do/idrl/model-act-on-idrl/>

Download of the Model Act and Commentary:

<http://www.ifrc.org/docs/IDRL/MODEL%20ACT%20ENGLISH.pdf>

### ***United Nations Resources:***

Introduction to U.N. General Assembly Resolution 46/182:

[https://ochanet.unocha.org/p/Documents/OOM\\_46-182\\_Nov2011.pdf](https://ochanet.unocha.org/p/Documents/OOM_46-182_Nov2011.pdf)

U.N. General Assembly Resolution 46/182: <http://www.un.org/documents/ga/res/46/a46r182.htm>

U.N. General Assembly Resolution 57/150:

[http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/57/150&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/57/150&Lang=E)

INSARAG International Search and Rescue Advisory Group: <http://www.unocha.org/what-we-do/coordination-tools/insarag/overview>

Report of the Secretary-General: International Cooperation of Humanitarian Assistance in the Field of Natural Disasters, from Relief to Development (2007):

[http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/62/323](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/62/323)

### ***United States / Canada Cross-Border Collaboration Resources:***

Agreement between the Government of Canada and the Government of the United States of America on Emergency Management Cooperation: <http://www.treaty-accord.gc.ca/text-texte.aspx?id=105173>

Canada – United States Framework for the Movement of Goods and People across the Border during and following an Emergency:

[http://www.dhs.gov/xlibrary/assets/border\\_management\\_framework\\_2009-05-27.pdf](http://www.dhs.gov/xlibrary/assets/border_management_framework_2009-05-27.pdf)

Maritime Annex to the Canada – United States Framework for the Movement of Goods and People across the Border during and Following an Emergency:

<http://www.publicsafety.gc.ca/prg/ns/ci/marann-eng.aspx>

Compendium of U.S.-Canada Emergency Management Assistance Mechanisms:

<http://www.dhs.gov/xlibrary/assets/policy/btb-compendium-of-us-canada-emergency-management-assistance-mechanisms.pdf>

Pacific Northwest Border Health Alliance Operational Guidelines for Moving Emergency Medical Services Staff and Resources across the Canada and United States Border:

<http://www.pnwaha.org/wp-content/uploads/2012/11/EMS-Border-Guidelines-v3.pdf>

Pacific Northwest Border Health Alliance Operational Plan for Moving Emergency Medical Services Staff and Resources Across the Washington and British Columbia Border:

<http://www.pnwaha.org/wp-content/uploads/2010/04/WA-BC-EMS-Border-Crossing-Plan.pdf>

Travel Facilitation through the Nexus Program:

[http://www.cbp.gov/xp/cgov/travel/trusted\\_traveler/nexus\\_prog/](http://www.cbp.gov/xp/cgov/travel/trusted_traveler/nexus_prog/)

United States International Assistance System (IAS CONOPS):

<http://www.ifrc.org/docs/idrl/748EN.pdf>

### ***WCO Resources:***

Revised Kyoto Convention: [http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/conventions/pf\\_revised\\_kyoto\\_conv.aspx](http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/conventions/pf_revised_kyoto_conv.aspx)

### ***Recent Workshops and Training:***

ARDEX (ASEAN Regional Disaster Emergency Simulation Exercise):

[http://aseanregionalforum.asean.org/files/References/ARF%20Work%20Plan%20on%20Disaster%20Relief%202012-2014%20\(FINAL\).pdf](http://aseanregionalforum.asean.org/files/References/ARF%20Work%20Plan%20on%20Disaster%20Relief%202012-2014%20(FINAL).pdf)

<http://aboutvietnam.net/detail/vnn/fms/environment/66220/asean-disaster-response-exercise-scheduled-in-october.html>

ASEAN ARF DiREx 2013:

<https://www.facebook.com/media/set/?set=a.535899763119457.1073741830.235060286536741&type=1>

Ejercicio SIMEX América INSARAG (October 2013):

<http://www.indeci.gob.pe/sectores/reuniones/2013/02%20may/INSARAG.pdf>

Mentawai Megathrust DiREx International Table Top Exercises Indonesia 2013/2014:

