Asia-Pacific
Economic Cooperation

Experience exchange on the use of tools and Information Technology for goods identification

APEC Sub-Committee on Customs Procedures

December 2009

Printed in January 2010

APEC Project No. CTI 26/2009T

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APEC#210-CT-01.1

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INTRODUCTION

Context

1. In the post-9/11 context, Customs administrations have been addressing efforts and resources to maintain and enhance security by, inter alia, improving the inspection process without hindering the movement of cargo at borders. Existing inspection processes have underscored longstanding inadequacies in interagency information collection, sharing, and analysis. A better and wider use of available technologies was required in many countries as an option to reduce these inadequacies.

2. To respond to this situation, under the banner of the World Customs Organization (WCO), Directors General of Customs unanimously adopted the SAFE Framework of Standards at the June 2005 annual Council Sessions in Brussels, Belgium.

3. In line with the Revised Kyoto Convention, the SAFE Framework of Standards harmonizes the advance electronic cargo information requirements on inbound, outbound and transit shipments. In particular, it stipulates that:

a. Each country joining the SAFE Framework commits to employing a consistent risk management approach to address security threats;
b. At the reasonable request of the receiving nation, based upon a comparable risk targeting methodology, the sending nation's Customs administration will perform an outbound inspection of high-risk containers and cargo, preferably using non-intrusive detection equipment such as large-scale X-ray machines and radiation detectors;
c. Customs will provide defined benefits to businesses that meet minimal supply chain security standards and best practices.

4. In this context, the APEC Sub-Committee on Customs Procedures (SCCP) decided to conduct a study to improve the use of tools and IT for goods identification.

The Questionnaire

5. The questionnaire has been developed for the APEC SCCP by the National Superintendency of Tax Administration (SUNAT-Peru) with the assistance of an external consultant. Response to the Questionnaires were intended to be used to collect experiences of the economies that have adopted (or that are going to adopt) international tools and IT for cargo identification, in the context of their border inspection process.

6. The information on these experiences covers the necessary reforms to comply with new standards and requirements, as well as the practical aspects related with operational modalities of implementing the tools and IT for cargo identification, as they are presently undertaken by APEC economies

7. The questionnaire was addressed to the security-concerned units within the Customs administrations of the APEC Member Economies.

8. SUNAT-Peru was in charge of consolidating and evaluating the questionnaires results and of assembling the final report of the study for its dissemination within Member Economies.

Scope of the Questionnaire

9. The questionnaire comprises two parts. The first part (Part ONE) includes 27 questions necessary to understand the context of the use of cargo identification tools. The second part (Part TWO) includes 29 questions refering to the cargo identification technologies currently in use. These questions are optional but important to complete the picture emerging from Part ONE.

10. The context of use of cargo identification tools includes questions grouped into seven (7) sections: Agency mission; Inspection locations; Documentation; Inspection process; Reporting; inspection technology; Human resource development issues. The 27 questions under Part ONE offer 193 possible combinations of answers.

11. The cargo identification technologies have been grouped according to their (main) use in primary inspection or secondary inspection. Questions related to primary inspection refer to Radiation Portal Monitors (RPMs), No-Intrusive Inspection Devices (NIIDs) and Track devices. Questions related to secondary inspection refer to Radioactive Isotope Identification Devices (RIIDs), Personal Radiation Detectors (PRDs) and other common tools including canines. While the 29 questions under Part TWO offer 519 possible combinations of answers, some of the questions might not be relevant to a particular Economy that may not use one or another of the technologies.

12. At the end of Part ONE and Part TWO, Member Economies were invited to make comments related to any particular view on cargo identification issues and to the Questionnaire itself.

13. The Questionnaire was intended to be user-friendly and easy to answer by inputing directly into the respective sheets of EXCEL worksheet. Information could only be entered in the YELLOW cells, by selecting from the proposed list or typing a number (value or percentage). PURPLE cells are included to enter "free text", comments, additional information.

Contents of this report

14. This report compiles the answers received from the APEC Member Economies that have responded to the Questionnaire. The main body of the report is structured as follows:

1. A general overview of the received answers;
2. An analysis of the answers to Part ONE of the Questionnaire;
3. A presentation of the answers to Part TWO of the Questionnaire.

15. The report is complemented by a series of annexes:

1. The Questionnaire;
2. A background information note on cargo identification tools;
3. A print-out of the database corresponding to the answers received for Part ONE;
4. A print-out of the database corresponding to the answers received for Part TWO.

16. In addition to the survey on adoption of tools and IT for goods identification, the APEC SCCP project also included the organization, by SUNAT-Peru, of a Seminar to disseminate the findings of the survey and share experiences among APEC Member Economies' representatives. To report on this last activity, a document was assembled by the Consultant who attended and contributed to the seminar. The document covers: the Consultant's mission report to APEC, together with: (1) the seminar's contents and participants' list; (2) a presentation summarizing the findings of the SUNAT's work; (3) a summary of the presentations delivered at the seminar; and (4) a summary of the main Questions and Answers. This document is attached as the last annex to this report.

OVERVIEW OF THE RECEIVED ANSWERS TO THE QUESTIONNAIRE

Preliminary considerations

17. An APEC Economy that responded to the Questionnaire is qualified as "responding Economy". A responding Economy may have provided answers to some of the questions only.

General observations

18. By the end of August 2009, fourteen (14) APEC Member Economies had submitted their answers. The table below indicates the Economies that responded to the Questionnaire.[1]

APEC ECONOMIES THAT HAVE RESPONDED TO THE QUESTIONNAIRE			
Developed (DEV) Economies		**Developing (DING) Economies**	
Name	**Ident.**	**Name**	**Ident.**
Australia	**AUS**	Chile	**CHL**
Canada	**CDA**	People's Republic of China	**PRC**
Chinese Taipei	**CT**	Malaysia	**MAS**
Hong Kong, China	**HKC**	Mexico	**MEX**
Japan	**JPN**	Peru	**PE**
New Zealand	**NZ**	Thailand	**THA**
United States of America	**USA**	Viet Nam	**VN**
Total	**7**	**Total**	**7**

Rate of responses

19. For each question under Part ONE and Part TWO, a series of combinations of answers were expected. However, not all Economies have provided information for all possible combinations. For a given responding Economy, the rate of responses to the Questionnaire corresponds to the ratio between the total number of combinations used and the maximum possible combinations. A low rate may reflect that the person who answered the Questionnaire was not in a position to provide an answer to all the questions; a high rate would reflect that the person who answered was knowledgeable of the local situation of his/her Economy and could pick up a suitable combination for most of the questions.

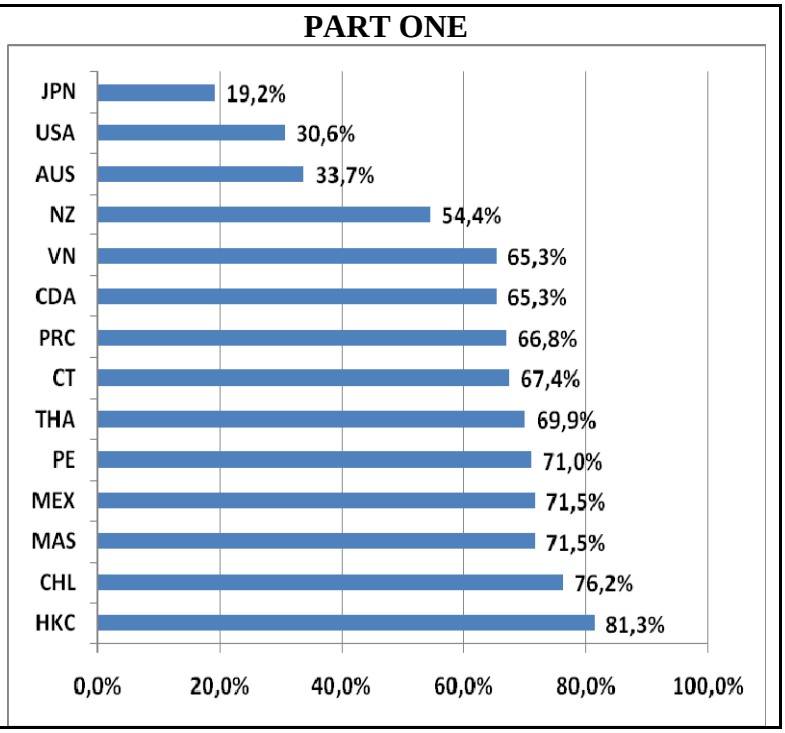
Rate of responses for Part ONE

20. All responding Economies were expected to provide information on each of the questions under Part ONE. As mentioned above, these 27 questions offer 193 possible

[1] The classification of APEC Member Economies into "Developed" and "Developing" Economies has been taken from the report "*Study to Identify Best Practices in Processes From Transportation Arrival To the Presentation of Goods Declaration*" prepared by SUNAT-Peru, for the APEC SCCP, dated October 2008.

combinations of answers. For each of the responding Economies, the table below shows the rate of responses to these questions.[2]

	Number of combinations		
	Maximun	Used	%
JPN	193	37	19,2%
USA	193	59	30,6%
AUS	193	65	33,7%
NZ	193	105	54,4%
CDA	193	126	65,3%
VN	193	126	65,3%
PRC	193	129	66,8%
CT	193	130	67,4%
THA	193	135	69,9%
PE	193	137	71,0%
MAS	193	138	71,5%
MEX	193	138	71,5%
CHL	193	147	76,2%
HKC	193	157	81,3%
TOTAL	2702	1629	60%



21. From this table, it can be observed that the rates of responses of all 7 DING Economies and three DEV Economies are above the overall average (60%); the four remaining Economies are DEV Economies (**AUS**, **JPN**, **NZ** and **USA**).

22. Regarding the seven (7) responding Developed Economies (DEV), the average rate of response on Part ONE questions is 50,3%, with AUS, USA and JPN responding below average. Regarding the DING Economies alone, the average rate of response is 70,3%, with **VN**, **PRC** and **THA** responding below average.

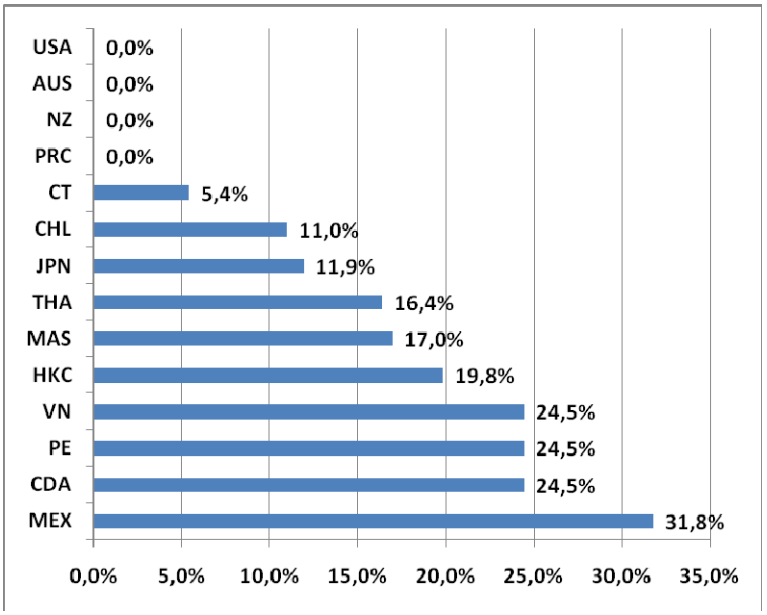
Rate of responses for Part TWO

23. Part TWO of the Questionnaire was optional. De facto, three DEV Economies (**AUS**, **NZ** and **USA**) and one DING Economy (**PRC**) did not provide any answer to this Part. The questions under Part TWO refer to the use of cargo identification technologies by APEC Economies. While the 29 questions under Part TWO offer 519 possible combinations of answers, some of the questions might not be relevant to a particular Economy that may not use one or another of the technologies. For this reason, each of the 519 combinations of answers cannot be expected to be used. In this case, the rate of responses may provide a rough indication of the variety of tools in use or of the interest/willingness to provide information. For each of the responding Economies, the table below shows the rate of responses to these questions.

[2] In the column identifying the Economies, a YELLOW background indicates a Developed (DEV) Economy.

	Number of combinations		
	Maximun	Used	%
USA	519	0	0,0%
AUS	519	0	0,0%
NZ	519	0	0,0%
PRC	519	0	0,0%
CT	519	28	5,4%
CHL	519	57	11,0%
JPN	519	62	11,9%
THA	519	85	16,4%
MAS	519	88	17,0%
HKC	519	103	19,8%
CDA	519	127	24,5%
PE	519	127	24,5%
VN	519	127	24,5%
MEX	519	165	31,8%
TOTAL	**7266**	**969**	**13%**

PART TWO



24. Regarding the rate of response to Part TWO questions, 5 DING and two DEV Economies are above the overall average (13%); out of the seven remaining Economies, four had not provided answers.

25. The rate of response to Part TWO questions is very low. Three (3) DEV and one DING Economies did not respond. Among the four (4) other DEV Economies, the average rate was 15,4%; two Economies were below average (**JPN** with 11,9% and **CT** with 5,4%). Regarding the DING Economies, one Economy (**PRC**) did not provide information. The average rate of the other six (6) DING Economies was 20,8%, a level sunstantially higher than DEV Economies'one (20,8% against 15,4%). Three DING Economies were below average (**CHL** with 11%, **THA** with 16,4% and **MAS** with 17%).

ANALYSIS OF THE ANSWERS TO THE QUESTIONS UNDER PART ONE

26. The answers to each question under Part ONE are analyzed below according to the following pattern:

1) Question number
2) Statement of the question
3) Reference to the proposed combinations of answers
4) Statistics on the answers provided by DEV Economies
    a. Number of responding Economies
    b. List of figures given by each Economy
    c. Main indicator that can be drawn from these figures
    d. Graphical presentation (if appropriate)
    e. Comments submitted by the Economies
    f. Analysis of the information provided by DEV Economies
5) Statistics on the answers provided by DING Economies
    a. Number of responding Economies
    b. List of figures given by each Economy
    c. Main indicator that can be drawn from these figures
    d. Graphical presentation (if appropriate)
    e. Comments submitted by the Economies
    f. Analysis of the information provided by DING Economies
6) Overall analysis of the answers provided by all responding Economies

SECTION 1: Agency Missions

The questions under Section #1 address the basic missions and enforcement strategies of APEC Member Economies.

Q_1: Missions

What are the missions of your agency (at ports of entry)?

Proposed combination of answers:	**YES** or **NO**,
	for each of the missions in the list (11 missions mentioned, plus "Other").
Number of combinations of answers:	**12 + 1 (text for *"Other"*)**

DEV Economies

DEV Economies that have answered	7	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Type of missions	**# comb.**									
Health	**6**	Yes	Yes	Yes	**n.a.**	No	No	Yes	**4**	57%
Safety	**6**	No	Yes	Yes	**n.a.**	Yes	Yes	Yes	**5**	83%
Immigration	**6**	Yes	Yes	No	**n.a.**	Yes	No	Yes	**4**	67%
Environ'tal Protection	**6**	No	Yes	Yes	**n.a.**	No	No	Yes	**3**	50%
Border Security	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
Trade Compliance	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Currency	**6**	Yes	Yes	Yes	**n.a.**	No	Yes	Yes	**5**	83%
Stolen Property	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
Narcotics Trafficking Interdiction	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Weapons/Explosives	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Criminal Finance	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
National Law Enforcement	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%

Comments submitted:

- **AUS** indicates additional missions such as **Fauna / Flora / CITES / IPR** (although these missions could be covered in Environnemental protection and Trade compliance)
- **HKC** indicates additional missions such as **Dutiable commodities, IPRs, legitimate trade facilitation** (although these missions could be covered under Environnemental protection and Trade compliance)
- **JPN** stresses that the answers are based on the Japanese Customs Law.
- **NZ** makes reference to its "umbrella" mission statement: "*The mission statement of the New Zealand Customs Service is Protecting New Zealand's border and revenue so that New Zealanders may live in safety whilst actively participating in the global community."*

Observations: All responding DEV Economies are sharing 7 out of the 12 proposed missions.

DING Economies

DING Economies that have answered	7	PRC	MAS	MEX	THA	PE	VN	CHL	# YES	% YES
Type of missions	**# comb.**									
Health	**7**	No	No	Yes	Yes	Yes	Yes	No	**4**	57%
Safety	**7**	No	Yes	Yes	Yes	Yes	Yes	Yes	**6**	86%
Immigration	**7**	No	No	No	No	No	No	No	**0**	0%
Environ'tal Protection	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Border Security	**7**	Yes	Yes	Yes	Yes	No	No	No	**4**	57%
Trade Compliance	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Currency	**7**	No	Yes	Yes	Yes	No	Yes	Yes	**5**	71%
Stolen Property	**7**	Yes	Yes	No	No	No	Yes	No	**3**	43%
Narcotics Trafficking Interdiction	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Weapons/Explosives	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Criminal Finance	**7**	No	Yes	Yes	Yes	Yes	Yes	Yes	**6**	86%
National Law Enforcement	**7**	No	Yes	Yes	Yes	Yes	Yes	Yes	**6**	86%

Comments submitted:

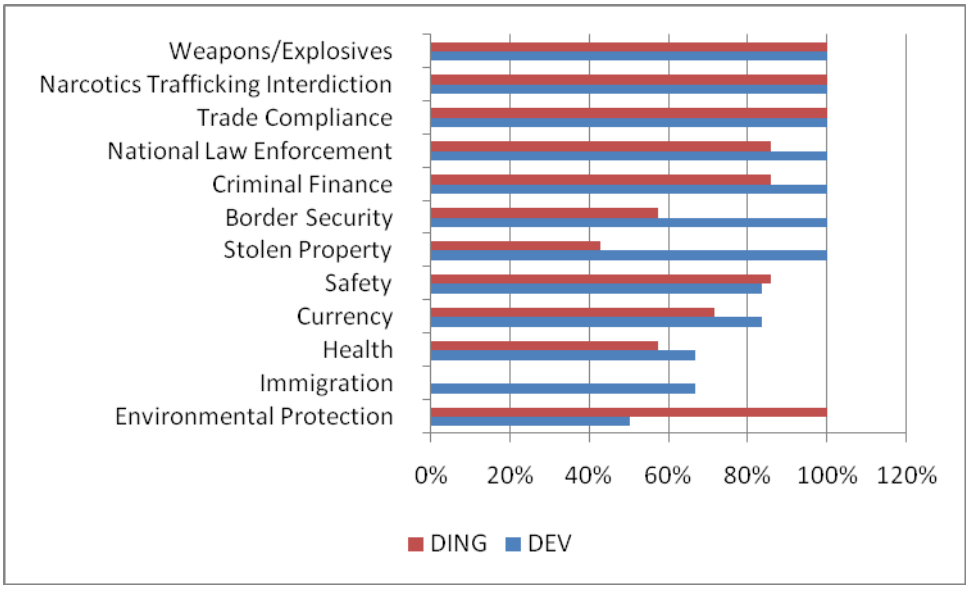
- **CHL** makes reference to its "umbrella" mission statement: "*To protect the country from the trade trafficking and custom tax evasion.*"

Observations: Four of the 12 proposed missions are shared by the 7 responding DING Economies.
None of the DING Economies has selected "*Immigration*" as a mission.
Stolen property, Health and Border security