<http://bnpb.go.id/mmdirex2013-2014/?page=home>

NationLab 2012: <http://www.ndu.edu/chds/news.cfm?action=view&id=169&lang=EN>

WCO Regional Seminar on the Role of Customs in Natural Disaster Relief 2012:

<http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/~/media/WCO/Public/Global/PDF/Topics/Facilitation/Activities%20and%20Programmes/Natural%20Disaster/Asia%20Pacific%20Regional%20Customs%20Seminar%20-%20Report.ashx>



## Appendix B. Stocktaking Survey

APEC EPWG Survey: Emergency Response Travel Facilitation for Personnel and Equipment in the Asia-Pacific Region in Times of Disaster

Any effort to facilitate cross-border travel of emergency personnel, goods and equipment requires an international legal framework, domestic legislations, and effective coordination platforms.

The objectives of this survey are to:

1. Take stock of current policies and procedures affecting the cross border movement of emergency personnel and disaster goods and equipment within selected APEC economies; and,
2. Identify best practices that can be used to formulate policy recommendations to effectively deal with international movements of emergency responders and disaster goods and equipment, for APEC economies delivering and receiving international disaster relief.

This survey has 23 questions, divided in three sections: Assessment of Current Regulations, Practical Issues, and Best Practices. The average time to take the survey is 20 minutes.

Your expert input is greatly appreciated.

## SECTION 1: CURRENT REGULATIONS FOR TRAVEL FACILITATION FOR EMERGENCY PERSONNEL, GOODS AND EQUIPMENT

There are 11 questions in this section to assess the overall perception about the existence and effectiveness of current regulations. We hope to receive your input on all aspects of this multi-faceted problem. If you feel that a question is too specific given your area of expertise, just skip it, and go to the next question.

*Q1: Does your economy have bilateral, multilateral, or regional treaties and agreements, which facilitate cross-border movements of international disaster assistance to your economy? (Please select one.)*

- Yes
- No, but planned
- No, and not in the near future

Please provide any details if possible including the names of relevant agreements and treaties and/or a website where additional information might be found:

---

*Q2: Do you consider existing treaties and agreements helpful in facilitating entry of international disaster assistance into your economy? (Please select one.)*

- Not helpful
- Moderately helpful
- Very helpful
- Not tested yet

Any details that you wish to provide including the names of relevant agreements and treaties and/or a website where additional information might be found?

---

*Q3: Does your economy have any domestic regulations or legal guidelines to identify who is allowed to enter the economy for the purpose of disaster relief? (Please select one.)*

- Yes
- No, but planned
- No, not in the near future

Any details that you wish to provide including the names of relevant agreements and treaties and/or a website where additional information might be found?

---

*Q4: Does your economy have regulations/guidelines to prioritize international assistance (e.g., who would qualify for expedited visa, exemption of goods and equipment from customs and duties)? (Please select one.)*

- We allow pre-authorization, prioritized entry, and grant expedited procedures and special entitlements
- We have a 'blanket' procedure to facilitate any international disaster assistance, regardless of source
- We create "ad hoc case-by-case procedures" in time of crisis
- Other: \_\_\_\_\_

*Q5: List authorities in your economy authorized to manage expedited procedures and special entitlements: (If not applicable (N/A), please skip this question and go to Q6.)*

---

*Q6: Does your economy have immigration policies and procedures that specify how visas are issued to foreign disaster personnel? (Please select one.)*

- We have no special "disaster relief" visas, but we expedite the issuance process
- We waive visa requirements for rescue personnel
- We issue special 'disaster visas' with temporary employment
- Other: \_\_\_\_\_

*Q7: Does your economy have customs policies and procedures for the entry of disaster goods and equipment? (Please check all that apply.)*

- We have exemptions from import duties, taxes and restrictions
- We simplify documentation requirements
- We extend hours for customs
- We have agreements on pre-positioning of stock
- We simplify inspections and customs security
- Other: \_\_\_\_\_

*Q8: We have policies and procedures to facilitate entry of the following special types of goods and equipment: (Please check all that apply.)*

- Food
- Medications and Medical Equipment
- Telecommunications and IT Equipment
- Vehicles
- Search animals
- Currency
- Other: \_\_\_\_\_

*Q9: Does your economy have policies and procedures to facilitate cross-border transportation? (Please check all that apply.)*

- We have priority treatment of passage for transportation by land, air, and sea
- We exempt transportation from regular taxes, levies, duties, fees and charges
- We have expedited procedures for transportation operators (drivers, pilots and crew)
- Other: \_\_\_\_\_

*Q10: Does your economy have policies and procedures to facilitate cross-border transit? (Please check all that apply.)*

- We expedite transit entry and exit of international personnel
- We waive transit visa for international personnel
- We expedite transit entry and exit of goods and equipment
- We exempt transit goods and equipment from import duties and taxes
- We have provisions for transit transport of personnel and goods and equipment by land, air, sea
- Other: \_\_\_\_\_

*Q11: Assess how well your economy's policies and procedures have handled so far:*

(Leave the answer blank, if you wish not to answer to an item.)

	Very inadequate	Somewhat inadequate	Mostly adequate	Adequate	More than adequate
How international assistance is prioritized					
Entry of foreign disaster personnel					
Entry of disaster relief goods and equipment					
Cross-border transport					
Cross-border transit					

## SECTION 2: PRACTICAL ISSUES RELATED TO ENTRY FACILITATION

There are four questions in this section to poll your opinion in evaluating the current issues related to entry facilitation, from the perspectives of:

1. The economy receiving international assistance (Q12);
2. The economy offering international assistance (Q13, Q14); and
3. The economy offering transit between the economies involved in international assistance (Q15).

*The following question explores issues related to facilitation of movement of goods and people from the viewpoint of an economy **RECEIVING** international assistance. Has your economy received international assistance in response to an emergency situation in the past 15 years? (Please select one.)*

- Yes, answer Q12  
 No, go to Q13

### ECONOMY RECEIVING ASSISTANCE:

*Q12: Think of a disaster that recently occurred in your economy requiring international assistance. Indicate the event if applicable (Note: If you have not experienced a disaster in your economy requiring international assistance in the past 15 years, please skip to question 13):*

---

*BASED ON YOUR ANSWER ABOVE, PLEASE RATE THE FOLLOWING ISSUES:*

#### RELIEF PERSONNEL

	No Problem	Some problems	Frequent problems	Not applicable or Don't know
Personnel entered economy without visa or by tourist visa				
Personnel experienced delays in obtaining visas				
Personnel was not able to obtain visas				
Personnel experienced difficulties with licenses, permits, or foreign credentials (e.g., healthcare providers)				
Restrictions on movements/access of personnel to disaster sites				

## GOODS AND EQUIPMENT

	No Problem	Some Problems	Frequent Problems	Not applicable or Don't know
Customs clearance was delayed due to large volume of disaster relief goods				
Many relief goods did not address critical needs				
Customs clearance was delayed due to rigidity of the customs clearance process				
Customs clearance was delayed due to insufficient or incorrect documentation by foreign personnel				
Customs clearance was delayed due to inspection requirements				
Customs duties and tariffs or difficulties in obtaining exemptions from customs duties				
Relief ran into problems due to Customs restrictions				
There were problems with implementation of special regulations and procedures				
Lack of training of custom officials regarding special regulations and procedures				
Food				
Medications and medical equipment				
Telecommunications and IT equipment				
Vehicles				
Search dogs				
Currency				
Issues entering the economy with transport vehicles (e.g., restrictions, tolls, fees and charges)				
Issues entering the economy with transport aircraft (e.g., flight permissions, landing and departure taxes and airport fees)				
Issues entering the economy with sea vessels (e.g., immigration regulations, fees associated with unloading transports)				

The following questions explore issues related to facilitation of movement of goods and people from the viewpoint of an economy **PROVIDING** international assistance. Has your economy provided international assistance in response to an emergency situation in the past 15 years? (Please select one.)