Overall analysis of both DEV and DING Economies

Missions	shared by xx out of 14 Economies	Comments
Trade Compliance	**14**	Three of the 12 missions are shared by all responding Economies: Trade compliance, Narcotics trafficking interdiction and Weapons/explosives. Two more (Criminal finance and National law enforcement) are shared by 12 Economies. Immigration is only shared by four DEV Economies and none of the DING Economies. Environmental protection ranks highest in DING Economies and lowest in DEV's.
Narcotics Trafficking Interdiction	**14**	
Weapons/Explosives	**14**	
Criminal Finance	**12**	
National Law Enforcement	**12**	
Safety	**11**	
Environmental Protection	**10**	
Border Security	**10**	
Currency	**10**	
Stolen Property	**9**	
Health	**8**	
Immigration	**4**	

Comparison between DING and DEV Economies regarding the missions of the Agency



Q_2: Principal enforcement strategies

What is your principal enforcement strategy? (Indicate a relative percentage of effort for each)

Proposed combination of answers:	A value
	for each of the enforcement strategy in the list (8 strategies mentioned, plus "Other"), please indicate the relative percentage of effort for this strategy. The sum of figures should be not greater than 100.
Number of combinations of answers:	**9 + 1 (text for "*Other*")**

DEV Economies

DEV Economies that have answered	**4**	AUS	CDA	HKC	JPN	NZ	CT	USA
Type of enforcement strategies	**AVG %.**							
Intelligence and Targeting	**43,8**	**n.a.**	35	25	**n.a.**	70	45	**n.a.**
Documentary Discrepancy	**17,5**	**n.a.**	35	15	**n.a.**	0	20	**n.a.**
Investigation	**11,3**	**n.a.**	0	10	**n.a.**	30	5	**n.a.**
Laboratory Analysis	**1,3**	**n.a.**	0	0	**n.a.**	0	5	**n.a.**
Random Inspection	**7,8**	**n.a.**	1	10	**n.a.**	0	20	**n.a.**
Statistical Sampling or Modeling	**0,0**	**n.a.**	0	0	**n.a.**	0	0	**n.a.**
Intrusive Examination	**4,8**	**n.a.**	9	10	**n.a.**	0	0	**n.a.**
Non-intrusive Examination	**13,8**	**n.a.**	20	30	**n.a.**	0	5	**n.a.**

Comments submitted:

- **NZ** indicates that "*Intrusive and non intrusive examination of goods flow out from the strategies identified above*."
- **CT** adds "*Canines*" to the proposed enforcement strategies.
- **USA** indicates that "*CBP utilizes a layered enforcement strategy.*"

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN
Type of enforcement strategies	**AVG %**							
Intelligence and Targeting	**25,6**	25	25	30	10	30	5	54
Documentary Discrepancy	**11,4**	5	25	10	15	10	5	10
Investigation	**7,9**	20	5	5	10	5	5	5
Laboratory Analysis	**6,7**	5	5	5	15	10	5	2
Random Inspection	**10,4**	10	1	5	10	2	40	5
Statistical Sampling or Modeling	**14,0**	5	25	25	5	30	5	3
Intrusive Examination	**11,3**	15	6	5	25	5	5	18
Non-intrusive Examination	**12,7**	15	8	15	10	8	30	3

Observations: Figures from **VN** summed up 128. They were uniformally reduced to sum up to 100.

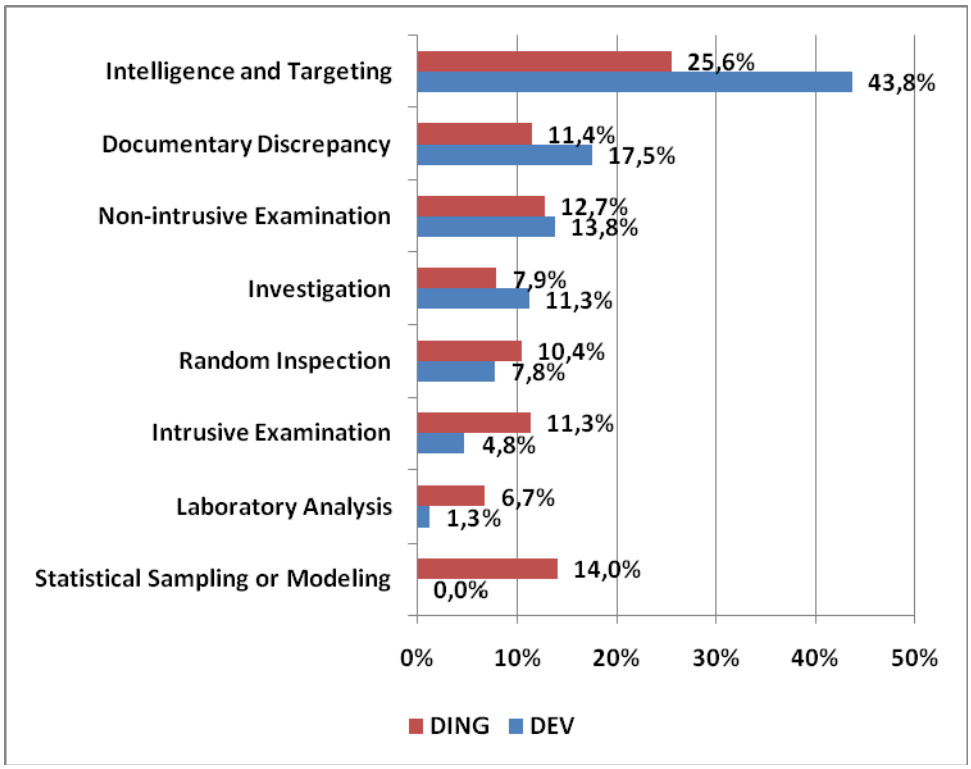
Overall analysis of both DEV and DING Economies

DEV Economies appear to rely almost twice more on Intelligence and targeting and 1.5 time more on Documentary discrepancy than DING Economies. These two strategies have more 1.5 times more weight than the remaining six. They do not rely on Statistical sampling or modeling, and very little on Laboratory analysis.

DEV and DING Economies appear to rely almost equally on Non-intrusive examination.

For DING Economies, Statistical sampling or modeling ranks second to Intelligence and targeting. Random inspection and Intrusive examination have similar importance. Laboratory analysis is approx. five times more important than in DEV Economies, a situation that may generate additional delay to cargo clearance.

Comparison between DING and DEV Economies regarding enforcement strategies



Section 1 (Agency missions): Synthesis of observations

The questions under Section #1 address the basic missions and enforcement strategies of APEC Member Economies.

There is a certain consensus between DEV and DING Economies regarding the missions of the Customs Administration.

Enforcement strategies seem to be different in essence. DEV Economies appear to rely on information and processing of information, whereas DING tend to prefer more “traditional” strategies, a situation that may reflect a certain resistance to change.

SECTION 2: Inspection locations

The questions under Section #2 address the locations of the various tasks involved in the inspection process, in particular: Customs documentation, non-intrusive examination, review of data from non-intrusive examination, physical examination or inspection.

Q_3: Place of review of documentation

Where does your agency review of Customs import or export documentation take place?

Proposed combination of answers:	**YES** or **NO**,
	for each of the locations in the list (4 locations mentioned, plus "Other").
Number of combinations of answers:	**5 + 1 (text for "*Other*")**

DEV Economies

DEV Economies that have answered	**7**	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Review of Customs IM-EXport documentation	**# comb.**									
Port of Entry – Local Office	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Regional Office	**6**	Yes	Yes	Yes	Yes	No	No	**n.a.**	**4**	67%
Headquarters	**7**	Yes	Yes	No	Yes	No	No	Yes	**4**	57%
Remote	**7**	Yes	Yes	No	Yes	No	No	Yes	**4**	57%

Comments submitted:

- **NZ** indicates that "*National Targeting Center operates across the main ports of entry; Auckland and Tauranga."*

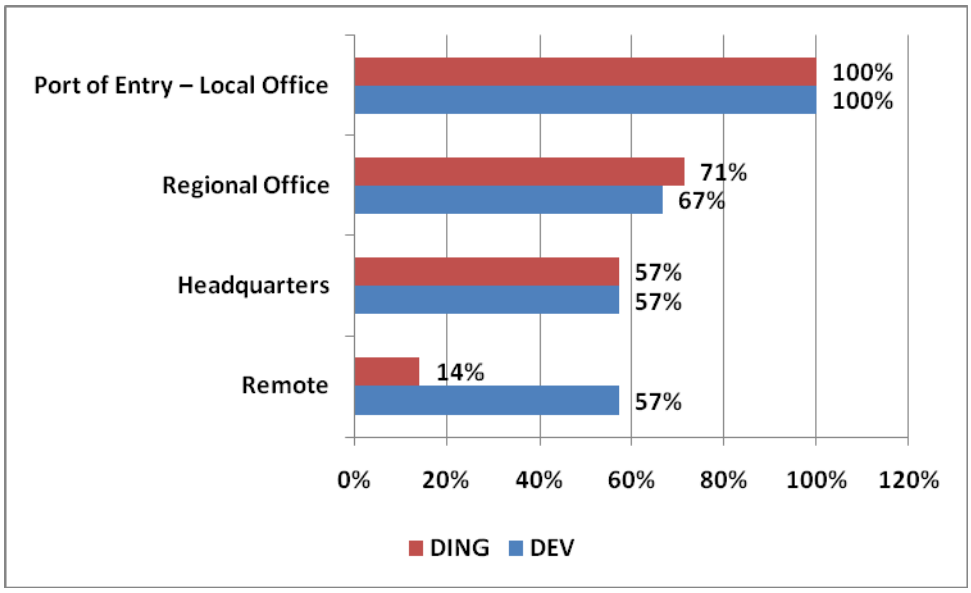
DING Economies

DING Economies that have answered	**7**	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Review of Customs IM-EXport documentation	**# comb.**									
Port of Entry – Local Office	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Regional Office	**7**	Yes	Yes	Yes	No	No	No	Yes	**4**	57%
Headquarters	**7**	Yes	No	Yes	Yes	Yes	Yes	No	**5**	71%
Remote	**7**	No	No	No	No	No	No	Yes	**1**	14%

Overall analysis of both DEV and DING Economies

Review of Customs IM-EXport documentation	shared by xx out of 14 Economies	Comments
Port of Entry – Local Office	**14**	The review of Customs import or export documentation takes place in the local office at the port of entry for all responding Economies. The use of Regional office and Headquarters is similarly common in DEV and DING Economies. The Remote review of documentation is not common in DING Economies..
Headquarters	**9**	
Regional Office	**8**	
Remote	**5**	

Comparison between DING and DEV Economies regarding the place where IM-EXport documentation takes place



Q_4: Place of non-intrusive examination

Where does the initial non-intrusive examination of target population physically occur?

Proposed combination of answers:	**YES** or **NO**,
	for each of the locations in the list (3 locations mentioned, plus "Other").
Number of combinations of answers:	**4 + 1 (text for "*Other*")**

DEV Economies

DEV Economies that have answered	**6**	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Initial non-intrusive examination occurs	**# comb.**									
Apron, Dockside or at Anchor	**4**	Yes	Yes	Yes	**n.a.**	**n.a.**	No	**n.a.**	**3**	75%
Within the Airport/Port Complex	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
Co-located with another Agency	**4**	No	No	Yes	**n.a.**	**n.a.**	No	**n.a.**	**1**	25%

Comments submitted:

- **HKC** mentions the location: "*Port of entry at our Land Boundary Control Points and cargo yard at rail stations.*"
- **JPNC** mentions the location: "*Customs Inspection Areas.*"

DING Economies

DING Economies that have answered	**7**	CHL	PRC	MAS	MEX	PE	THA	VN	#YES	%YES
Initial non-intrusive examination occurs	**# comb.**									
Apron, Dockside or at Anchor	**7**	No	No	No	Yes	Yes	Yes	Yes	**4**	57%
Within the Airport/Port Complex	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Co-located with another Agency	**7**	Yes	No	No	No	No	No	Yes	**2**	29%

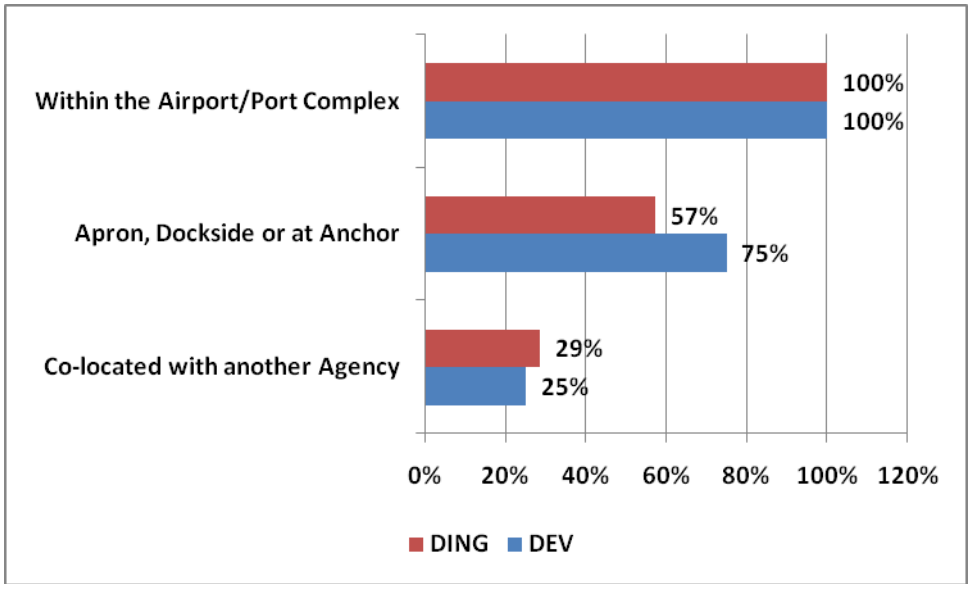
Comments submitted:

- **CHL** mentions the location: "*Border.*"
- **PE** mentions the location: "*Storage terminal.*"

Overall analysis of both DEV and DING Economies

Initial non-intrusive examination occurs	shared by xx out of 14 Economies	Comments
Within the Airport/Port Complex	**13**	The initial non-intrusive examination occurs within the airport/port complex in all responding Economies. It occurs at Apron, dockside or at anchor in approx. 60-70% of all Economies, and at another location in approx. 30% of all Economies.
Apron, Dockside or at Anchor	**7**	
Co-located with another Agency	**3**	

Comparison between DING and DEV Economies regarding the place where Initial non-intrusive examination occurs



Q_5: Place of review of data from examination

Where is the principal location that you review the data from an initial non-intrusive examination of the target population? (Indicate a relative percentage of review for each)

Proposed combination of answers:	A value
	for each of the locations in the list (5 locations mentioned, plus "Other"), please indicate the relative percentage to each location where review may occur. The sum of all figures should be not greater than 100.
Number of combinations of answers:	**6 + 1 (text for "*Other*")**

DEV Economies

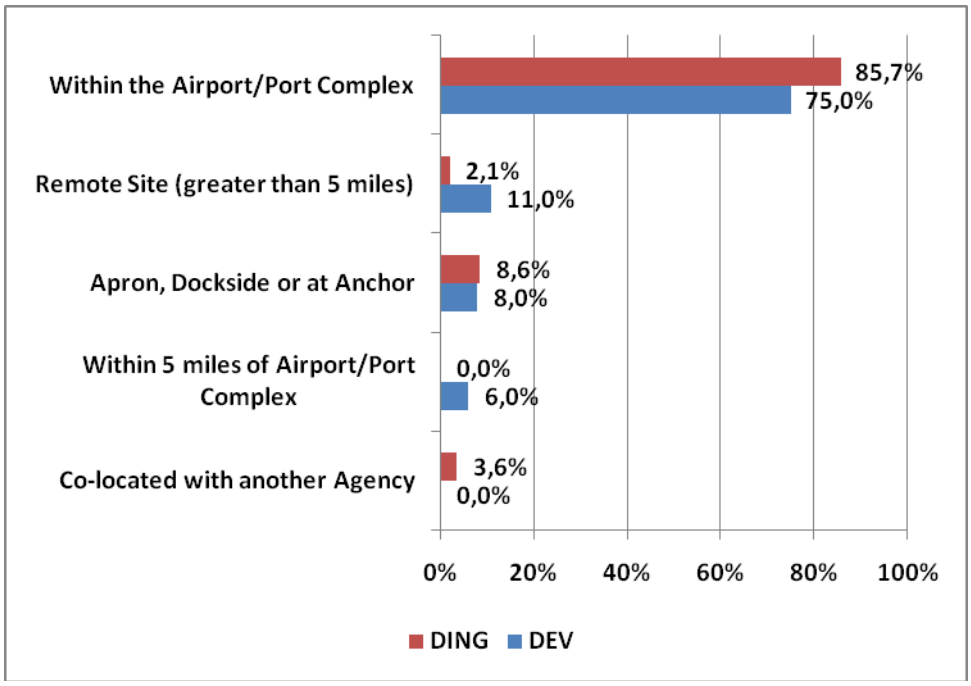
DEV Economies that have answered	**5**	**AUS**	**CDA**	**HKC**	**JPN**	**NZ**	**CT**	**USA**
Principal location for review of data	**AVG %**							
Apron, Dockside or at Anchor	**8,0**	**n.a.**	15	25	**n.a.**	0	0	0
Within the Airport/Port Complex	**75,0**	**n.a.**	30	65	**n.a.**	80	100	100
Within 5 miles of Airport/Port Complex	**6,0**	**n.a.**	30	0	**n.a.**	0	0	0
Remote Site (greater than 5 miles)	**11,0**	**n.a.**	25	10	**n.a.**	20	0	0
Co-located with another Agency	**0,0**	**n.a.**	0	0	**n.a.**	0	0	0

DING Economies

DING Economies that have answered	**7**	**CHL**	**PRC**	**MAS**	**MEX**	**PE**	**THA**	**VN**
Principal location for review of data	**AVG %**							
Apron, Dockside or at Anchor	**8,6**	0	0	0	40	10	0	10
Within the Airport/Port Complex	**85,7**	60	100	100	60	90	100	90
Within 5 miles of Airport/Port Complex	**0,0**	0	0	0	0	0	0	0
Remote Site (greater than 5 miles)	**2,1**	15	0	0	0	0	0	0
Co-located with another Agency	**3,6**	25	0	0	0	0	0	0

Overall analysis of both DEV and DING Economies

For all responding Economies, the principal location for review of data from an initial non-intrusive examination is located within the Airport/Port Complex (more than 75% of the cases). In few cases, it may be located at Apron, dockside or at anchor (approx. 8% of the cases). In DEV Economies, it may also be located at a remote site (greater than 5 miles).



Q_6: Place of final physical examination

Where is the final physical examination or inspection performed of target population?

Proposed combination of answers:	**YES** or **NO**,
	for each of the locations in the list (5 locations mentioned, plus "Other").
Number of combinations of answers:	**6 + 1 (text for "*Other*")**

DEV Economies

DEV Economies that have answered	6	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Final physical examination or inspection	**# comb.**									
Airport/Marine Terminal/dockside	**4**	Yes	Yes	Yes	**n.a.**	**n.a.**	Yes	**n.a.**	**4**	100%
Port of Entry	**5**	Yes	Yes	Yes	**n.a.**	**n.a.**	Yes	Yes	**5**	100%
Off site Examination	**6**	Yes	Yes	Yes	**n.a.**	Yes	No	Yes	**5**	83%
Bonded Warehouse	**6**	Yes	Yes	No	**n.a.**	Yes	Yes	Yes	**5**	83%
Ultimate Consignee's Facility	**4**	Yes	No	Yes	**n.a.**	**n.a.**	No	**n.a.**	**2**	50%

Comments submitted:

- **HKC** mentions the location: "*Customs Examination Halls/Compounds at various cargo terminals, cargo yard at rail stations.*"
- **JPNC** mentions the location: "*Customs Inspection Areas.*"

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Final physical examination or inspection	**# comb.**									
Airport/Marine Terminal/dockside	**7**	Yes	Yes	No	Yes	Yes	Yes	Yes	6	86%
Port of Entry	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
Off site Examination	**7**	Yes	Yes	No	No	No	Yes	No	3	43%
Bonded Warehouse	**7**	Yes	Yes	Yes	No	Yes	Yes	Yes	6	86%
Ultimate Consignee's Facility	**7**	Yes	Yes	Yes	No	No	Yes	Yes	5	71%

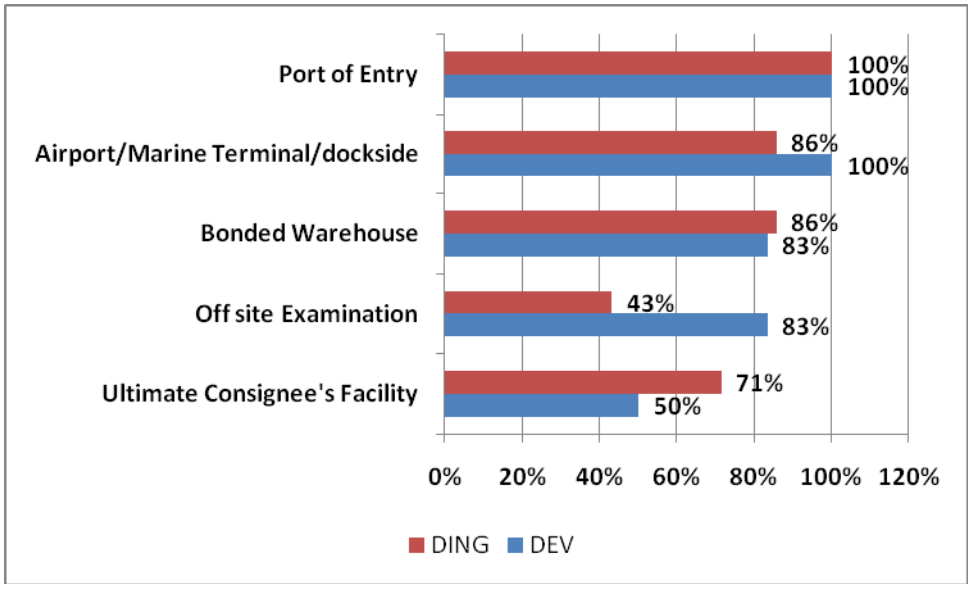
Comments submitted:

- **PRC** mentions the location: "*Customs Surveillance Areas.*"
- **PE** and **THA** mention the location: "*Storage Terminals.*"

Overall analysis of both DEV and DING Economies

Final physical examination or inspection occurs at	shared by xx out of 13 Economies	Comments
Port of Entry	**12**	For all responding Economies, the final physical examination or inspection occurs at the Port of entry. It may also occur at the Airport/Marine terminal/dockside in DEV Economies and to a slightly less extent in DEV Economies. Bonded warehouse are equally used in DEV and DING Economies at a rate of approx. 85%. Offsite examination occurs twice more in DEV Economies (83%) than in DING Economies (43%). Ultimate consignee's facility is used more in DING than in DEV Economies (71% against 50%).
Bonded Warehouse	**11**	
Airport/Marine Terminal/dockside	**10**	
Off site Examination	**8**	
Ultimate Consignee's Facility	**7**	

Comparison between DING and DEV Economies regarding the place where final physical examination or inspection occurs



Q_7: Place of principal office by function

Where is the principal office that exercises each of the following inspection functions?

Proposed combination of answers:	**YES** or **NO**,
	for each of combinations of inspection functions and locations in the lists (5 inspections functions and 3 locations mentioned, plus "Other").
Number of combinations of answers:	**20**

The answers to this question for DEV and DING Economies are presented in the two following pages.

Where is the principal office that exercises each of the following inspection functions?

DEV Economies

DEV Economies that have answered		7	AUS	CDA	HKC	JPN	NZ	CT	USA	#YES	%YES
Function	**Location**	**# comb.**									
Administrative and Data Analysis	*Apron, Dockside or at Anchor*	3	n.a.	No	No	n.a.	n.a.	No	n.a.	0	0%
	Within the Port Complex	3	n.a.	Yes	Yes	n.a.	n.a.	Yes	n.a.	3	100%
	Co-located with another Agency	3	n.a.	No	No	n.a.	n.a.	No	n.a.	0	0%
	Other	6	Yes	Yes	Yes	n.a.	Yes	No	Yes	5	83%
Documentary Review and Reporting	*Apron, Dockside or at Anchor*	3	n.a.	Yes	No	n.a.	n.a.	No	n.a.	1	33%
	Within the Port Complex	4	n.a.	Yes	Yes	n.a.	n.a.	Yes	Yes	4	100%
	Co-located with another Agency	5	n.a.	No	No	Yes	Yes	No	n.a.	2	40%
	Other	4	Yes	Yes	Yes	n.a.	n.a.	No	n.a.	3	75%
Intelligence and Targeting	*Apron, Dockside or at Anchor*	3	n.a.	No	No	n.a.	n.a.	No	n.a.	0	0%
	Within the Port Complex	4	n.a.	Yes	Yes	n.a.	n.a.	Yes	Yes	4	100%
	Co-located with another Agency	5	n.a.	No	No	n.a.	Yes	No	Yes	2	40%
	Other	5	Yes	Yes	Yes	n.a.	n.a.	No	Yes	4	80%
Physical Inspection	*Apron, Dockside or at Anchor*	5	Yes	Yes	No	n.a.	n.a.	No	Yes	3	60%
	Within the Port Complex	5	Yes	Yes	Yes	n.a.	n.a.	Yes	Yes	5	100%
	Co-located with another Agency	3	n.a.	No	No	n.a.	n.a.	No	n.a.	0	0%
	Other	6	n.a.	Yes	Yes	Yes	Yes	No	Yes	5	83%
Screening Examination	*Apron, Dockside or at Anchor*	4	n.a.	Yes	No	n.a.	n.a.	Yes	Yes	3	75%
	Within the Port Complex	6	Yes	Yes	Yes	n.a.	Yes	Yes	Yes	6	100%
	Co-located with another Agency	3	n.a.	No	No	n.a.	n.a.	No	n.a.	0	0%
	Other	4	n.a.	No	Yes	Yes	n.a.	No	n.a.	2	50%

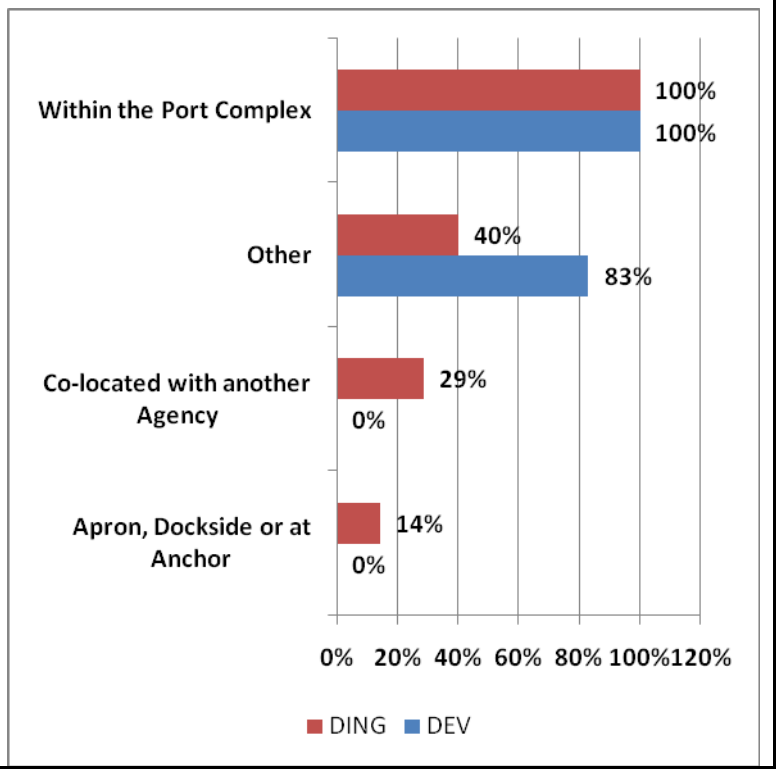
Where is the principal office that exercises each of the following inspection functions?

DING Economies

DING Economies that have answered		7	CHL	PRC	MAS	MEX	PE	THA	VN	#YES	%YES
Function	**Location**	**# comb.**									
Administrative and Data Analysis	*Apron, Dockside or at Anchor*	**7**	No	No	No	Yes	No	No	No	1	14%
	Within the Port Complex	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
	Co-located with another Agency	**7**	No	No	No	Yes	No	No	Yes	**2**	29%
	Other	**5**	Yes	n.a.	No	n.a.	No	No	Yes	**2**	40%
Documentary Review and Reporting	*Apron, Dockside or at Anchor*	**7**	Yes	No	No	Yes	No	No	No	**2**	29%
	Within the Port Complex	**7**	Yes	Yes	Yes	Yes	No	Yes	Yes	**6**	86%
	Co-located with another Agency	**7**	No	No	No	No	No	No	No	**0**	0%
	Other	**5**	Yes	n.a.	No	n.a.	Yes	No	Yes	**3**	60%
Intelligence and Targeting	*Apron, Dockside or at Anchor*	**7**	No	No	No	Yes	No	No	Yes	**2**	29%
	Within the Port Complex	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
	Co-located with another Agency	**7**	No	No	No	No	No	No	Yes	1	14%
	Other	**5**	Yes	n.a.	No	n.a.	No	No	Yes	**2**	40%
Physical Inspection	*Apron, Dockside or at Anchor*	**7**	Yes	No	No	Yes	No	No	No	**2**	29%
	Within the Port Complex	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
	Co-located with another Agency	**7**	No	No	No	Yes	No	No	Yes	**2**	29%
	Other	**5**	No	n.a.	No	n.a.	No	No	No	**0**	0%
Screening Examination	*Apron, Dockside or at Anchor*	**7**	No	No	No	Yes	No	No	No	1	14%
	Within the Port Complex	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
	Co-located with another Agency	**7**	Yes	No	No	No	No	No	Yes	**2**	29%
	Other	**5**	No	n.a.	No	n.a.	No	No	No	**0**	0%

Overall analysis of both DEV and DING Economies

Administrative and Data Analysis	DEV	DING
Apron, Dockside or at Anchor	0%	14%
Co-located with another Agency	0%	29%
Other	83%	40%
Within the Port Complex	100%	100%

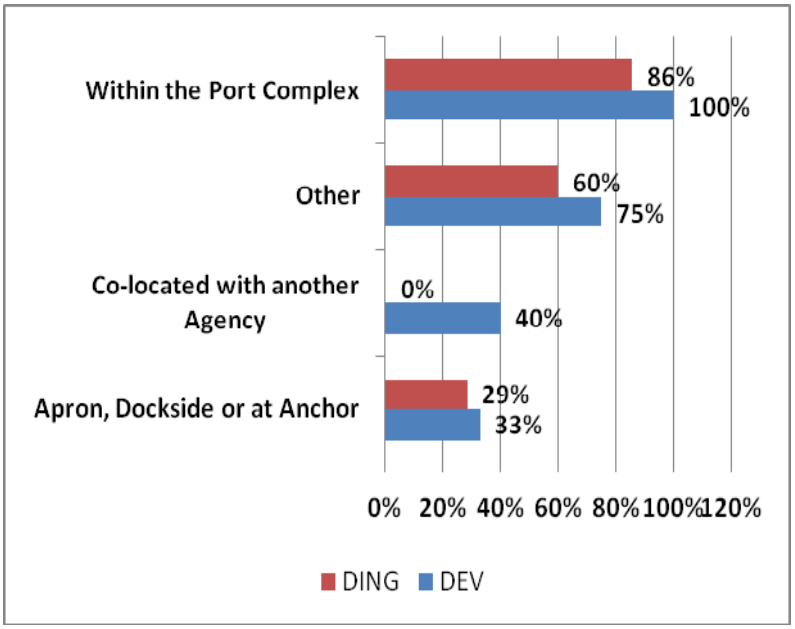


For all responding Economies, the function of **administrative and data analysis** is performed within the Port complex.

In 5 out of 6 responding DEV Economies, this function may also be performed at other places; this is twice more than in DING Economies.

In none of the DEV Economies, this function is performed at Apron, dockside or at anchor, or co-located with another agency.

Documentary Review and Reporting	DEV	DING
Apron, Dockside or at Anchor	33%	29%
Co-located with another Agency	40%	0%
Other	75%	60%
Within the Port Complex	100%	86%



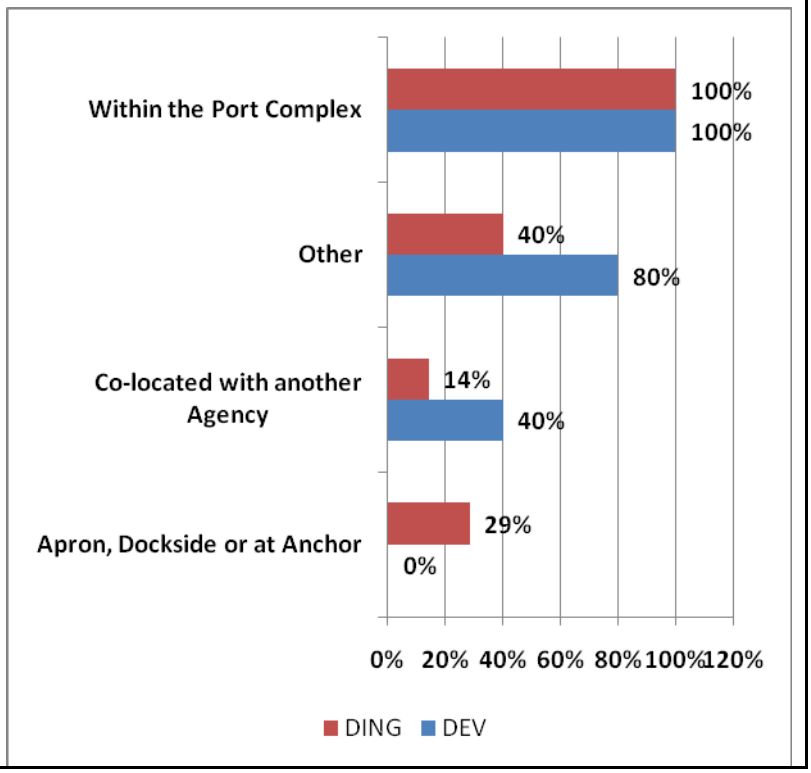
For all responding Economies except **PE**, the function of **documentary review and reporting** is performed within the Port complex.

In 3 out of 4 DEV Economies and 3 out of 5 DING Economies, this function may also be performed at other places.

In 2 out of 5 DEV Economies, this function may be co-located with another agency. This does not occur in DING Economies.

This function is performed at apron, dockside or at anchor, in approx. 30% of the cases in both DEV and DING Economies.

Intelligence and Targeting	DEV	DING
Apron, Dockside or at Anchor	0%	29%
Co-located with another Agency	40%	14%
Other	80%	40%
Within the Port Complex	100%	100%



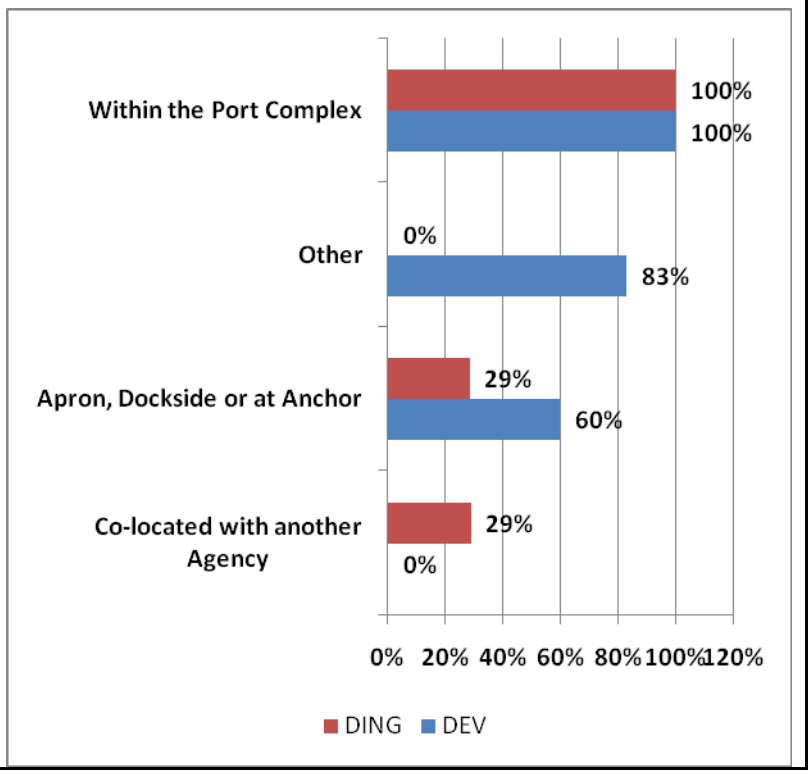
For all responding Economies, the function of **Intelligence and Targeting** is performed within the Port complex.

In 4 out of 5 responding DEV Economies, this function may also be performed at other places; this is twice more than in DING Economies (2 out of 5 Economies).

In none of the DEV Economies, this function is performed at apron, dockside or at anchor while it is performed in 2 out of 7 DING Economies.

The function is three times more often co-located with another agency in DEV Economies than in DING Economies.

Physical Inspection	DEV	DING
Apron, Dockside or at Anchor	60%	29%
Co-located with another Agency	0%	29%
Other	83%	0%
Within the Port Complex	100%	100%



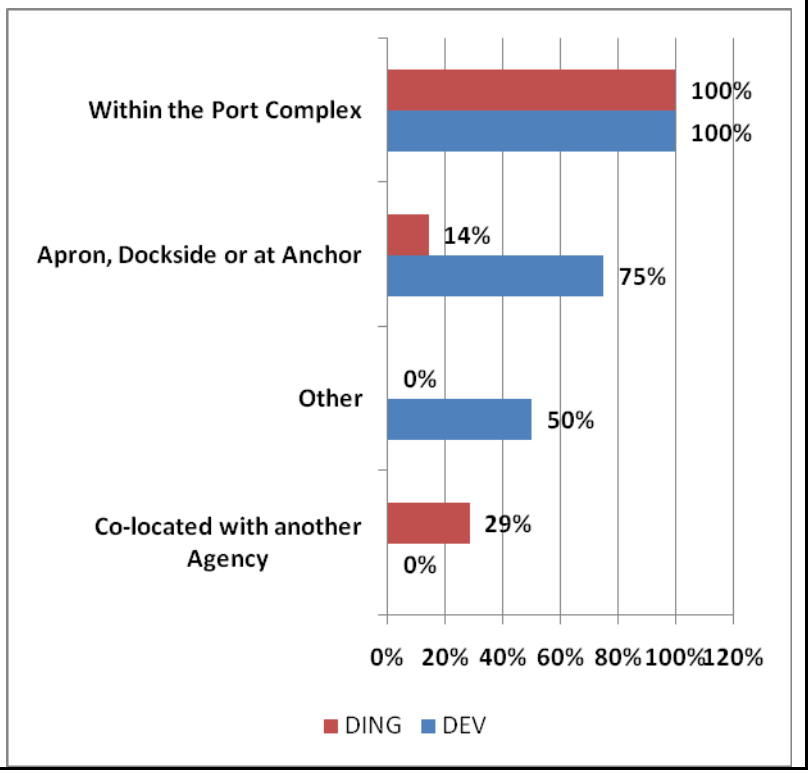
For all responding Economies, the function of **Physical Inspection** is performed within the Port complex.