- Yes, answer Q13 and Q14
- No, go to Q15

**ECONOMY PROVIDING ASSISTANCE:**

*Q13: Think of a disaster that recently occurred in another APEC economy receiving your economy's assistance. Indicate the event if applicable (Note: If your economy has not assisted another APEC economy during a disaster in the past 15 years, please skip to Question 15):*

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*BASED ON YOUR ANSWER ABOVE, PLEASE RATE THE FOLLOWING ISSUES:*

**RELIEF PERSONNEL**

	No Problem	Some problems	Frequent problems	Not applicable or Don't know
Personnel entered economy without visa or by tourist visa				
Personnel experienced delays in obtaining visas				
Personnel was not able to obtain visas				
Personnel experienced difficulties with licenses, permits, or foreign credentials (e.g., healthcare providers)				
Restrictions on movements/access of personnel to disaster sites				

## GOODS AND EQUIPMENT

	No Problem	Some Problems	Frequent Problems	Not applicable or Don't know
Customs clearance delays due to large volume of disaster relief goods				
Many relief goods did not address critical needs				
Customs clearance delays due to rigidity of the customs clearance process				
Customs clearance delays due to insufficient or incorrect documentation by foreign personnel				
Customs clearance delays due to inspection requirements				
Customs duties and tariffs or difficulties in obtaining exemptions from customs duties				
Customs restrictions				
Problems with implementation of special regulations and procedures				
Lack of training of custom officials regarding special regulations and procedures				
Food				
Medications and medical equipment				
Telecommunications and IT equipment				
Vehicles				
Search dogs				
Currency				
Issues entering the economy with transport vehicles (e.g., restrictions, tolls, fees and charges)				
Issues entering the economy with transport aircraft (e.g., flight permissions, landing and departure taxes and airport fees)				
Issues entering the economy with sea vessels (e.g., immigration regulations, fees associated with unloading transports)				



*Q14: When you sent international assistance that had to transit through another APEC economy, rate the issues below: (Note: If your economy did not have to transit through another APEC economy to provide international assistance during a disaster in the past 15 years, please skip to question 15.)*

	No Problem	Some problems	Frequent problems	Not applicable or Don't know
Transit delays of personnel due to immigration requirements				
Transit delays of goods and equipment due to customs requirements				
Taxes and duties for transit goods and equipment				
Transit transport issues				

*The following question explores issues related to facilitation of movement of goods and people from the viewpoint of an economy SERVING AS A TRANSIT POINT for international assistance. Has your economy served as a transit point for international assistance in response to an emergency situation in the past 15 years? (Please select one.)*

- Yes, answer Q15  
 No, go to Section 3 (Best Practices)

*Q15: Think of a disaster that required your economy as a transit. Indicate the event, if applicable (Note: If your economy has not served as a transit point for disaster response and recovery during the past 15 years, please skip to Question 16):*

---

**BASED ON YOUR ANSWER ABOVE, PLEASE RATE THE FOLLOWING ISSUES:**

	No Problem	Some problems	Frequent problems	Not applicable or Don't know
Transit delays of personnel due to immigration requirements				
Transit delays of goods and equipment due to customs requirements				
Taxes and duties for transit goods and equipment				
Transit transport issues				

### SECTION 3. ENTRY FACILITATION BEST PRACTICES

*Q16: How often does your economy organize training workshops for authorized domestic personnel dealing with entry facilitation?*

	Never	Less than once a year	Once to twice yearly	More than twice yearly	Not applicable or Don't know
Legislature (parliamentary)					
Ministerial (e.g., Foreign Affairs, Defense)					
Agency level (e.g., immigration, customs)					
Inter-organizational level (e.g., public, private, NGO's)					

*Q17: List current or recent training workshops with neighbor economies:*

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*Q18. How functional are Information Technology systems in your economy in facilitating entry of foreign relief personnel and goods and equipment?*

	Minimum support	Functional only at primary agency level	Functional as inter-agency collaboration	Functional as an international level	Don't know
Immigrations					
Customs					
Public Health					
Emergency Management and Logistics					

Please provide any details if possible:

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*Are you familiar with global treaties, resolutions and guidelines that address entry facilitation of personnel, goods and equipment? (Please select one.)*