The function is never performed at Other locations in DING Economies, while it may be performed at Other places in 5 out of 6 DEV Economies.

It may take place at Apron, Dockside or at Anchor twice more often in DEV Economies (3 out of 5 DEV Economies) than in DING Economies (2 out of 7).

In none of the DEV Economies, this function is co-located with another Agency while it is co-located with another agency in 2 out of 7 DING Economies.

Screening Examination	DEV	DING
Co-located with another Agency	0%	29%
Other	50%	0%
Apron, Dockside or at Anchor	75%	14%
Within the Port Complex	100%	100%



For all responding Economies, the function of **Screening Examination** is performed within the Port complex.

The function is never performed at Other locations in DING Economies, while is may be performed at other places in 2 out of 4 responding DEV Economies.

It may take place at Apron, Dockside or at Anchor much more often in DEV Economies (3 out of 4 DEV Economies) than in DING Economies (1 out of 7).

In none of the DEV Economies, this function is co-located with another Agency while it is co-located with another agency in 2 out of 7 DING Economies.

Q_8: Cost-recovery mechanism

Has a cost-recovery mechanism been established regarding the use of cargo inspection tools? *Who directly contributes to this mechanism?*

Proposed combination of answers:	**YES** or **NO**,
	for the main question and an answer from the list (Cargo concerns, Terminal operators, Cargo & Terminal, or Others).
Number of combinations of answers:	**2 + 1 (text for "*Others*")**

DEV Economies

DEV Economies that have answered	**7**	AUS	CDA	HKC	JPN	NZ	CT	USA
Cost-recovery mechanism	**# comb.**							
Has a cost-recovery mechanism been established ?	**5**	Yes	No	No	No	Yes	No	No
Who directly contributes to this mechanism?	**1**	**n.a.**				Cargo concerns		

All DEV Economies have responded the question; only two have established a cost-recovery mechanism.

DING Economies

None of the 7 responding Economies reports the establishment of a cost-recovery mechanism regarding the use of cargo inspection tools.

Overall analysis of both DEV and DING Economies

Regarding the use of cargo inspection tools, none of the DING Economies has established a cost-recovery mechanism while 2 out of the 5 responding DEV Economies have done so.

In one of these two cases (NZ), **cargo concerns** are contributing to the mechanism.

Section 2 (Inspection locations): Synthesis of observations

The questions under Section #2 address the locations of the various tasks involved in the inspection process, in particular: Customs documentation, non-intrusive examination, review of data from non-intrusive examination, physical examination or inspection.

As expected, in both DEV and DING Economies, the Port/Airport complex is the place where most of the inspection tasks are performed. It is interesting to observe that DING Economies, more than DEV Economies, tend to perform some of those tasks at Headquarters.

In both DEV and DING responding Economies, there is a reluctance to locate the performance of these tasks with another agency.

SECTION 3: Documentation

The question under Section #3 is intended to determine the levels of inspection, in quantitative terms, that may render effective the inspection process.

Q_9: Indicators and deterrence level

With regards to the indicators below, what do you consider to be an effective deterrence level for your target population? (Please indicate a number or a percentage, and specify if "Other")

Proposed combination of answers:	A value
	for each of the indicators in the list (4 indicators mentioned, plus 3 "Other"). For the 1st indicator, a number was expected, while a percentage would have applied to the 3 following indicators.
Number of combinations of answers:	**7**

DEV Economies

DEV Economies that have answered	**2**	**HKC**	**NZ**
Type of indicators	**# comb.**		
Number of Annual Inspections	**1**	0	225000
% of Annual Passengers	**1**	0	2
% of Container Volume Throughput	**1**	30	2
% of Inspection Target Population	**1**	70	2
Other: (please specify)	**1**	Case detected	100% Data validation - Risk management of import and export transactions
Other: (please specify)	**1**	No. of arrest /conviction	100% Data validation -Risk mangement of arriving passengers (both air and sea) and crew
Other: (please specify)	**1**	No. of consignments for inspection	100% physical screening of incoming and outgoing mail.

This question was qualified of "unclear" by one DEV Economy (**USA**). Five out the 7 responding DEV Economies did not provide data (**AUS**, **CDA**, **JPN**, **CT** and **USA**).

It seems that one of the responding DEV Economies (**HKC**) has provided a percentage to the proposed indicators, but not an "effective deterrence level".

Only **NZ** seems to have provided "coherent" information. In particular, regarding the indicator "Number of annual inspections", it provided (as requested) an absolute number. The appropriateness of this particular indicator may surely be questioned since there is no available information regarding, for example, the total number of shipments.

Regarding the indicators "Percentage of annual passengers", "Percentage of container volume throughput" and "Percentage of inspection target population", **NZ** indicates a value of 2%. These figures seem reasonable and somewhat consistent with the answers provided by DING Economies.

DING Economies

DING Economies that have answered	6	CHL	PRC	MAS	MEX	PE	THA
Indicators	**# comb.**						
Number of Annual Inspections	**1**	75	0,05	0,05	25	0,05	0,05
% of Annual Passengers	**1**	0	5	1	10	1	0
% of Container Volume Throughput	**1**	0	4	3	15	3	95
% of Inspection Target Population	**1**	25	1	100	50	100	0
Other: (please specify)	**1**	0	0	0	0	0	0
Other: (please specify)	**1**	0	0	0	0	0	0
Other: (please specify)	**1**	0	0	0	0	0	0

One responding DING Economy (**VN**) did not provide information. It appears that a number of other DING Economies have provided a percentage to the proposed indicators, but not an "effective deterrence level".). This is the case for **CHL**, **MEX** and **THA**.

The other 3 responding DING Economies (**PRC**, **MAS** and **PE**) have provided reasonable data regarding the indicators "Percentage of annual passengers" and "Percentage of container volume throughput": repectively between 1 and 5%, and between 3 and 4%

Regarding the indicator "Number of annual inspections", it seems that four DING Economies (**PRC**, **MAS**, **PE** and **THA**) have indicated a percentage (of the total number of shipments ?). As mentioned earlier, the appropriateness of this particular indicator may surely be questioned.

Finally, regarding the "percentage of inspection target population", PRC is providing reasonable figure (1%) while two others (**MAS** and **PE**) refer to a very high figure (100%).

Section 3 (Documentation): Synthesis of observations

The question under Section #3 was intended to determine the levels of inspection, in quantitative terms, that may render effective the inspection process. **It appears that there has been a misunderstanding among some Ecomomies between percentages and numbers. Therefore, no general statement can be made.** It would be expetected however that the levels of inspection should strike an adecuate level to balance trade facilitation and protection of national interests.

SECTION 4: Inspection process

The questions under Section #4 address the inspection process in terms of its main elements, its primary inspection targets (in general and in container traffic), its performance indicators and its criteria to target containers.

Q_10: Basic elements of inspection process

What are the basic elements of your agency's port of entry inspection process?

Proposed combination of answers:	**YES** or **NO**,
	for each of the basic elements in the list (9 elements, plus "Other").
Number of combinations of answers:	**10 + 1 (text for "*Others*")**

DEV Economies

DEV Economies that have answered	**7**	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Elements of inspection process	**# comb.**									
Data analysis and Profiling	**6**	Yes	Yes	Yes	Yes	Yes	Yes	**n.a.**	**6**	100%
Documentary Review and Reporting	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Intelligence and Targeting	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Investigation	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
Laboratory Analysis	**5**	No	No	Yes	**n.a.**	**n.a.**	Yes	Yes	**3**	60%
Non-intrusive Screening and Examination	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
Random or Statistical Sampling	**6**	No	Yes	Yes	**n.a.**	Yes	Yes	Yes	**5**	83%
Physical Intrusive Examination	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
Inspection Technology	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Elements of inspection process	**# comb.**									
Data analysis and Profiling	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
Documentary Review and Reporting	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
Intelligence and Targeting	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
Investigation	**7**	Yes	Yes	Yes	Yes	No	Yes	Yes	6	86%
Laboratory Analysis	**7**	Yes	Yes	No	Yes	Yes	Yes	Yes	6	86%
Non-intrusive Screening and Examination	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
Random or Statistical Sampling	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
Physical Intrusive Examination	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
Inspection Technology	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%

Overall analysis of both DEV and DING Economies

There is a strong convergence among DEV and DING Economies regarding the elements of inspection process.

Only "*Laboratory analysis*" is not considered basic by two DEV and one DING Economies, while "*Investigation*" is not basic for one DING Economy and "*Random or Statistical Sampling*" is not basic for one DEV Economy.

Q_11: Primary inspection targets

What is the primary inspection target for each function in ports of entry? (Indicate a relative percentage of enforcement effort for each)

Proposed combination of answers:	A value
	for each of the targets in the list (4 targets mentioned, plus "Other"), please indicate the relative percentage to each location where review may occur. The sum of all figures should be not greater than 100.
Number of combinations of answers:	**5+ 1 (text for "*Others*")**

DEV Economies

DEV Economies that have answered	**4**	AUS	CDA	HKC	JPN	NZ	CT	USA
Primary inspection targets	**AVG %.**							
Baggage	**18**	**n.a.**	18	15	**n.a.**	20	20	**n.a.**
Bulk Freight	**17**	**n.a.**	2	25	**n.a.**	10	30	**n.a.**
Container Freight	**46**	**n.a.**	40	35	**n.a.**	60	50	**n.a.**
Vessel/Aircraft	**14**	**n.a.**	40	5	**n.a.**	10	0	**n.a.**
Other	**5**	**n.a.**	0	20	**n.a.**	0	0	**n.a.**
Total	**100**	**n.a.**	100	100	**n.a.**	100	100	**n.a.**

Comments submitted:

- **HKC** mentions "R*ail cargo, vehicle check and search.*"
- **USA** indicates that "*The U.S. has 327 ports of entry, and the primary inspection target at every port of entry are illegal goods or people.*"

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN
Primary inspection targets	**AVG %**							
Baggage	**10**	15	20	5	20	5	0	5
Bulk Freight	**15**	40	15	4	30	4	5	5
Container Freight	**64**	40	45	90	30	90	90	60
Vessel/Aircraft	**12**	5	20	1	20	1	5	30
Other	**0**	0	0	0	0	0	0	0
Total	**100**	100	100	100	100	100	100	100

Overall analysis of both DEV and DING Economies

For both DEV and DING Economies, container freight is the primary inspection target, with a higher importance given in DING Economies (64% against 46% in DEV Economies).

Bulk Freight is ranked second, approx. 4 times less important than container freight in DING Economies (almost 3 times less in DEV Economies).

Baggage comes close to bulk freight in DEV Economies while the third position is taken by Vessel/aircraft in DING Economies.

Q_12: Primary inspection target in container freight

If your primary target is container freight, what is your primary inspection target within the container?

Proposed combination of answers:	**YES** or **NO**,
	for each of the basic elements in the list (9 elements, plus "Other"). For two of the elements, there is a possibility to provide free-text information.
Number of combinations of answers:	**12 + 1 (text for *"Others"*)**

DEV Economies

DEV Economies that have answered	**6**	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Primary inspection targets for containers	**# comb.**									
Illegal Aliens	**3**	No	No	Yes	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**1**	33%
Plants	**3**	No	No	No	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**0**	0%
Animals	**3**	No	No	No	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**0**	0%
Weapons/Explosives	**6**	Yes	No	Yes	Yes	Yes	Yes	**n.a.**	**5**	83%
Narcotics	**6**	Yes	Yes	Yes	Yes	Yes	Yes	**n.a.**	**6**	100%
Currency	**3**	No	No	No	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**0**	0%
Merchandise Trade Compliance	**5**	Yes	No	Yes	**n.a.**	Yes	Yes	**n.a.**	**4**	80%
Organics	**3**	No	No	No	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**0**	0%
Inorganic	**3**	No	No	No	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**0**	0%
Other	**3**	**n.a.**	No	Yes	**n.a.**	Yes	**n.a.**	**n.a.**	**2**	67%

Comments submitted:

- **HKC** mentions as "Other target": "*Dutiable commodities.*"
- **NZ** mentions as "Other target": "*Objectionable material.*"
- **CT** mentions as "Other target": "*IPR, CITES.*"
- **USA** mentions as "Other target": "*Anything illegal.*"

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Primary inspection targets for containers	**# comb.**									
Illegal Aliens	**5**	No	Yes	**n.a.**	No	**n.a.**	No	Yes	**2**	40%
Plants	**5**	No	Yes	**n.a.**	Yes	**n.a.**	Yes	Yes	**4**	80%
Animals	**5**	No	Yes	**n.a.**	Yes	**n.a.**	Yes	Yes	**4**	80%
Weapons/Explosives	**6**	Yes	Yes	Yes	Yes	**n.a.**	Yes	Yes	**6**	100%
Narcotics	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Currency	**5**	No	Yes	**n.a.**	Yes	**n.a.**	Yes	Yes	**4**	80%
Merchandise Trade Compliance	**6**	Yes	Yes	Yes	Yes	**n.a.**	Yes	Yes	**6**	100%
Organics	**4**	No	**n.a.**	**n.a.**	No	**n.a.**	Yes	Yes	**2**	50%
Inorganic	**3**	No	**n.a.**	**n.a.**	No	**n.a.**	Yes	**n.a.**	**1**	33%
Other	**3**	No	Yes	**n.a.**	**n.a.**	**n.a.**	No	**n.a.**	**1**	33%

No specific information is provided by **THA** and **VN** regarding the target "Organics".

No specific information is provided by **THA** regarding the target "Inorganics".

No specific information is provided by **PRC** regarding "Other".

Overall analysis of both DEV and DING Economies

Regarding the primary inspection targets for container freight, **Weapons/explosives**, **Narcotics**, and **Merchandise trade compliance** are considered to be the most important targets by both DEV and DING Economies.

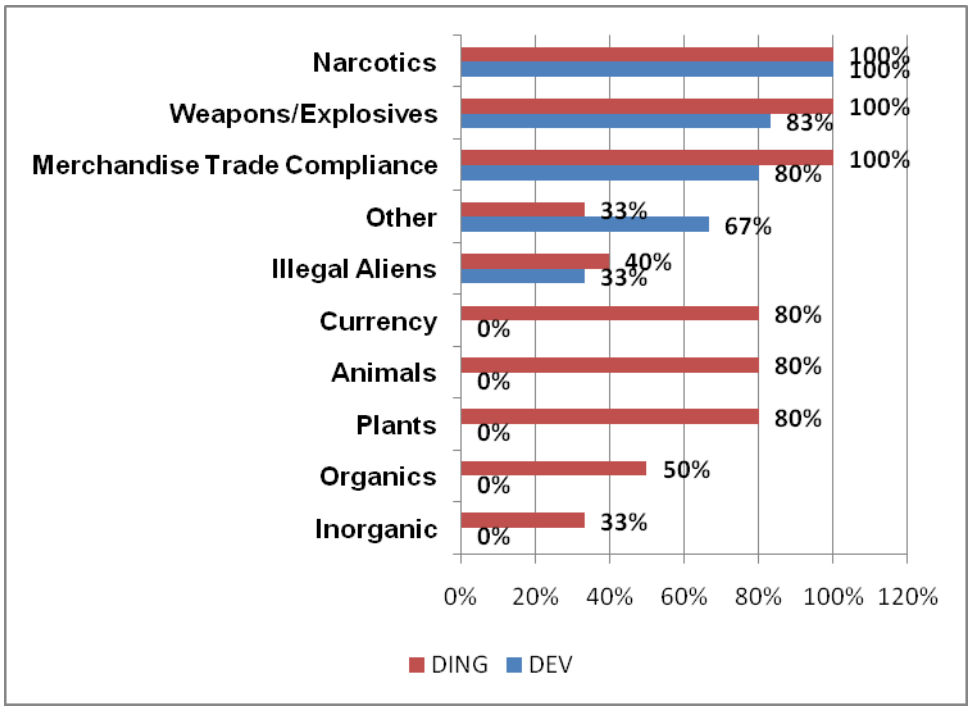
Animals, **plants** and **currency** are the second most important targets in DING while there are not considered as important targets in DEV Economies.

Illegal aliens is a primary inspection target in one of the two DEV Economies that responded this question.

Overall analysis of both DEV and DING Economies

Primary inspection targets for container	shared by xx out of 13 Economies	Comments
Narcotics	**13**	Regarding the primary inspection targets for container freight, **Narcotics**, **Weapons/explosives** and **Merchandise trade compliance** are considered to be the most important targets by most responding DEV and DING Economies. **Animals**, **plants** and **currency** are the second most important targets in DING while there are not considered as important targets in DEV Economies. **Illegal aliens** is a primary inspection target in one of the three DEV Economies that responded this question.
Weapons/Explosives	**11**	
Merchandise Trade Compliance	**10**	
Plants	**4**	
Animals	**4**	
Currency	**4**	
Illegal Aliens	**3**	
Other	**3**	
Organics	**2**	
Inorganic	**1**	

Comparison between DING and DEV Economies regarding primary inspection targets



Q_13: Important performance indicators of inspection and enforcement

To measure inspection and enforcement effectiveness, which of the following performance indicators are considered important?

Proposed combination of answers:	**YES** or **NO**,
	for each of the basic elements in the list (9 elements, plus "Other").
Number of combinations of answers:	**10 + 1 (text for "*Others*")**

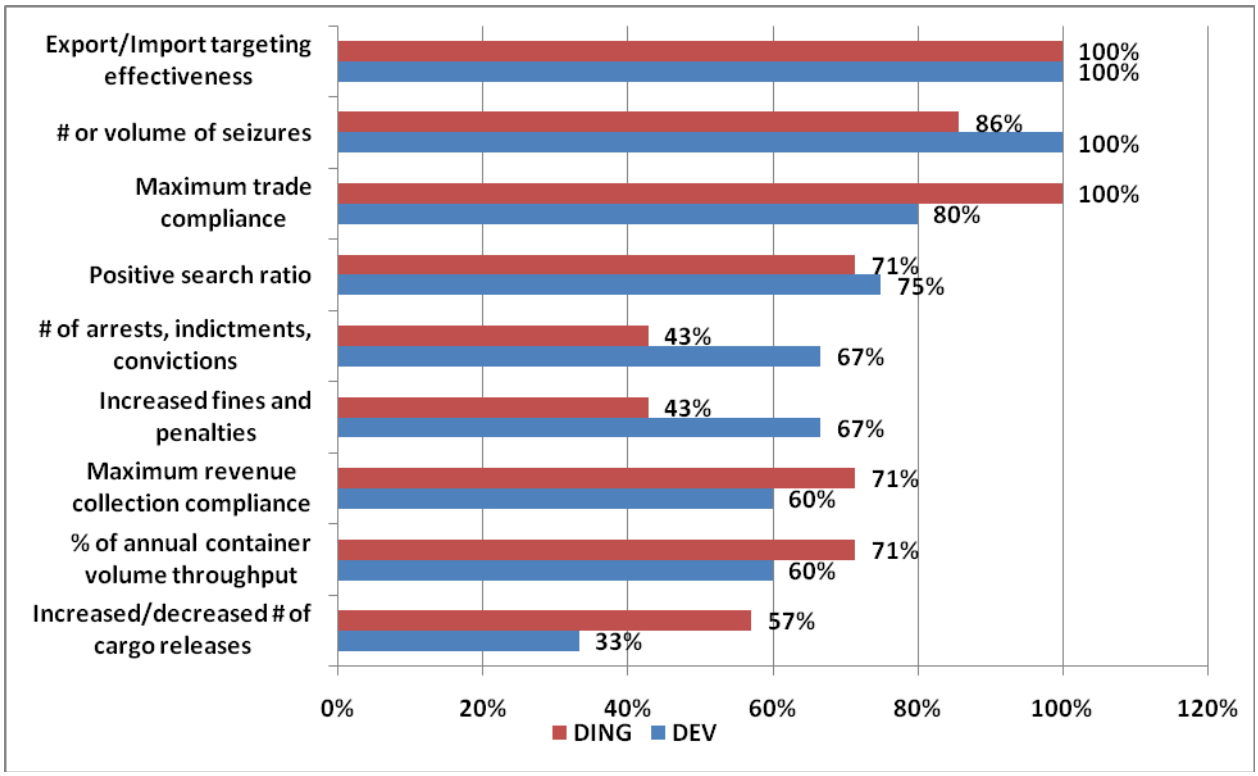
DEV Economies

DEV Economies that have answered	**7**	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Importance of performance indicators	**# comb.**									
% of annual container volume throughput	**5**	Yes	No	Yes	**n.a.**	No	Yes	**n.a.**	**3**	60%
Maximum revenue collection compliance	**5**	**n.a.**	No	Yes	**n.a.**	Yes	No	Yes	**3**	60%
Maximum trade compliance	**5**	**n.a.**	No	Yes	**n.a.**	Yes	Yes	Yes	**4**	80%
# or volume of seizures	**6**	Yes	Yes	Yes	Yes	**n.a.**	Yes	Yes	**6**	100%
Increased/decreased # of cargo releases	**3**	**n.a.**	No	Yes	**n.a.**	**n.a.**	No	**n.a.**	**1**	33%
Increased fines and penalties	**3**	**n.a.**	No	Yes	**n.a.**	**n.a.**	Yes	**n.a.**	**2**	67%
Export/Import targeting effectiveness	**6**	Yes	Yes	Yes	**n.a.**	Yes	Yes	Yes	**6**	100%
# of arrests, indictments, convictions	**3**	**n.a.**	Yes	Yes	**n.a.**	**n.a.**	No	**n.a.**	**2**	67%
Positive search ratio	**3**	No	No	No	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**0**	0%

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Importance of performance indicators	**# comb.**									
% of annual container volume throughput	**7**	No	No	Yes	Yes	Yes	Yes	Yes	5	71%
Maximum revenue collection compliance	**7**	Yes	Yes	Yes	Yes	No	Yes	No	5	71%
Maximum trade compliance	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
# or volume of seizures	**7**	Yes	Yes	Yes	Yes	No	Yes	Yes	6	86%
Increased/decreased # of cargo releases	**7**	No	No	Yes	Yes	No	Yes	Yes	4	57%
Increased fines and penalties	**7**	Yes	No	Yes	Yes	No	No	No	3	43%
Export/Import targeting effectiveness	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	100%
# of arrests, indictments, convictions	**7**	No	No	Yes	Yes	No	Yes	No	3	43%
Positive search ratio	**7**	Yes	No	Yes	Yes	Yes	No	Yes	5	71%

Comparison between DING and DEV Economies regarding performance indicators



Overall analysis of both DEV and DING Economies

Importance of performance indicators	shared by xx out of 14 Economies	Comments
Export/Import targeting effectiveness	**13**	Export/Import targeting effectiveness and Number or volume of seizures are both indicators considered to be important to measure inspection and enforcement effectiveness by most of responding DEV and DING Economies. Maximum trade compliance is considered important by all DING Economies and by 4 of 5 responding DEV Economies. The % of annual container volume throughput, Maximum revenue collection compliance and Positive search ratio are ranked similarly by both DEV and DING Economies. Increased/decreased # of cargo releases, Increased fines and penalties and # of arrests, indictments, convictions are considered as not so relevant indicators particularly by DEV but also by DING Economies.
# or volume of seizures	**12**	
Maximum trade compliance	**11**	
% of annual container volume throughput	**8**	
Maximum revenue collection compliance	**8**	
Positive search ratio	**8**	
Increased/decreased # of cargo releases	**5**	
Increased fines and penalties	**5**	
# of arrests, indictments, convictions	**5**	

Q_14: Specific criteria to target containers

What specific criteria in order of importance do you use to target particular containers for non-intrusive examination using inspection technology or for physical examination?

Proposed combination of answers:	Economies were invited to indicate up to 5 specific criteria.
Number of combinations of answers:	**5**

DEV Economies

Responding DEV Economies	Proposed criteria
HKC	Intelligence and alert
	Profiling of risk indicators
	Consignment/importer/expertor/manifest details
	Routing of consignment/shipment
NZ	Specific alert
	Previous adverse recordings - supplier or importing entity
	1st time importer
	Cost unit ratio
	Source country
CT	High Tariff or contraband goods
	Country of origin, Route
	Cargo description
	Consignee
	Customs broker

The responding three (3) DEV Economies listed 14 criteria for non-intrusive examination.

AUS and **JPN** did not provide any information. **CDA** mentions that "*A list of criteria that we have developed over the years.*" **USA** indicates that "*it cannot share this information.*"

DING Economies

Responding DING Economies	Proposed criteria
CHL	New Importers
	Kind of Merchandise
	Country of Origin
	Importer Behavior History
PRC	Intelligence
	Company scores
	Risk analysis
MAS	Country of origin
	Type of cargo
	Importer's profile
	Importer's compliance level
MEX	Risk analysis
	Random selection
	Port of entry
	Type of container
	Experience
PE	Country of destination
	Specif Alert
	Score exporter
THA	Screen exporters and importers
	Specify tariff
	Country of destination or origin
VN	Lack of information on the containers
	Come from suspected countries or regions
	High risk

The seven (7) responding DING Economies indicated a total of 25 criteria for non-intrusive examination.

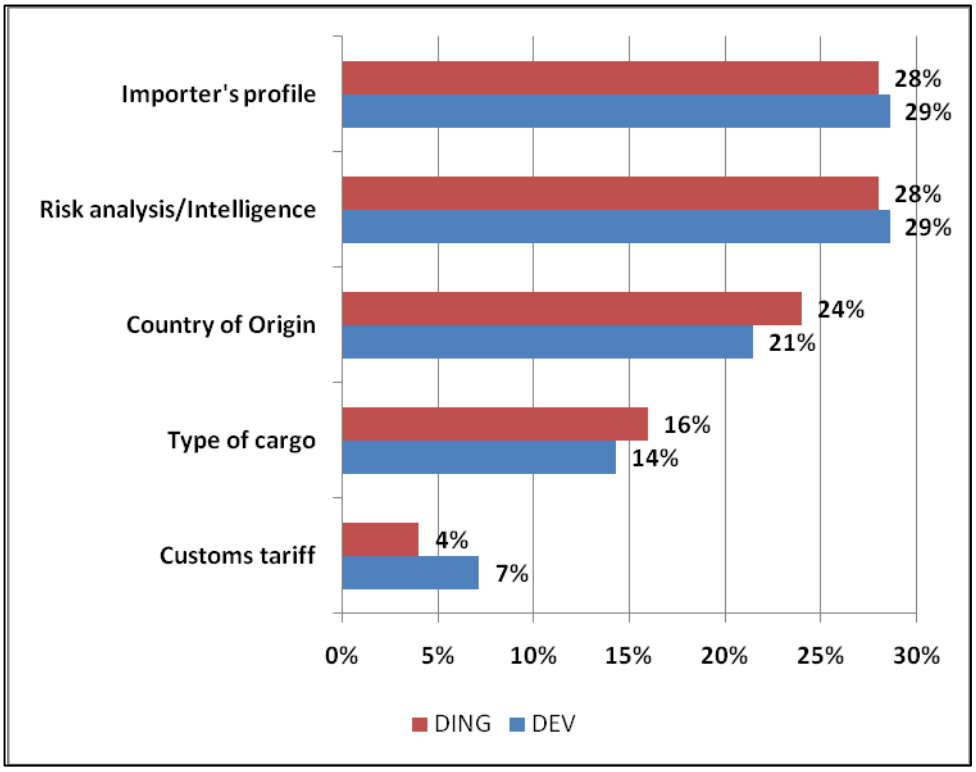
Overall analysis of both DEV and DING Economies

The criteria (39 in total) proposed by the responding Economies were regrouped into the following five (5) categories:

Category of criteria	DEV	DING	DEV	DING
	Numbers		Percentage	
Customs tariff	1	1	7%	4%
Type of cargo	2	4	14%	16%
Country of Origin	3	6	21%	24%
Risk analysis/Intelligence	4	7	29%	28%
Importer's profile	4	7	29%	28%
TOTAL	**14**	**25**	**100%**	**100%**

Responding DEV and DING Economies came up with a similar choice of criteria and ranking. The two first criteria (Importer's profile and Riskanalysis/Intelligence) ranked high (around 29% of all proposed criteria), followed by country of origin (approx. 23%), Type of cargo (respectively 14 and 16%) and Customs tariff, far behind with 7 and 4%.

Comparison between DING and DEV Economies regarding criteria for examination



Section 4 (Inspection process): Synthesis of observations

The questions under Section #4 address the inspection process in terms of its main elements, its primary inspection targets (in general and in container traffic), its performance indicators and its criteria to target containers.

There is a strong convergence of views regarding the elements of the inspection process, along the line of WCO-recommended modern Customs practices. Investigation, Random or statistical sampling and Laboratory analysis are among the lower ranking elements.

Container freight is the primary inspection target, ranking far higher than the two other targets (Bulk freight and Baggage), particularly in DING Economies.

Regarding container freight inspection, Narcotics, Weapons/explosives and Merchandise trade compliance are the most relevant primary inspection targets.

Export/Import targeting effectiveness and Number/ volume of seizures are the most relevant indicators to measure inspection and enforcement effectiveness, closely followed by Maximum trade compliance.

Among other things, these observations may indicate that the role of Customs Administration in protecting national interests is increasingly geared towards security (rather than trade facilitation), with the support of modern practice and technologies (i.e. risk management).

SECTION 5: Reporting

The questions under Section #5 address the reporting of inspection results, in terms of level of reporting, types of results reported, location of records and sharing of results.

Q_15: Level of reporting of inspection results

To which level of the Control and Enforcement instution are inspection results reported?

Proposed combination of answers:	**YES** or **NO**,
	for each of the levels in the list (4 levels, plus "Other").
Number of combinations of answers:	**5 + 1 (text for *"Others"*)**

DEV Economies

DEV Economies that have answered	**7**	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Level of reporting	**# comb.**									
Port of Entry – Local Office	**5**	**n.a.**	Yes	Yes	Yes	Yes	Yes	**n.a.**	**5**	100%
Regional Office	**3**	**n.a.**	Yes	Yes	**n.a.**	**n.a.**	No	**n.a.**	**2**	67%
Headquarters	**6**	Yes	Yes	Yes	**n.a.**	Yes	No	Yes	**5**	83%
Remote	**3**	**n.a.**	Yes	Yes	**n.a.**	**n.a.**	No	**n.a.**	**2**	67%

Comments submitted:

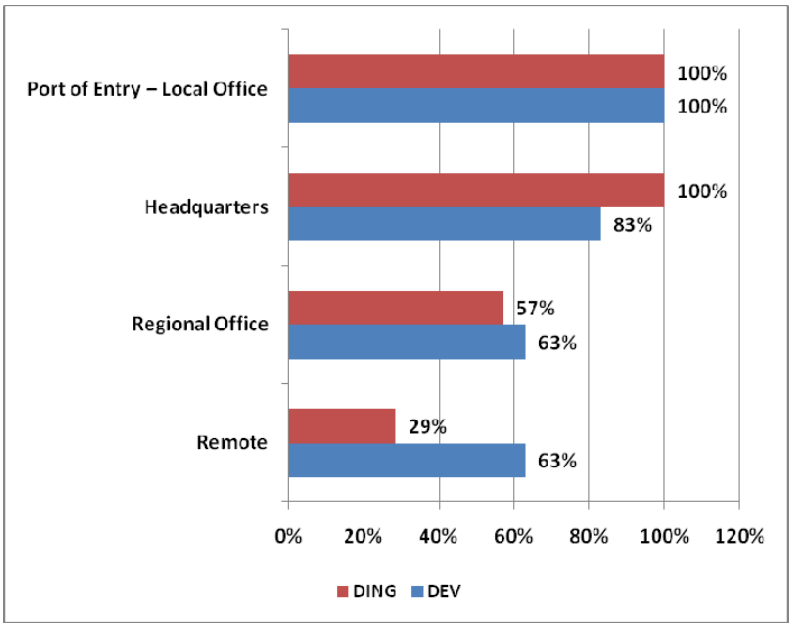
- **NZ** makes reference to its "*National Targeting Center and Intelligence.*"

DING Economies

DING Economies that have answered	**7**	CHL	PRC	MAS	MEX	PE	THA	VN	% YES	% YES
Level of reporting	**# comb.**									
Port of Entry – Local Office	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Regional Office	**7**	Yes	Yes	Yes	No	No	No	Yes	**4**	57%
Headquarters	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Remote	**7**	No	No	No	Yes	No	No	Yes	**2**	29%

Overall analysis of both DEV and DING Economies

Level of reporting	DEV	DING
Remote	63%	29%
Regional Office	63%	57%
Headquarters	83%	100%
Port of Entry – Local Office	100%	100%



Among all responding DING Economies, inspection results are reported at the levels of both Headquarters and Port of entry/local office of the Control and Enforcement Institution.

This situation is similar among responding DEV Economies, with the exception of CT that does not report to Headquarters.

Reporting at regional offices or remote places is much less common in all of the responding APEC Economies, particularly the DING ones.

Q_16: Types of inspection results reported

What type(s) of inspection results are reported?

Proposed combination of answers:	**YES** or **NO**,
	for each level in the list (4 levels, plus "Other").
Number of combinations of answers:	**5 + 1 (text for "*Others*")**

DEV Economies

DEV Economies that have answered	7	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Types of inspection results reported	**# comb.**									
Successfull identifications	**6**	Yes	Yes	Yes	Yes	Yes	No	**n.a.**	**5**	83%
Failures	**5**	Yes	Yes	Yes	Yes	**n.a.**	No	**n.a.**	**4**	80%
Volume/number of cargo units inspected (throughput)	**6**	Yes	Yes	Yes	Yes	Yes	Yes	**n.a.**	**6**	100%

Comments submitted:

- **CDA** informs that "*all targetted containers that are non-resultant are reported.*"
- **HKC** mentions that "*inspection/examination method, vehicle and passenger throughout*" are also reported.
- **USA** indicates that: "*Not sure what these options mean; what is a "failure" for inspection results?*"

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Types of inspection results reported	**# comb.**									
Successfull identifications	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Failures	**7**	Yes	Yes	Yes	Yes	No	Yes	Yes	**6**	86%
Volume/number of cargo units inspected (throughput)	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%

Overall analysis of both DEV and DING Economies

The volume/number of cargo units inspected (throughput) is always reported in both responding DEV and DING Economies.

Successfull identifications are reported in all DING Economies and in all DEV Economies, except **CT**.

To a less extent, failures are are similarly reported in most responding DEV and DING EconomiesDING Economies.

Q_17: Recording of inspection results

Where are the inspection results recorded?

Proposed combination of answers:	**YES** or **NO**,
	for each option in the list (3 options, plus "Other").
Number of combinations of answers:	**4 + 1 (text for *"Others"*)**

DEV Economies

DEV Economies that have answered	7	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Recording of inspection results	**# comb.**									
Manually in local Records Book	**3**	**n.a.**	Yes	Yes	**n.a.**	**n.a.**	No	**n.a.**	**2**	67%
Customs computerized system	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Port Authority computerized system	**3**	**n.a.**	No	Yes	**n.a.**	**n.a.**	Yes	**n.a.**	**2**	67%

Comments submitted:

- **HKC** mentions that "*Stand-alone computers are used.*"

DING Economies

DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Recording of inspection results	**# comb.**									
Manually in local Records Book	**7**	No	Yes	Yes	Yes	Yes	Yes	Yes	**6**	86%
Customs computerized system	**7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**7**	100%
Port Authority computerized system	**7**	No	No	No	No	No	No	No	**0**	0%

Comments submitted:

- **MEX** indicates the use of "*Central office thru internet system.*"

Overall analysis of both DEV and DING Economies

In both DEV and DING Economies, inspection results are recorded on the Customs computerized system. Manual recording of the results in local Records Books is a practice in most DING Economies and in few DEV ones. Recording these results on the local Port Authority computerized system is not a practice in the responding DING Economies, but it is in few DEV ones.

Q_18: Sharing of inspection results

Are inspections results shared with other concerned institutions?

Proposed combination of answers:	**YES** or **NO**,
	Opening question and for each of the levels in the list (3 levels, plus "Other").
Number of combinations of answers:	**5 + 1 (text for "*Others*")**

DEV Economies

DEV Economies that have answered	6	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
Sharing of inspection results	**# comb.**									
With the Port Authority?	**4**	No	No	Yes	**n.a.**	**n.a.**	No	**n.a.**	**1**	25%
With other Customs Administrations abroad?	**6**	Yes	Yes	Yes	**n.a.**	Yes	No	Yes	**5**	83%
With other Institutions?	**5**	Yes	Yes	Yes	**n.a.**	Yes	No	**n.a.**	**4**	80%

Comments submitted:

- **AUS** does not indicate which other institutions.
- **CDA** mentions that "*Intelligence officers can/will disseminate results with other agencys, if information is pertinent.*"
- **HKC** mentions "*local enforcement agencies.*"
- **NZ** mentions **"***Police and other government agencies, sometimes press if significant result.***"**
- **USA** indicates that it "*depends on bilateral information sharing agreements/instruments.*"

DING Economies

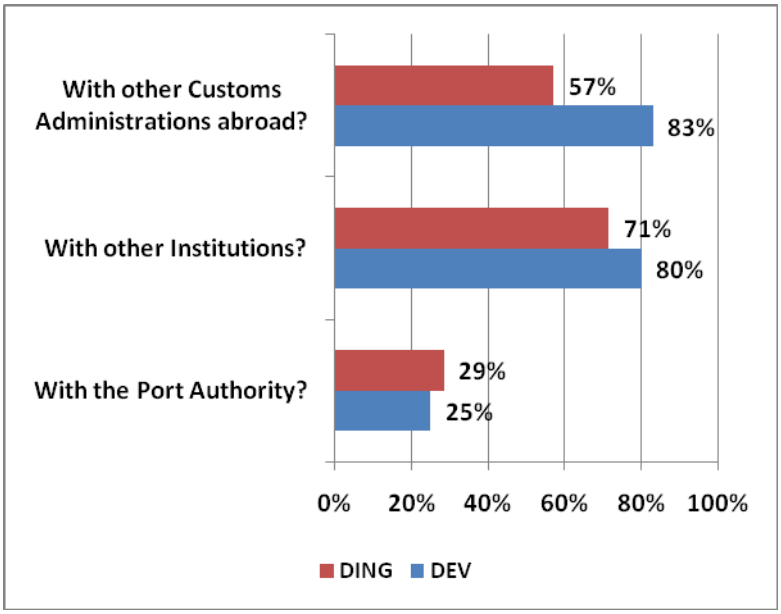
DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
Sharing of inspections results	**# comb.**									
With the Port Authority?	**7**	No	No	Yes	No	No	No	Yes	**2**	29%
With other Customs Administrations abroad?	**7**	No	No	Yes	Yes	Yes	No	Yes	**4**	57%
With other Institutions?	**7**	Yes	No	Yes	Yes	Yes	No	Yes	**5**	71%

Comments submitted:

- **CHL** mentions "*Health Service, Treasury, Mobilization General Direction.*"
- **MAS** mentions "*The Police, Drug Enforcement Agency.*"
- **MEX** does not indicate which other institutions.
- **PE** mentions "*The Police.*"
- **VN** indicates that sharing of results only "*If required or requested.*"

Overall analysis of both DEV and DING Economies

Sharing of inspections results	DEV	DING
With the Port Authority?	25%	29%
With other Institutions?	80%	71%
With other Customs Administrations abroad?	83%	57%



Sharing inspection results with other Customs Administrations abroad is a practice more common in DEV Economies than in DING Economies (83% against 57%).