- Yes, answer Q19  
 No, go to question Q20

*Q19: There are global treaties, resolutions and policy guidelines that address entry facilitation of personnel, goods and equipment. To what extent have they been relevant to your economy?*

**GLOBAL TREATIES:**

	Little relevance	Somewhat relevant and not much applicable	Relevant and being adapted	Very relevant and being used	Don't know
Istanbul convention on temporary admissions (1990)					
Kyoto customs convention on simplification and harmonization of customs procedures (1973/1999)					
Tampere convention on telecommunications resources for disaster operations (1998)					
Chicago convention on entry, transit and departure of relief flights (1944)					
Convention on facilitation of international maritime traffic for relief vessels (1965)					

RESOLUTIONS AND GUIDELINES:

	Little relevance	Somewhat relevant and not much applicable	Relevant and being adapted	Very relevant and being used	Don't know
U.N. General Assembly Resolution 46/182 (coordination of humanitarian emergency assistance of the U.N., 1991)					
U.N. General Assembly Resolution 57/150 (coordination of international urban search and rescue assistance, 2002)					
Oslo Guidelines on the use of foreign military and civil defense assets in disaster relief (2007)					
IDRL Guidelines (2007) and Model Act (2013) (IFRC Guidelines for the domestic facilitation and regulation of international disaster relief and initial recovery assistance)					
CCC (Customs Co-operation Council) Recommendation for WCO and U.N. members (1970) / WCO/OCHA Model Customs Agreement (1995)					

*Q20. Does your economy have any partnerships or agreements signed with private organizations (such as cargo airlines, food manufacturers, pharmaceutical multinationals) to provide international assistance? If "YES", please list the companies that you are aware of, otherwise skip and go to Q21.*

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*Q21. Given your area of responsibilities, please list one to three issues that APEC has MOST successfully dealt with in entry facilitation:*

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*Q22. Given your area of responsibilities, please list one to three issues that APEC has LEAST successfully dealt with in entry facilitation:*

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*Q23. What should APEC do in the near future to further promote facilitation of international entry of relief personnel and emergency goods and equipment?*

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**DEMOGRAPHICS**

*Designation:* \_\_\_\_\_

*First Name:* \_\_\_\_\_

*Last Name:* \_\_\_\_\_

*APEC Member Economy:* \_\_\_\_\_

*Professional Role:* \_\_\_\_\_

*Email:* \_\_\_\_\_

*Phone Number:* \_\_\_\_\_

*Would you be available for a follow-up interview if needed? (Please select one.)*

Yes

No

*How would you like us to contact you? (Please select all that apply.)*

Email \_\_\_\_\_

Phone \_\_\_\_\_

Other \_\_\_\_\_

**THANK YOU FOR YOUR TIME.**

We would appreciate your sharing with us any information / documentation to be included in the report to various APEC entities. Please send to:

Ms. Ina Sebastian

APEC Study Center, University of Hawaii

isebasti@hawaii.edu

## Appendix C. U.S.-Canada Bilateral Assistance Mechanisms (2012 Compendium)

<i>Item</i>	<i>Type</i>
<i>Agreement between the Government of Canada and the Government of the United States of America on Emergency Management Cooperation (2008)</i>	<b>EMERGENCY PREPAREDNESS AGREEMENT</b>
<i>Canada-United States Action Plan for Critical Infrastructure (2010)</i>	<b>EMERGENCY PREPAREDNESS PLAN</b>
<i>Transport Canada's Cross-Border Emergency Response Guide, 3<sup>rd</sup> Edition (2007)</i> <ul style="list-style-type: none"> <li>• <i>Matrices listing immigration and customs agreements, training and liability requirements</i></li> </ul>	<b>EMERGENCY PREPAREDNESS PLANNING GUIDE</b>
<i>North American Plan for Avian and Pandemic Influenza (2007)</i>	<b>EMERGENCY PREPAREDNESS PLAN</b>
<i>Agreement between the Government of Canada and the Government of the United States of America for Cooperation in Science and Technology for Critical Infrastructure Protection and Border Security and related Cooperative Activity Arrangements (2004)</i>	<b>EMERGENCY PREPAREDNESS AGREEMENT</b>
<i>Canada-United States Framework for the Movement of Goods and People across the Border During and Following an Emergency (2009) + Maritime Annex to the Canada-United States Framework (2011)</i>	<b>RECOVERY FRAMEWORK</b>
<i>Canada-U.S. Marine Pollution Contingency Plan (1983, last update 2003) and Joint Inland Contingency Plan (1985, last update 2009)</i> <ul style="list-style-type: none"> <li>• <i>Addresses exercises and training, coordinated response</i></li> <li>• <i>Inland plan covers procedures for five regional planning areas: <a href="http://www.ec.gc.ca/ee-ue/default.asp?lang=en&amp;n=deb16a21">http://www.ec.gc.ca/ee-ue/default.asp?lang=en&amp;n=deb16a21</a></i></li> </ul>	<b>PLAN</b>
<i>Canada/U.S. Reciprocal Forest Fire Fighting Arrangement and operating plan (1982, updated 2011)</i>	<b>ARRANGEMENT AND OPERATING PLAN</b>
<i>MOU for Co-Operation Among the Department of National Defence Canada, Department of Fisheries and Oceans Canada, U.S. Coast Guard, U.S. Air Force, UK Maritime and Coast Guard Agency, UK Civil Aviation Division of the Department of Environment, Transport and the Regions, UK Ministry of Defence Concerning Search and Rescue (1999)</i> <ul style="list-style-type: none"> <li>• <i>Framework for search and rescue cooperation for maritime or aeronautical incidents in a participant's region</i></li> </ul>	<b>AGREEMENT</b>
<i>MOU on the Facilitation of Vital Civil Cross Border Transport under the North Atlantic Treaty Organization's (NATO) Euro-Atlantic Partnership Council (EAPC) and approved by Senior Civil Emergency Planning Committee (SCEPC) (2009)</i> <ul style="list-style-type: none"> <li>• <i>Multilateral framework for transport and transit of relief personnel and material</i></li> </ul>	<b>AGREEMENT</b>

<p><i>Canada-United States Joint Radiological Emergency Response Plan (JRERP) (1996)</i></p>	<p><i>PLAN</i></p>
<p><i>Canada-U.S. Civil Assistance Plan (CAP) (2008, renewed 2012)</i></p> <ul style="list-style-type: none"> <li>• <i>military support</i></li> </ul>	<p><i>PLAN</i></p>
<p><i>Joint Canada Border Services Agency (CBSA)/U.S. Customs and Border Protection (CBP) Business Resumption Communication and Coordination Plan (BR CCP) (2007)</i></p> <ul style="list-style-type: none"> <li>• <i>Framework for communication between the agencies to facilitate trade and travelers during trade disruption or increase security level (not intended as communication plan for crisis management)</i></li> </ul>	<p><i>COMMUNICATION AND COORDINATION PLAN</i></p>
<p><i>Memorandum of Cooperation between Public Safety Canada and the United States Department of Homeland Security (to promote joint efforts by the respective public affairs organizations) and Canada-U.S. Incident Management Framework for Public Communications (2008)</i></p> <ul style="list-style-type: none"> <li>• <i>Documents the partnership, developed Canada-U.S. Incident Management Framework for Public Communications</i></li> </ul>	<p><i>COMMUNICATION AND COORDINATION AGREEMENT AND FRAMEWORK</i></p>
<p><i>Canada Acts/Plans with International Components:</i></p> <ul style="list-style-type: none"> <li>• <i>Canada Emergency Management Act (2007) (gives authority to Minister or Public Safety, in consultation with Minister of Foreign Affairs authority to coordinate Canada's response in U.S. emergencies),</i></li> <li>• <i>Canada Federal Emergency Response Plan (FERP) (2009)</i></li> </ul> <p><i>U.S. Acts/Plans with International Components:</i></p> <ul style="list-style-type: none"> <li>• <i>U.S. Foreign Assistance Act Chapter 9 (1961)</i></li> <li>• <i>U.S. National Response Framework (NRF) International Coordination Support Annex (ICSA) (2008)</i></li> <li>• <i>International Assistance System (IAS) (2009)</i></li> <li>• <i>Robert T. Stafford Disaster Relief and Emergency Assistance Act (1988)</i></li> <li>• <i>U.S. Border Crossing Process for Voluntary Agency Groups/Individuals (2007)</i> <ul style="list-style-type: none"> <li>○ <i>Facilitates entry of groups and individuals affiliated with the National Voluntary Organizations Active in Disaster (NVOAD) into the United States to provide voluntary services to NGOs in U.S. declared disaster recovery</i></li> <li>○ <i>Voluntary organization activates the process by providing a list of volunteers and information to FEMA no later than one week prior to U.S. entry</i></li> </ul> </li> </ul>	<p><i>ACT</i></p> <p><i>PLAN</i></p> <p><i>ACT</i></p> <p><i>FRAMEWORK PROCEDURES EMERGENCY PREPAREDNESS ACT RECOVERY PROCEDURES</i></p>

## Appendix D. Tables Showing Details of Survey Findings

### Relevance and Use of International Conventions

<b>GLOBAL TREATIES:</b>	Little relevance	Somewhat relevant and not much applicable	Relevant and being adapted	Very relevant and being used	Don't know
Istanbul convention on temporary admissions (1990)	n=3	n=1	n=1	n=1	n=7
<b>Kyoto customs convention on simplification and harmonization of customs procedures (1973/1999)</b>	n=1	n=1	n=1	<b>n=6</b>	n=4
Tampere convention on telecommunications resources for disaster operations (1998)	n=2	n=0	n=1	n=0	n=10
Chicago convention on entry, transit and departure of relief flights (1944)	n=2	n=1	n=1	n=1	n=8
Convention on facilitation of international maritime traffic for relief vessels (1965)	n=2	n=1	n=0	n=2	n=8

### Relevance and Use of International Resolutions and Guidelines

<b>RESOLUTIONS AND GUIDELINES:</b>	Little relevance	Somewhat relevant and not much applicable	Relevant and being adapted	Very relevant and being used	Don't know
<b>U.N. General Assembly Resolution 46/182</b> (coordination of humanitarian emergency assistance of the U.N., 1991)	n=1	n=0	n=0	<b>n=5</b>	n=7
<b>U.N. General Assembly Resolution 57/150</b> (coordination of international urban search and rescue assistance, 2002)	n=0	n=0	n=1	<b>n=4</b>	n=8
Oslo Guidelines on the use of foreign military and civil defense assets in disaster relief (2007)	n=1	n=0	n=0	n=3	n=9
<b>IDRL Guidelines (2007) and Model Act (2013)</b> (IFRC Guidelines for the domestic facilitation and regulation of international disaster relief and initial recovery assistance)	n=1	n=0	n=1	n=3	n=8



CCC (Customs Co-operation Council) Recommendation for WCO and U.N. members (1970) / WCO/OCHA Model Customs Agreement (1995)	n=2	n=1	n=3	n=1	n=6
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### Problems with Entry Facilitation for Personnel (Receiving Assistance)

<b>RELIEF PERSONNEL</b>	No Problem	Some problems	Frequent problems	Not applicable or Don't know
Personnel entered economy without visa or by tourist visa	n=3	n=0	n=1	n=7
Personnel experienced delays in obtaining visas	n=4	n=1	n=0	n=6
Personnel was not able to obtain visas	n=4	n=0	n=0	n=7
Personnel experienced difficulties with licenses, permits, or foreign credentials (e.g., healthcare providers)	n=2	n=1	n=1	n=7
Restrictions on movements/access of personnel to disaster sites	n=3	n=2	n=0	n=6