Sharing results with other local institutions is a relatively common practice in both DEV and DING Economies (around 75%).

Sharing with the Port Authority is a much less common practice in both DEV and DING Economies (approx. 28%).

Section 5 (Reporting): Synthesis of observations

The questions under Section #5 address the reporting of inspection results, in terms of:

- level of reporting: mostly Headquarters and Port of entry,
- types of results reported: volume of unit inspected and successful identifications,
- location of records: Customs computerized system. and
- sharing of results: eventually with other local institutions and Customs abroad.

SECTION 6: Inspection technology

The questions under Section #6 address the general features of the inspection technology used, in terms of mobility, technologies used and for what types of targets.

Q_19: Degree of mobility of inspection technology used

What is the degree of mobility in the inspection technology that you utilize? (Please indicate a percentage)

Proposed combination of answers:	A value
	for each of the mobility options in the list (3 options), please indicate the relative percentage of each option. The sum of all figures should be not greater than 100.
Number of combinations of answers:	**3**

DEV Economies

DEV Economies that have answered	**4**	**AUS**	**CDA**	**HKC**	**JPN**	**NZ**	**CT**	**USA**
Degree of mobility used	**AVG %.**							
Fixed	**45**	**n.a.**	30	38	**n.a.**	20	90	**n.a.**
Portable/transportable	**28**	**n.a.**	52	15	**n.a.**	40	5	**n.a.**
Mobile	**28**	**n.a.**	18	47	**n.a.**	40	5	**n.a.**
Total	**100**	**n.a.**	100	100	**n.a.**	100	100	**n.a.**

It can be noted that **CT** has a quite different approach on mobility of inspection technology, compared with the three other responding Economies.

DING Economies

DEV Economies that have answered	**4**	**CHL**	**PRC**	**MAS**	**MEX**	**PE**	**THA**	**CHL**
Degree of mobility used	**AVG %.**							
Fixed	**54**	60	15	80	69	0	100	**54**
Portable/transportable	**28**	25	50	20	25	50	0	**28**
Mobile	**18**	15	35	0	6	50	0	**18**
Total	**100**	100	100	100	100	100	100	**100**

THA and **MAS** (to some extent) are giving more importance to "*fixed*" inspection technology, followed by **MEX** and **CHL**. Only **PRC** and **PE** are relying more on portable/transportable and mobile inspection technologies.

DING Economies appear to be more inclined towards the use of fixed technology.

Q_20: Kind of inspection technology used

What kind of inspection technology do you currently utilize for your target population?

Proposed combination of answers:	A value
	for each of the technologies in the list (6 technologies mentioned, plus "Other"), please indicate the relative percentage to each technology used. The sum of all figures should be not greater than 100.
Number of combinations of answers:	**7+ 1 (text for "*Others*")**

DEV Economies

DEV Economies that have answered	**4**	AUS	CDA	HKC	JPN	NZ	CT	USA
Inspection technologies used	**AVG %.**							
X-ray	**71**	**n.a.**	38	75	**n.a.**	80	90	**n.a.**
Gamma Ray	**1**	**n.a.**	4	0	**n.a.**	0	0	**n.a.**
Fast/Thermal Neutron	**0**	**n.a.**	0	0	**n.a.**	0	0	**n.a.**
Radioactive Isotope Detector	**3**	**n.a.**	10	0	**n.a.**	0	0	**n.a.**
Radiation Detector	**7**	**n.a.**	8	0	**n.a.**	10	10	**n.a.**
Vapor/Trace Detector	**18**	**n.a.**	40	20	**n.a.**	10	0	**n.a.**
Other	**1**	**n.a.**	0	5	**n.a.**	0	0	**n.a.**
Total	**100**	**n.a.**	100	100	**n.a.**	100	100	**n.a.**

Comments submitted:

- **HKC** mentions "*Detective dogs*" as another technology.

DING Economies

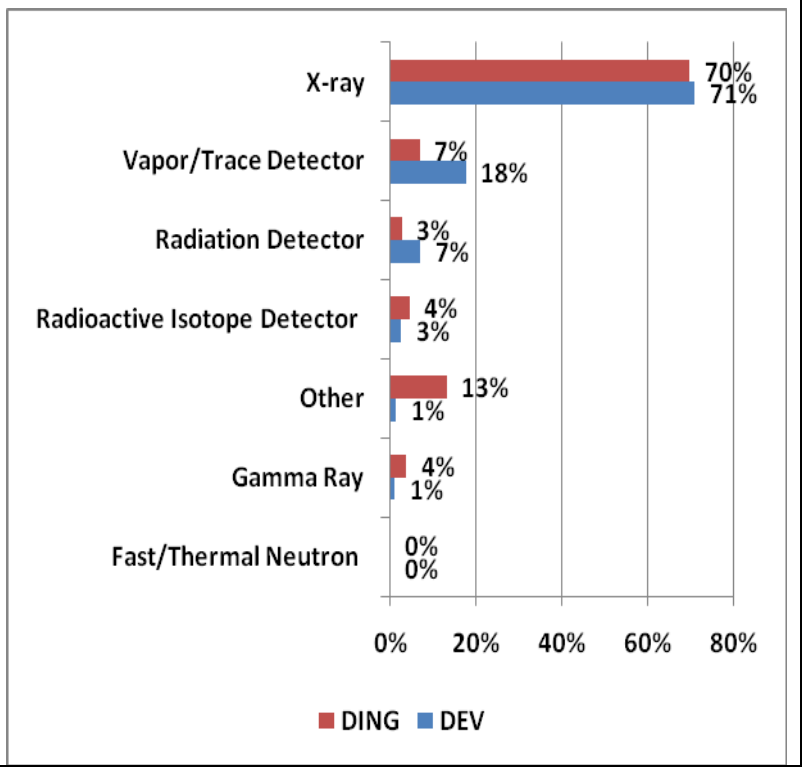
DING Economies that have answered	7	CHL	PRC	MAS	MEX	PE	THA
Inspection technologies used	**AVG %.**						
X-ray	**70**	100	50	65	52	50	100
Gamma Ray	**4**	0	0	0	22	0	0
Fast/Thermal Neutron	**0**	0	0	0	0	0	0
Radioactive Isotope Detector	**4**	0	15	5	1	5	0
Radiation Detector	**3**	0	15	0	1	0	0
Vapor/Trace Detector	**7**	0	10	5	6	20	0
Other	**13**	0	10	25	18	25	0
Total	**100**	100	100	100	100	100	100

Comments submitted:

- **PRC, MAS** and **PE** mention "*Dogs*" as another technology.
- **MEX** also uses "*Phazir*."
- Although **VN** does not provide any data on the technologies used, it says that "*we use X-ray scanners, inspection tools or dogs.*"

Overall analysis of both DEV and DING Economies

Inspection technologies used	DEV	DING
Fast/Thermal Neutron	0%	0%
Gamma Ray	1%	4%
Other	1%	13%
Radioactive Isotope Detector	3%	4%
Radiation Detector	7%	3%
Vapor/Trace Detector	18%	7%
X-ray	71%	70%



Out of the four (4) responding DEV Economies, only **CDA** uses inspection technologies such as Gamma Ray, FTA/TNA and Radioactive isotope detector. All DEV Economies use X-Ray technology and, eventually, Vapor/trace detector and Radiation detector.

Two of the 6 responding DING Economies (**CHL** and **THA**) report to use exclusively (?) X-Ray technology. The others share the use of X-Ray with the use of other technologies (Canines, Vapor/trace detectors). In particular, **MEX** uses Gamma-Ray technology.

None of the responding Economies reports the use of FNA/TNA technologies.

Q_21: Non-intrusive screening and examination technologies used

What inspection technology does your agency primarily utilize for non intrusive screening and examination of each of the following? (Please indicate the technology)

Proposed combination of answers:	Economies were invited to indicate a specific technology for each type of targets: Passengers; Baggage; Freight at ports of entry.
Number of combinations of answers:	**3**

ECONOMIES	Ident.	*Passengers:*	*Baggage:*	*Freight at ports of entry:*
DEV Economies	CDA	Alcohol and Trace Detection	X-ray	radiation detection, gamma and xray imaging
	HKC	ion-scanners, metal detector, itemizer, dogs	x-ray machine, ion-scanners, metal detector,itemizers, dogs	fixed/mobile x-ray machines, ion-scanners, itemizer, vehicle scanning system
	JPN	**n.a**	X-Ray	X-Ray
	NZ	**n.a**	Fixed x-ray	x-ray; mobile, fixed and portable
	CT	**n.a**	X-Ray	X-Ray
DING Economies	CHL	X-Ray	X-Ray	X-Ray
	PRC	X-Ray (Radiation Detector)	X-Ray (Radiation Detector)	X-Ray (Radiation Detector)
	MAS	**n.a**	Rapiscan	X-Ray
	MEX	Metal detector	X-Ray	X-Ray, Gamma, Phazir
	PE	X-Ray	X-Ray	X-Ray
	THA	**n.a**	**n.a**	X-Ray
	VN	**n.a**	X-ray	X-Ray

For the twelve (12) responding APEC Economies, X-ray is the inspection technology used for non-intrusive screening and examination of freight at ports of entry and for Baggages.

Regarding Passengers, only 6 Economies out of 12 provided an answer that points to X-ray technology, but also indicates other technologies such as alcool, metal and trace detection and canines.

It can be noticed that **HKC** uses a similar variety of technologies for the three targets.

Section 6 (Inspection technology): Synthesis of observations

The questions under Section #6 address the general features of the inspection technology used, in terms of mobility, technologies used and for what types of targets.

Regarding mobility, responding DEV Economies tend to use more the category "Portable + Mobile" than the category "Fixed" (55% against 45%), a situation opposite to the one observed with responding DING Economies. This might be due to the likely higher operating costs of "Portable + Mobile" versus "Fixed" technologies.

X-ray technology is by far the mostly used technology by both DEV and DING Economies. Vapor/Trace Detection technology appears to be the second type of technology used by DEV Economies, while DING Economies use canines.

X-ray technology is commonly used for Baggage and Freight at port of entry. It is used for Passengers, together with other types of detectors.

SECTION 7: Human resources development issues

The questions under Section #7 address the resources invested into the inspection process, the number of local and foreign staff assingned to key inspection-related activities, the volume of staff trained locally and abroad, the established audit mechanisms for the goods control process,and the main active NII devices used in primary inspection.

Q_22: Staffing and funding of screening and examination technologies

What is the relative percentage of effort (in terms of staffing and funding) for your agency between physical examination (intrusive) and technology screening (non-intrusive examination) of target populations?

Proposed combination of answers:	A value
	for the four (4) combinations of resources (staffing and funding) and types of examination (intrusive and non-intrusive), please indicate the relative percentage assignet to to intrusive and non-intrusive examination. The sum of all figures by resources should be not greater than 100.
Number of combinations of answers:	**4**

DEV Economies

DEV Economies answering on efforts **(staffing)**	**3**	**HKC**	**NZ**	**CT**
Percentage of personnel in the following areas	**AVG %**			
Physical Examination	**69**	65	67	75
Technology Screening	**31**	35	33	25
Total	**100**	100	100	100
DEV Economies answering on efforts **(funding)**	**2**	**HKC**	**NZ**	**CT**
Percentage of funds in the following areas	**AVG %**			
Physical Examination	**58**	55	60	**n.a**
Technology Screening	**43**	45	40	**n.a**
Total	**100**	100	100	**n.a**

Observations: Only three (3) of the 7 DEV Economies have provided information on **staffing**. Out of those 3, only two have provided information on **funding**.

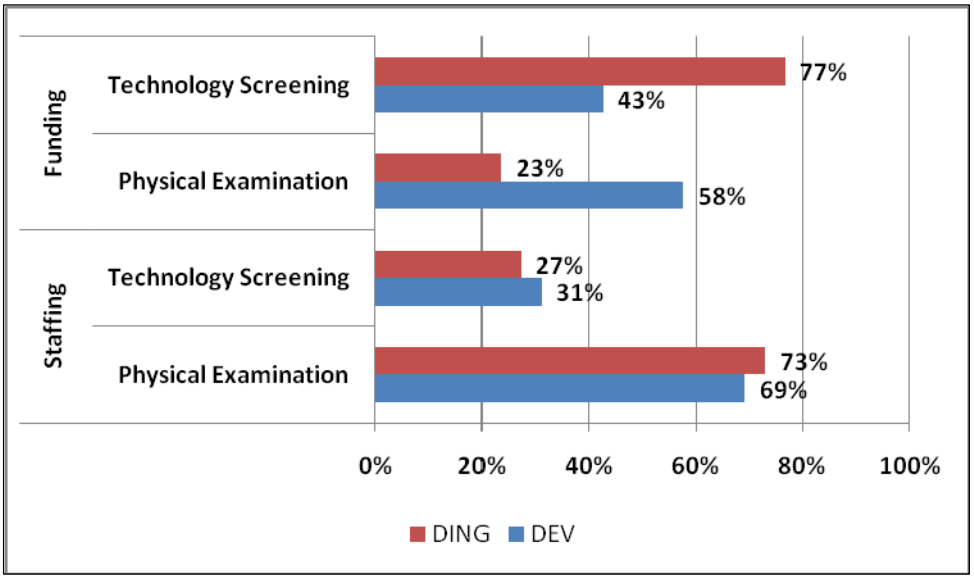
DING Economies

DING Economies answering on efforts **(staffing)**	**7**	**CHL**	**PRC**	**MAS**	**MEX**	**PE**	**THA**	**VN**
Percentage of personnel in the following areas	**AVG %**							
Physical Examination	**73**	80	70	80	60	80	70	70
Technology Screening	**27**	20	30	20	40	20	30	30
Total	**100**	100	100	100	100	100	100	100
DING Economies answering on efforts **(funding)**	**6**	**CHL**	**PRC**	**MAS**	**MEX**	**PE**	**THA**	**VN**
Percentage of funds in the following areas	**AVG %**							
Physical Examination	**23**	10	30	20	40	20	20	**n.a**
Technology Screening	**77**	90	70	80	60	80	80	**n.a**
Total	**100**	100	100	100	100	100	100	**n.a**

Observations: All seven responding DING Economies have provided information on **staffing**. Only **VN** did not provide information on **funding**.

Overall analysis of both DEV and DING Economies

Combinations of resources and types of examination		DEV	DING
Staffing	*Physical Examination*	69%	73%
	Technology Screening	31%	27%
Funding	*Physical Examination*	58%	23%
	Technology Screening	43%	77%



In terms of "**Staffing**", DEV and DING Economies have a similar distribution between Physical examination and Technology screening (approx. 70/30), although DING Economies seem to give slightly more importance to Physical examination (73% against 69%).

In terms of "**Funding**", DING Economies allocate more than 3 times funds to Technology screening than to Physical examination, while DEV Economies allocate slightly more to Physical examination than to Technology screening. This may reflect the fact that the cost of staffing in DEV Economies is probably much higher than in DING Economies.

Q_23: Local specialized personnel employed

How many LOCAL specialized personnel (Full Time Equivalent - FTE) do work in the following areas?

Proposed combination of answers:	A value
	for each of areas of specialized personnel in the list (4 areas mentioned, plus "Other"), please indicate the number of FTE persons.
Number of combinations of answers:	**5+ 1 (text for "*Other*")**

DEV Economies

DEV Economies that have answered	**2**	**HKC**	**NZ**
Number of LOCAL persons employed in the following areas	**AVG**		
Enforcement and control procedures	**50**	50	50
Operations of cargo identification tools	**32**	39	25
Interpretation of results	**16**	21	10
Information Technology	**8**	10	5
Other	**5**	0	10

Comments submitted:

- **NZ** mentions 10 staff specialized in Intelligence.
- **CT** indicates that "*the chief or supervisor handles such mattters, about 3 to 5 people.*"
- **USA** mentions that "*CBP has approximately 55,000 employees, but does not define into these categories.*"

Observations: The two responding DEV Economies are assigning approx. three times more staff to the areas of "Enforcement and control procedures" and "Operations of cargo identification tools" than to the other two areas: "Interpretation of results" and "Information technology."

It might be that **NZ** has provided a distribution of the number of local staff among the 5 proposed areas. In any case, no detail is given regarding the area "Other".

DING Economies

DING Economies that have answered	6	CHL	PRC	MAS	PE	THA	VN
Number of LOCAL persons employed in the following areas	**AVG**						
Enforcement and control procedures	**31**	100	10	1	1	5	70
Operations of cargo identification tools	**32**	100	60	8	8	3	10
Interpretation of results	**21**	100	10	4	4	5	2
Information Technology	**13**	50	20	1	1	3	5
Other	**2**	0	0	0	0	0	13

Comments submitted:

- **CHL** mentions that "*in total, there are 320 enforcement officers in the Customs.*"
- **VN** indicates that, under Other are persons in "*Admistrative and Audit functions.*"…Furthermore, the figures provided are in relative percentages.

Observations: Two of the 6 responding DING Economies seem to have indicated figures in relative percentages: **VN** (as per the comment above) and **PRC** (considering that a staff of 100 persons looks particularly small for such an Economy).

CHL appears to allocate much more local staff to the four areas that any of the other DING Economies that provided numbers (**MAS**, **PE** and **THA**): 350 against approx. 15 for the others.

Independently of whether the figures are numbers or percentages, the 6 DING Economies assign more staff to the areas of "Enforcement and control procedures" and "Operations of cargo identification tools" than to the other two areas: "Interpretation of results" and "Information technology", a situation similar to the one observed for the responding DEV Economies.

Q_24: Foreign specialized personnel employed

How many FOREIGN specialized personnel (Full Time Equivalent - FTE) do work in the following areas? Please indicate the total number of FOREIGN personnel (FTE) involved in national security-related issues.

Proposed combination of answers:	A value
	for each of areas of specialized personnel in the list (4 areas mentioned, plus "Other"), please indicate the number of FTE persons.
Number of combinations of answers:	**5+ 1 (text for "*Other*") + 1 for the number of persons involved in security-related issues.**

DEV	Number of DEV Economies that provided an answer	**1**
	DEV Economies that employ FOREIGN personnel	**1**
	Comments: Only **HKC** employs 11 FOREIGN personnel in the area of Information Technology	

DING	Number of DING Economies that provided an answer	**1**
	DING Economies that employ FOREIGN personnel	**0**
	Comments: Only **MEX**ican citizens can work for Customs	

Observations: The fact that only two Economies (**HKC** and **MEX**) have reacted to the question may raise the issue of wording of the question.