### Problems with Entry Facilitation of Goods and Equipment (Receiving Assistance)

<b>GOODS AND EQUIPMENT</b>	No Problem	Some Problems	Frequent Problems	Not applicable or Don't know
Customs clearance was delayed due to large volume of disaster relief goods	n=5	n=4	n=2	n=0
Many relief goods did not address critical needs	n=3	n=2	n=3	n=3
Customs clearance was delayed due to rigidity of the customs clearance process	n=5	n=4	n=2	n=0
Customs clearance was delayed due to insufficient or incorrect documentation by foreign personnel	n=3	n=5	n=2	n=1
Customs clearance was delayed due to inspection requirements	n=6	n=3	n=2	n=0
Customs duties and tariffs or difficulties in obtaining exemptions from customs duties	n=5	n=4	n=2	n=0
Relief ran into problems due to Customs restrictions	n=5	n=5	n=0	n=1
There were problems with implementation of special regulations and procedures	n=6	n=4	n=0	n=1
Lack of training of custom officials regarding special regulations and procedures	n=7	n=4	n=0	n=0

Food	n=5	n=1	n=2	n=3
Medications and medical equipment	n=6	n=0	n=3	n=2
Telecommunications and IT equipment	n=7	n=0	n=2	n=2
Vehicles	n=7	n=0	n=2	n=2
Search dogs	n=7	n=1	n=1	n=2
Currency	n=6	n=2	n=0	n=3
Issues entering the economy with transport vehicles (e.g., restrictions, tolls, fees and charges)	n=4	n=3	n=0	n=4
Issues entering the economy with transport aircraft (e.g., flight permissions, landing and departure taxes and airport fees)	n=4	n=3	n=0	n=4
Issues entering the economy with sea vessels (e.g., immigration regulations, fees associated with unloading transports)	n=3	n=3	n=0	n=5

#### **Problems with Entry Facilitation Personnel (Providing Assistance)**

<b>RELIEF PERSONNEL</b>	No Problem	Some problems	Frequent problems	Not applicable or Don't know
Personnel entered economy without visa or by tourist visa	n=4	n=1	n=0	n=8
Personnel experienced delays in obtaining visas	n=5	n=1	n=0	n=7
Personnel was not able to obtain visas	n=5	n=0	n=0	n=8
Personnel experienced difficulties with licenses, permits, or foreign credentials (e.g., healthcare providers)	n=4	n=2	n=0	n=7
Restrictions on movements/access of personnel to disaster sites	n=2	n=5	n=0	n=6

### Problems with Entry Facilitation of Goods and Equipment (Providing Assistance)

<b>GOODS AND EQUIPMENT</b>	No Problem	Some Problems	Frequent Problems	Not applicable or Don't know
Customs clearance was delayed due to large volume of disaster relief goods	n=8	n=4	n=0	n=1
Many relief goods did not address critical needs	n=7	n=1	n=0	n=5
Customs clearance was delayed due to rigidity of the customs clearance process	n=8	n=4	n=0	n=1
Customs clearance was delayed due to insufficient or incorrect documentation by foreign personnel	n=10	n=0	n=1	n=2
Customs clearance was delayed due to inspection requirements	n=10	n=1	n=1	n=1
Customs duties and tariffs or difficulties in obtaining exemptions from customs duties	n=9	n=2	n=0	n=2
Relief ran into problems due to Customs restrictions	n=8	n=3	n=1	n=1
There were problems with implementation of special regulations and procedures	n=5	n=3	n=1	n=4
Lack of training of custom officials regarding special regulations and procedures	n=8	n=1	n=0	n=4
Food	n=6	n=3	n=0	n=4
Medications and medical equipment	n=6	n=4	n=0	n=3
Telecommunications and IT equipment	n=7	n=3	n=0	n=3
Vehicles	n=6	n=2	n=1	n=4
Search dogs	n=5	n=3	n=0	n=5
Currency	n=4	n=4	n=0	n=5
Issues entering the economy with transport vehicles (e.g., restrictions, tolls, fees and charges)	n=3	n=3	n=0	n=7
Issues entering the economy with transport aircraft (e.g., flight permissions, landing and departure taxes and airport fees)	n=6	n=3	n=0	n=4
Issues entering the economy with sea vessels (e.g., immigration regulations, fees associated with unloading transports)	n=2	n=3	n=0	n=8