Indeed, in a number of DING Economies, the tools related to cargo identification are often installed, operated and maintained by foreign specialists (from donor countries or manufacturers) assigned (often on a long-term basis) to assist the Economies in the appropriate use of the tools....

So it is likely that there are foreign specialized personnel, but this category of personnel may not be included into the Economy's payroll.

Q_25: Provision/organization of training

Does your institution provide/organize training in the following areas?

Proposed combination of answers:	A value
	for each of the areas of specialization in the list (4 areas mentioned, plus "Other"), please indicate theaverage number of persons traind per year, locally and abroad.
Number of combinations of answers:	**10+ 1 (text for "*Other*")**

DEV Economies

DEV Economies that provide training **locally**	**2**	**HKC**	**JPN**	**NZ**
Average number of persons/year trained locally in the following areas	**AVG #**			
Enforcement and control procedures	**47**	40	0	100
Operations of cargo identification tools	**66**	82	17	100
Interpretation of results	**56**	52	15	100
Information Technology	**29**	77	0	10
Other	**8**	0	23	0
DEV Economies that provide training **abroad**	**1**	**HKC**	**JPN**	**NZ**
Average number of persons/year trained abroad in the following areas	**AVG #**			
Enforcement and control procedures	**40**	**n.a**	**n.a**	40
Operations of cargo identification tools	**0**	**n.a**	**n.a**	0
Interpretation of results	**40**	**n.a**	**n.a**	40
Information Technology	**0**	**n.a**	**n.a**	0
Other	**0**	**n.a**	**n.a**	0

Comments submitted:

- **JPN** mentions " *Training of Counter-Terrorism (Explosive etc.)*", as Other.
- **USA** mentions that "*training is provided domestically and abroad for all these areas.*"

Observations: In the three responding DEV Economies, local training seems to focus more on "*Operations of cargo identification tolls*" and "*Interpretation of results*" than on "*Enforcement and control procedures*" and "*Information technology*." In particular, JPN reports no local training in those to last areas.

Only **NZ** reports **training abroad** in the areas of "*Enforcement and control procedures*" and "*Interpretation of results*".

DING Economies

DING Economies that provide training **locally**	**4**	**CHL**	**MAS**	**PE**	**THA**
Average number of persons/year trained locally in the following areas	**AVG #**				
Enforcement and control procedures	**21**	50	20	2	10
Operations of cargo identification tools	**21**	25	30	25	2
Interpretation of results	**3**	0	4	4	2
Information Technology	**5**	10	5	2	2
Other	**0**	0	0	0	0
DING Economies that provide training **abroad**	**3**	**CHL**	**MAS**	**PE**	**THA**
Average number of persons/year trained abroad in the following areas	**AVG #**				
Enforcement and control procedures	**9**	15	10	1	**n.a**
Operations of cargo identification tools	**5**	0	10	5	**n.a**
Interpretation of results	**1**	0	1	1	**n.a**
Information Technology	**2**	0	5	0	**n.a**
Other	**0**	0	0	0	**n.a**

Observations: In the four responding DING Economies, **local training** seems to focus more on "*Enforcement and control procedures*" and "*Operations of cargo identification tolls*", although two Economies (**MAS** and **PE**) give relatively more importance to "*Operations of cargo identification tools*". The two other areas are given less importance. A similar situation is reported regarding **training abroad**, although no information is provided by **THA**.

Q_26: Audit mechanism for goods control process

Have you established an audit mechanism for the goods control process?

Proposed combination of answers:	**YES** or **NO**,
	Opening question with free text to detail the mechanism, if any.
Number of combinations of answers:	**1+ 1 (text for "*Detail of the mechanism*")**

Audit mechanisms	DEV	DING	TOTAL
Economies that have established an audit mechanism	**4**	**4**	**8**
Type of audit mechanism			
Internal audit	**1**	**2**	**3**
Post Clearance audit		**1**	**1**
Audit by private company		**1**	**1**
Internal procedures	**2**		**2**
Trade Assurance programme	**1**		**1**

Comments submitted:

ECONOMIES	Types of mechanisms
HKC	Daily random checking on cargo examination reports, consignment records and internal computer system; counter-checking on the declaration of inbound transhipment cargoes made by shippers.
NZ	Trade assurance program manned by in excess of 60 Customs auditors
CT	Audit divisions are in charge of such matters
USA	internal procedures
CHL	Interal Audit Department is in charge for audit mechanisms in the customs
PRC	Internal Audit
MAS	Post Clearance Audit
MEX	Audit process by a private company

Q_27: Primary inspection and use of NII devices

Is primary inspection carried out using active NII devices?

Proposed combination of answers:	**YES** or **NO**,
	Opening question and for each of the screening methods in the list (4 methods).
Number of combinations of answers:	**4**

DEV Economies

DEV Economies that have answered	**7**	AUS	CDA	HKC	JPN	NZ	CT	USA	# YES	% YES
DEV Economies that carry out NIID primary inspection	**6**	Yes	Yes	Yes	Yes	Yes	Yes	No	6	86%
Screening method used	**# comb.**									
X-Ray	**6**	Yes	Yes	Yes	Yes	Yes	Yes	**n.a.**	6	100%
Gamma Ray	**3**	**n.a.**	Yes	No	**n.a.**	**n.a.**	No	**n.a.**	1	33%
Pulsed Fast Neutron Analysis	**2**	**n.a.**	**n.a.**	No	**n.a.**	**n.a.**	No	**n.a.**	0	0%
Thermal Neutron Activation	**2**	**n.a.**	**n.a.**	No	**n.a.**	**n.a.**	No	**n.a.**	0	0%

DING Economies

DING Economies that have answered	**7**	CHL	PRC	MAS	MEX	PE	THA	VN	# YES	% YES
DING Economies that carry out NIID primary inspection	**6**	Yes	No	Yes	Yes	Yes	Yes	Yes	6	86%
Screening method used	**# comb.**									
X-Ray	**6**	Yes	**n.a.**	Yes	Yes	Yes	Yes	Yes	6	100%
Gamma Ray	**6**	No	**n.a.**	No	Yes	No	No	No	1	17%
Pulsed Fast Neutron Analysis	**6**	No	**n.a.**	No	No	No	No	No	0	0%
Thermal Neutron Activation	**6**	No	**n.a.**	No	No	No	No	No	0	0%

SUMMARY

Number of APEC Economies that provided an answer	**14**
APEC Economies that carry out NIID primary inspection	**12**
Screening method used	
X-Ray	**12**
Gamma Ray	**2**
Pulsed Fast Neutron Analysis	**0**
Thermal Neutron Activation	**0**

Two Economies (**USA** and **PRC**) do not use NIID for primary inspection.

The twelve (12) remaining responding Economies use X-Ray as a screening method.

Only **CDA** and **MEX** report the use of Gamma Ray screening method, in addition to X-Ray. FNA and TNA methods are not reported to be used by none of the responding Economies.

Section 7 (HRD issues): Synthesis of observations

The questions under Section #7 address the resources invested into the inspection process, the number of local and foreign staff assingned to key inspection-related activities, the volume of staff trained locally and abroad, the established audit mechanisms for the goods control process,and the main active NII devices used in primary inspection.

Regarding resources, the distribution of staff between Physical examination and Technology screening is similar in both DEV and DING Economies, with a ratio 2 to 1 in favor of examination in DEV Economies versus a ratio of 3 to 1 in DING Economies. The distribution of funds is relatively balanced between Physical examination and Technology screening in DEV Economies (58%-43%) while DING Economies invest three times more funds in Technology screening than in Physical examination.

Regarding the local staffing, DEV Economies strongly favor the areas of “Enforcement and control procedures" and "Operations of cargo identification tools” (82%) againt the two other areas: “Interpretation of results” and “Information Technology” (28%). The situation is slightly more balanced (63%-37%) in DING Economies. Regarding foreign staffing, the impression is that Economies were reluctant to provide information.

Regarding local training, responding DEV Economies focus on "Operations of cargo identification tools” and “Interpretation of results” (yearly average of 113) versus “Enforcement and control procedures" and “Information Technology” (yearly average of 97). Responding DING Economies are giving much more weight to local training in “Enforcement and control procedures" and "Operations of cargo identification tools” (yearly average of 42) against “Interpretation of results” and “Information Technology” (yearly average of 11). Training abroad is similarly unbalanced (yearly averages are respectively 14 and 3).

Regarding audit mechanisms for the goods control process, the few Economies that have reported the establishment of such a mechanism tend to use internal audit and/or post-clearance audit.

Finally, regarding the type of NII devices used in primary inspection, X-ray technology remains the most commonly used screening technology.

COMMENTS REPORTED IN PART ONE
regarding the two questions:

Any particular view on Cargo Identification issues?

From Canada:
"*From a technology perspective, the effectiveness of xray and gamma ray imaging is based on the experience of the officer to learn what a 'normal' shipment is. Only then can an 'anomaly' be identified for physical examination. Would appreciate learning from your experience with PFNA and TNA.*"

From New Zealand :
"*The development of effective screening criteria for suspect cargo, both import and export, is crucial to an effective and efficient intervention mechanism. For example at the Port of Auckland, New Zealand's busiest with a throughput of 800,000 TEU containers per annum, New Zealand Customs ends up x-ray screening between 5,000 to 6,000 TEUs each year (0.625%- 0.75%), of which they end up physically examining 500. This is due to capability issues. Of that small percentage physically examined (1 in 1600), NZ Customs has a 33% hit rate.*"

Comments on Part ONE Questionnaire ?

From New Zealand :
"*Many of the questions asked are definitive to one method only. A multi- layered screening/ intervention model, deploying different methods and criteria is often the most effective and needs to be factored in, as does the risk management intelligence driven model used as a filtering system for risk.*"

ANALYSIS OF THE ANSWERS TO THE QUESTIONS UNDER PART TWO

This Part of the Questionnaire will review the technologies used for primary inspection, for secondary inspection as well as support facilities (Alarm stations) and staffing (Secondary Inspection Teams).

PRIMARY INSPECTION and Radiation Portal Monitors (RPMS)

Q_29: Type(s) of RPMs

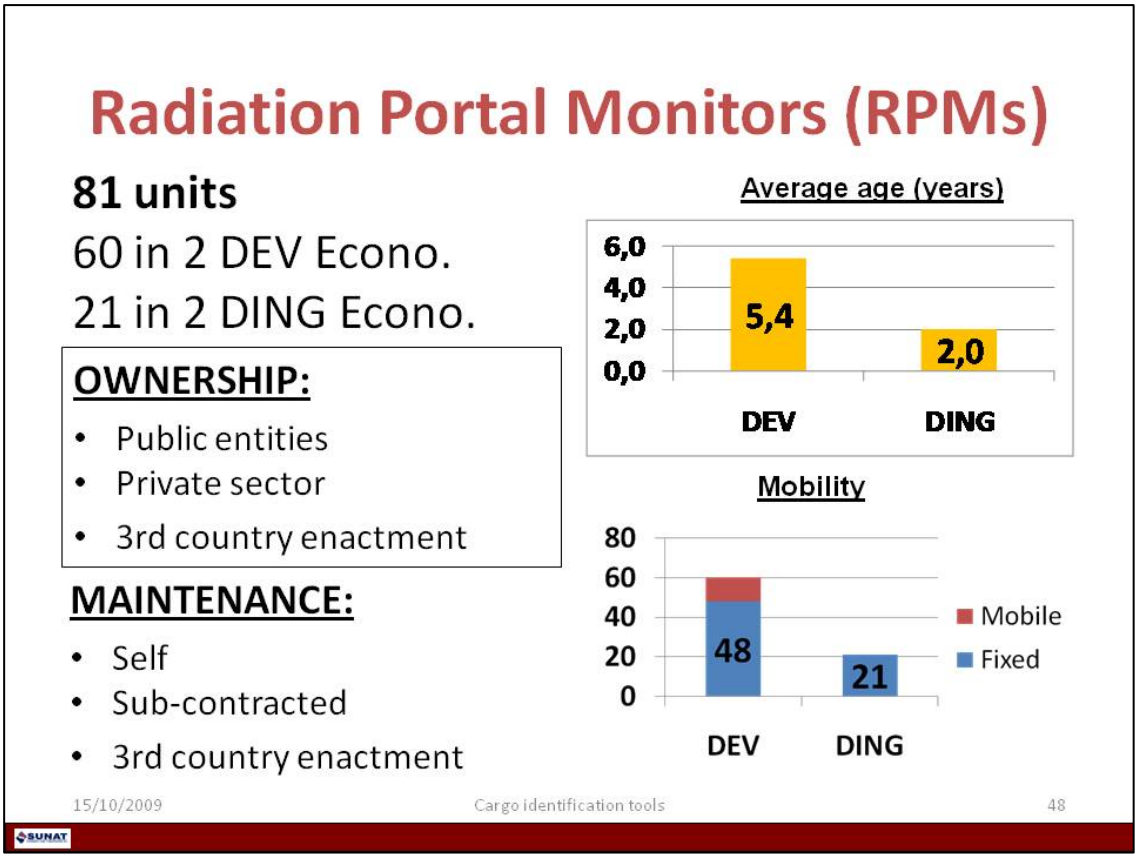
What type(s) of RPMs?

	DEV Economies				DING Eco.	
	CDA		JPN		MEX	THA
	Type 1	Type 2	Type 1	Type 2	Type 1	Type 1
Model	Portal	Carborne	**n.a.**	**n.a.**	VM-250AGN / PM-700AGN	Portal Monitor
Trademark	SAIC	SAIC	**n.a.**	**n.a.**	SAIC	**n.a.**
Mobility	Fixed	Mobile	Fixed	Fixed	Fixed	Fixed
Average age	5	5	7	7	2	2
Nb Units	32	12	15	1	1	20

Q_30: Ownership of RPMs

Who owns the RPMs?

	DEV Economies				DING Eco.	
	CDA		JPN		MEX	THA
	Type 1	Type 2	Type 1	Type 2	Type 1	Type 1
Who Owns RPMs	Customs	Customs	Private service provider	Private service provider	Port/Airport Authority	US/TH enacting
Contract with			Customs	Customs		
Duration			**n.a.**	**n.a.**		
Cost-basis			**n.a.**	**n.a.**		



Q_31: Maintenance of RPMs

Who provides RPM maintenance?

	DEV Economies				DING Eco.	
	CDA		JPN		MEX	THA
	Type 1	Type 2	Type 1	Type 2	Type 1	Type 1
RPMs Maintenance	Customs	Customs	Private service provider	Private service provider	Private service provider	Portal Monitor
Contract with			Customs	Customs	Port/Airport Authority	
Duration			**n.a.**	**n.a.**	1	
Cost-basis			**n.a.**	**n.a.**	Annual amount	

Q_32: Location of RPMs

Where are located the RPMs?

	DEV Economies				DING Eco.	
	CDA		JPN		MEX	THA
	Type 1	Type 2	Type 1	Type 2	Type 1	Type 1
RPMs location	Dockside	n.a.	n.a.	n.a.	Within the Port Complex	Within the Port Complex

Q_33: RPMs and re-organization of land use

Has the installation of the RPMs created a re- organisation of land use within the Port area?

	DEV Economies				DING Eco.	
	CDA		JPN		MEX	THA
	Type 1	Type 2	Type 1	Type 2	Type 1	Type 1
Re-organization	Minor	Un-changed	Un-changed	Un-changed	Minor	Minor

PRIMARY INSPECTION and Non-Intrusive Inspection Devices (NIIDs)

Q_34: Use of NIIDs

Is primary inspection carried out using active NII devices?

	DEV Economies				
	CDA	HKC	JPN	CT	USA
Primary inspection w/NII devices?	Yes	Yes	Yes	Yes	No
X-Ray	Yes	Yes	Yes	Yes	
Gamma Ray	Yes	No	No	n.a.	
FNA	No	No	No	n.a.	
TNA	No	No	No	n.a.	

	DING Economies						
	CHL	PRC	MAS	MEX	PE	THA	VN
Primary inspection w/NII devices?	Yes	No	Yes	Yes	Yes	Yes	Yes
X-Ray	Yes		Yes	Yes	Yes	Yes	Yes
Gamma Ray	No		No	Yes	No	No	No
FNA	No		No	n.a.	No	No	No
TNA	No		No	n.a.	No	No	No

Q_35: Type(s) of X-Ray devices

What type(s) of X-Ray devices?

	DEV Economies			
	CDA			
	Type 1	Type 2	Type 3	Type 4
Model	7555/7085	100100	9075	Rapiscan
Trademark	Smith Detection	Smith Detection	Smith Detection	Other
Mobility	Fixed	Mobile	Portable	Fixed
Average age	7	6	2	12
Nb Units	43	29	41	12

	DEV Economies				
	HKC				
	Type 1	Type 2	Type 3	Type 4	Type 5
Model	(*)	RAPISCAN Veh. X-ray	Fixed X-ray Machine	X-ray Van	X-ray Van
Trademark	Nuctech & Other	Nuctech	Nuctech	Smith Detection	Other
Mobility	Mobile & Fixed	Fixed	Fixed	Mobile	Mobile
Average age	18	6	5	7	7
Nb Units	6	1	4	4	1

(*) AS&S & VOLVO Mobile X-ray Vehicle Scanning System

	DEV Economies	
	CT	
	Type 1	Type 2
Model	HCV-MOBIL 3000	Luggage screening Instrument
Trademark	Smith Detection	Other
Mobility	Mobile	Fixed
Average age	1	8
Nb Units	2	32

Comments submitted:

- **HKC** mentions that the following equipment is also used: TH SCAN X-ray checker (Nuctech/fixed/2/12); Vehicle X-ray Inspection System (Nuctech/fixed/2/2); Thermo Isotope Identifier, HPGe Ortec

	DING Economies					
	CHL		MAS			
	Type 1	Type 2	Type 1	Type 2	Type 3	Type 4
Model	n.a.	n.a.	THScan	Scanvan	Rapiscan	Bodyscan
Trademark	Smith Detection	Other	Other	Other	Other	Other
Mobility	Mobile	Fixed	Fixed	Mobile	Fixed	Fixed
Average age	1	5	4	3	3	1
Nb Units	3	25	4	1	7	3

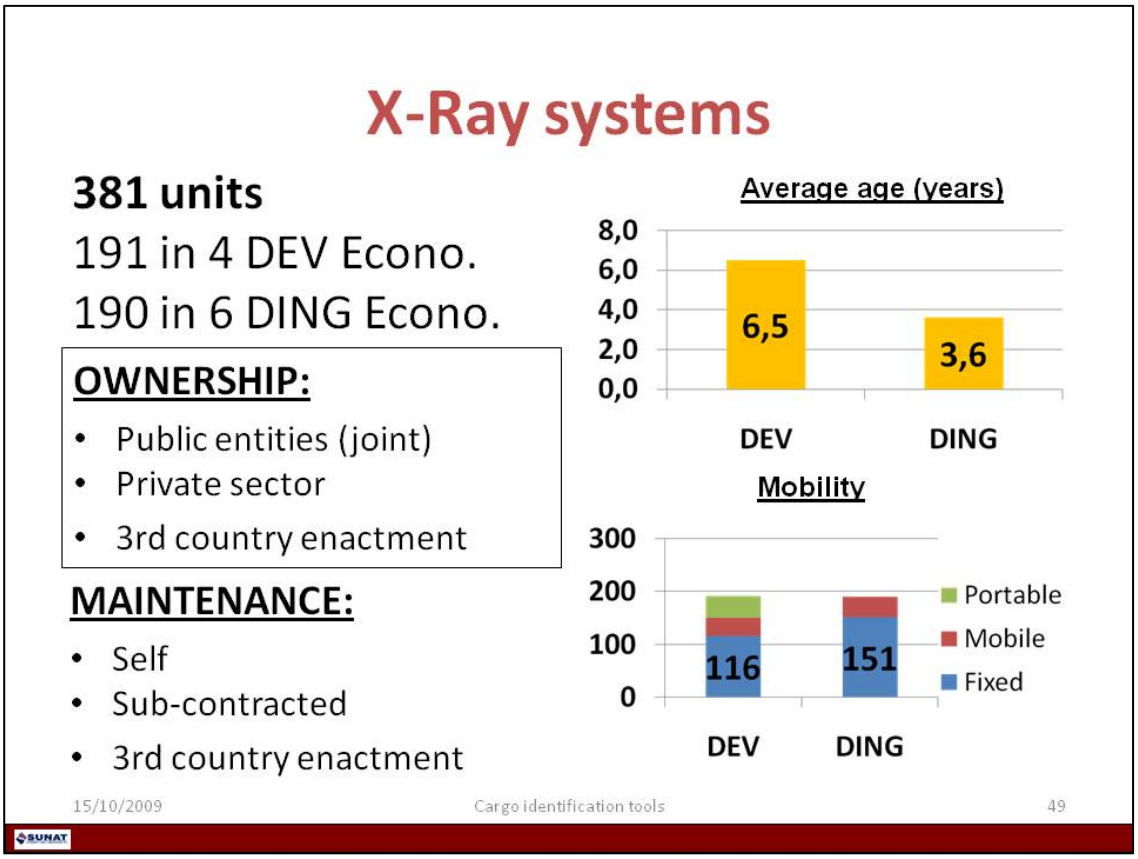
	DING Economies				
	MEX				
	Type 1	Type 2	Type 3	Type 4	Type 5
Model	100100T, 145180	536SV	HCV V1	100XD	ZVB
Trademark	Smith Detection	Other	Smith Detection	Other	Other
Mobility	Fixed	Mobile	Mobile	Fixed	Mobile
Average age	5	4	8	1	1
Nb Units	69	4	1	35	10

Comments submitted:

- **HKC** mentions also the use of the following equipment: RAPISCAN 536V AS&E ZBV, ASTROPHISICS 100XD

	DING Economies							
	PE				VN			
	Type 1	Type 2	Type 3	Type 4	Type 1	Type 2	Type 3	Type 4
Model	Backscatter	Scanvan	Rapiscan	Bodyscan	Backscatter	Scanvan	Rapiscan	Bodyscan
Trademark	Smith Detection	Smith Detection	Other	Smith Detection	Smith Detection	Smith Detection	Other	Smith Detection
Mobility	Mobile	Mobile	Mobile	Fixed	Mobile	Mobile	Mobile	Fixed
Average age	2	2	3	3	2	2	3	3
Nb Units	1	2	1	3	1	2	1	3

	DING Economies			
	THA			
	Type 1	Type 2	Type 3	Type 4
Model	THSCAN FG9056	MT1500	Checked Baggage	Carry-on Baggage
Trademark	Nuctech	Nuctech	Smith Detection	Smith Detection
Mobility	Fixed	Mobile	Mobile	Mobile
Average age	3	5	3	3
Nb Units	2	12	-	-



Q_36: Ownership of X-Ray devices

Who owns the X-Ray devices?

In the two responding DEV Member Economies (**CDA** and **HKC**), Customs is owning all the types of X-Ray devices in use.

A similar situation occurs in the three responding DING Member Economies (**CHL**, **MAS** and **MEX**). The case of **PE** and **THA** is slightly different:

	DING Economies							
	PE				THA			
	Type 1	Type 2	Type 3	Type 4	Type 1	Type 2	Type 3	Type 4
Who Owns X-Rays	US Embassy	US Embassy	Customs	US Embassy	Customs	Customs	Port/Airport Authority	Port/Airport Authority
Contract with	US Embassy	US Embassy	US Embassy	US Embassy				
Duration	2	n.a.	n.a.	n.a.				
Cost-basis	Annual amount	n.a.	n.a.	n.a.				

Q_37: Maintenance of X-Ray devices

Who provides tool maintenance?

In **CDA**, maintenance is carried out by the Owner (Customs), while in **HKC**, maintenance is under the responsibility of another Governmental Department (Electronic and Mechanical Services Department).

In the case of **CHL**, **MAS** and **MEX,** maintenance is performed by a Private Service Provider, usually engaged by Customs. In **MEX**, this engagement runs for a period of three years for an annual fee. In **THA**, the Owner maintains his own equipment, while in **PE**, maintenance is under the responsibility of the US Embassy who engages a Private Service Provider (United Limited) for a period of three years for an annual fee.

Q_38: Location of X-Ray devices

Where are located the X-Ray devices?

	DEV Economies								
	CDA				HKC				
	Type 1	Type 2	Type 3	Type 4	Type 1	Type 2	Type 3	Type 4	Type 5
X-Rays Location	Passenger	Flexible	Dockside	Dockside	Customs	Flexible	n.a.	(*)	n.a.

(*) Customs Examination Compound, Land Boundary Control Points

	DEV Economies		
	JPN	CT	
	Type 1	Type 1	Type 2
X-Rays Location	Customs	Airport	Airport

	DING Economies					
	CHL		MAS			
	Type 1	Type 2	Type 1	Type 2	Type 3	Type 4
X-Rays Location	Flexible	Borders Airports	Port Complex	Port Complex	Port Complex	Airport

	DING Economies				
	MEX				
	Type 1	Type 2	Type 3	Type 4	Type 5
X-Rays Location	Airport	Airport	Port Complex	Airport	Flexible

	DING Economies							
	PE				THA			
	Type 1	Type 2	Type 3	Type 4	Type 1	Type 2	Type 3	Type 4
X-Rays Location	Port Complex	Port Complex	Port Complex	Airport	Port Complex	Port Complex	Port Complex	Port Complex

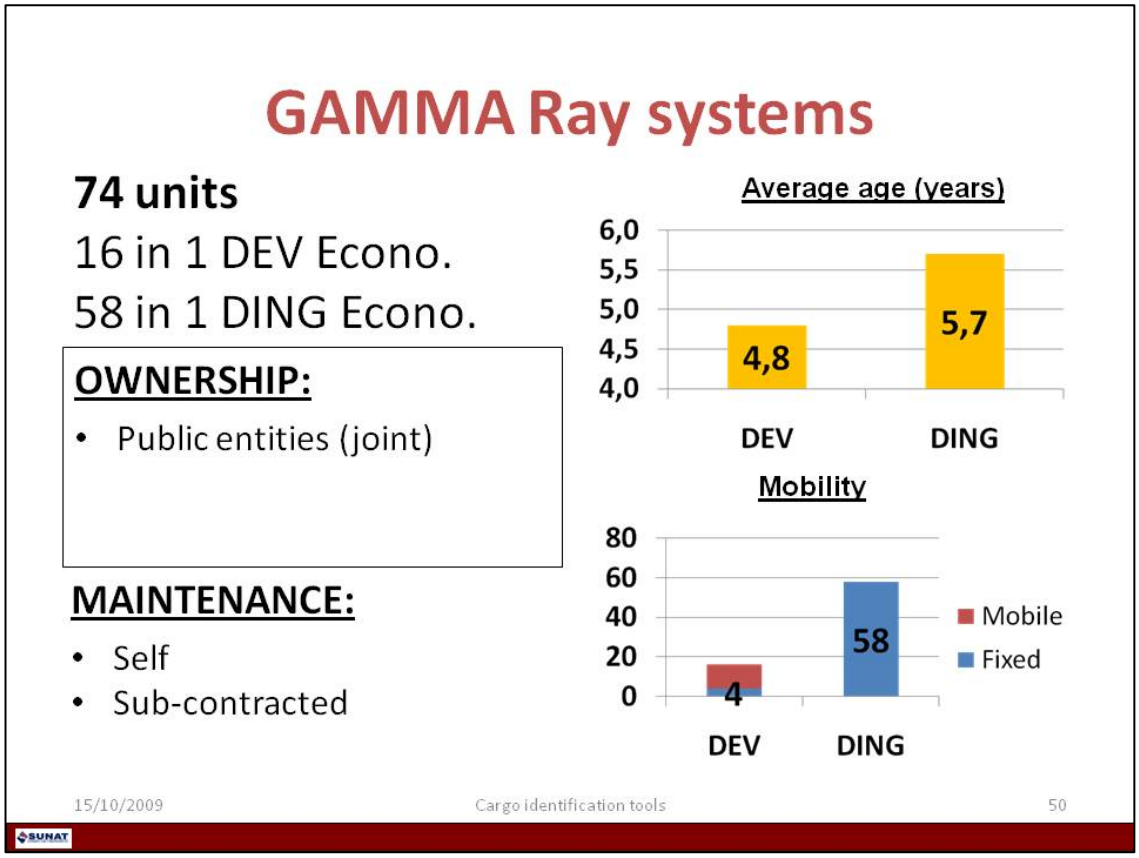
	DING Economies			
	VN			
	Type 1	Type 2	Type 3	Type 4
X-Rays Location	Port Complex	Port Complex	Port Complex	Airport

Q_39: Type(s) of Gamma-Ray devices

What type(s) of Gamma-Ray devices?

	DEV Economies	
	CDA	
	Type 1	Type 2
Model	VACIS	Pallet VACIS
Trademark	SAIC	SAIC
Mobility	Mobile	Fixed
Average age	6	5
Nb Units	12	4

	DING Economies				
	MEX				
	Type 1	Type 2	Type 3	Type 4	Type 5
Model	LEGACI	ADVANCE COM	RR VACIS	PALLET VACIS	ICIS
Trademark	SAIC	SAIC	SAIC	SAIC	SAIC
Mobility	Fixed	Fixed	Fixed	Fixed	Fixed
Average age	6	5	8	4	2
Nb Units	16	30	10	1	1



Q_40: Ownership of Gamma-Ray devices

Who owns the Gamma-Ray devices?

	DEV Economies	
	CDA	
	Type 1	Type 2
Who Owns Gamma Ray	Customs	Customs
Contract with		
Duration		
Cost-basis		

	DING Economies				
	MEX				
	Type 1	Type 2	Type 3	Type 4	Type 5
Who Owns Gamma Ray	Customs/ Port Authority	Customs/ Port Authority	Customs/ Port Authority	Customs	Port/Airport Authority
Contract with					
Duration					
Cost-basis					

Q_41: Maintenance of Gamma-Ray devices

Who provides tool maintenance?

	DEV Economies	
	CDA	
	Type 1	Type 2
Gamma Ray Maintenance	Customs	Customs
Contract with		
Duration		
Cost-basis		

	DING Economies				
	MEX				
	Type 1	Type 2	Type 3	Type 4	Type 5
Gamma Ray Maintenance	Private service provider	Private service provider	Private service provider	Private service provider	Private service provider
Contract with	Customs/ Port Authority	Customs/ Port Authority	Customs/ Port Authority	Customs/ Port Authority	Customs/ Port Authority
Duration	3	3	3	3	1
Cost-basis	Annual amount	Annual amount	per unit inspected	Annual amount	Annual amount

Q_42: Location of Gamma-Ray devices

Where are located the Gamma-Ray devices?

	DEV Economies	
	CDA	
	Type 1	Type 2
Gamma Ray Location	Marine/Highway	Marine

	DING Economies				
	MEX				
	Type 1	Type 2	Type 3	Type 4	Type 5
Gamma Ray Location	Within the Port Complex	Within the Port Complex	Within the Port Complex	Within the Port Complex	Within the Port Complex

Q_43: Type(s) of FNA devices?

What type(s) of Fast Neutron Analysis (FNA) devices?

None of the responding Economies reports the use of FNA devices.

Q_44: Type(s) of TNA devices

What type(s) of Thermal Neutron Analysis (TNA) devices?

Only one responding DING Economy (**MEX**) reports the use of two types of TNA devices. Both are SAIC equipment; one 4-year old fixed Palet VACIS; and one 2-year old fixed ICIS.

Q_45: Re-organisation of land use

Has the installation of the NIIDs created an additional re-organisation of land use within the Port area (in addition to the installation of RPMs)?

	DEV Eco.		DING Economies			
	CDA	HKC	MAS	MEX	PE	VN
X-Ray	Unchanged	Minor	Unchanged	Minor	Unchanged	Unchanged
Gamma Ray	Unchanged			Major		
FNA						
TNA						

PRIMARY INSPECTION and Track Devices

Q_46: Types of Track devices

Have you installed the following types of track devices at major ports and airports handling international cargo?

	DEV Economies				
	CDA	HKC		JPN	
	Port #1	Port #1	Port #2	Port #1	Airport #1
OCR	No	Yes	Yes	n.a.	n.a.
Electronic seal	n.a.	No	No	No	No
Integrated surveillance	n.a.	No	No	n.a.	n.a.

	DING Economies			
	CHL			
	Port #1	Port #2	Airport #1	Airport #2
OCR	Yes	No	Yes	No
Electronic seal	No	No	No	No
Integrated surveillance	No	No	No	No

Comments submitted:

- **CHL** mentions other terminal facilities: Los Andes Land Port, Los Libertadores Complex and Santiago Airport.

	DING Economies				
	MAS				MEX
	Port #1	Port #2	Airport #1	Airport #2	Port #1
OCR	No	No	No	No	Yes
Electronic seal	No	No	No	No	n.a.
Integrated surveillance	No	No	No	No	n.a.

Comments submitted:

- **MEX** mentions another tracking device: SAIC ICIS SYSTEM.

	DING Economies							
	PE				THA			
	Port #1	Port #2	Airport #1	Airport #2	Port #1	Port #2	Airport #1	Airport #2
OCR	No	No	No	No	n.a.	n.a.	n.a.	n.a.
Electronic seal	No	No	No	No	n.a.	n.a.	n.a.	n.a.
Integrated surveillance	No	No	No	No	Yes	Yes	Yes	Yes

	DING Economies			
	VN			
	Port #1	Port #2	Airport #1	Airport #2
OCR	No	No	No	No
Electronic seal	No	No	No	No
Integrated surveillance	No	No	No	No

Q_47: Joint inspection lanes

Have you organized joint inspection lanes using both RPM and NIID technology, plus eventually, other cargo tracking device(s)?

Among responding DEV Economies, only **CDA** reports the linear organization of joint inspection lanes; there are no Alarm Stations serving both RPMs and NIIDs. **JPN** does mention the organization of joint inspection lanes, but does not detail the organization. **HKC** does not have such joint inspection lanes.

Among responding DING Economies, only MEX reports the organization of joint inspection lanes, using the ICIS System, which includes RPMs, Gamma Ray and OCR System. Alarm Stations are serving both RPMs and NIIDs.

Q_48: Teams involved in scanning process

The operation of the scanning process requires a team of officers. The composition of this team depends on the configuration of the site. Could you indicate the size of this team at major ports and airports handling international cargo? Please refer to the following profiles.

	DEV Economies							
	CDA				HKC			
	Port #1	Port #2	Airport #1	Airport #2	Port #1	Port #2	Airport #1	Airport #2
Scanner manager	1	0	0	0	3	7	0	0
Marshaller	2	0	0	0	9	7	0	0
Image analyst	1	0	0	0	3	7	0	0
Tech. staff	1	0	0	0	0	0	0	0
Radiat. exp.	0	0	0	0	0	0	0	0

Comments submitted:

- **CDA** mentions one Driver of mobile units as another type of officer.

	DING Economies							
	PE				THA			
	Port #1	Port #2	Airport #1	Airport #2	Port #1	Port #2	Airport #1	Airport #2
Scanner manager	2	0	0	0	1	0	0	0
Marshaller	2	0	0	0	3	0	0	0
Image analyst	8	0	0	0	1	0	0	0
Tech. staff	1	0	0	0	3	0	0	0
Radiat. exp.	1	0	0	0	--	--	--	--

Comments submitted:

- **THA** mentions that Radiation experts are not located at terminal facilities but within another department.

SECONDARY INSPECTION: Radioactive Isotope Identification Devices and Personal Radiation Detectors

Q_49: Use of RIIDs

Is secondary inspection carried out using Radioactive Isotope Identification Devices (RIIDs) (for ex.: HPGe, NaI, or others)?
If YES, what type(s) of RIIDs?

	DEV Economies				
	CDA	HKC	JPN		
RIIDs	Yes	No	Yes		
Types	Type 1		Type 1	Type 2	Type 2
Model	GR-135		n.a.	n.a.	n.a.
Trademark	SAIC		n.a.	n.a.	n.a.
Average age	5		7	7	7
Nb Units	28		3	1	1

	DING Economies					
	CHL	MAS	PE	THA		VN
RIIDs	No	No	Yes	Yes		Yes
Types			Type 1	Type 1	Type 2	Type 1
Model			GR-135	Identifinder NGH	HPGe	GR-135
Trademark			SAIC	Other	Other	SAIC
Average age			4	3	3	4
Nb Units			1	8	1	1

Comments submitted:

- **THA** mentions Thermo Isotope Identifier, HPGe Ortec

Q_50: Use of PRDs

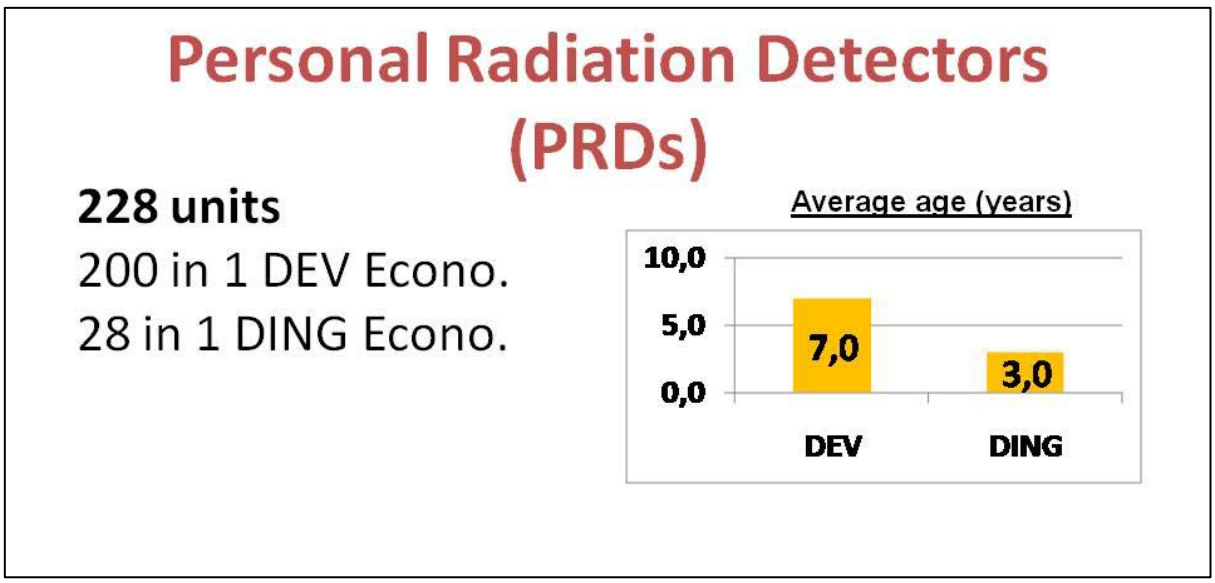
Is secondary inspection carried out using Personal Radiation Detectors (PRDs) (for ex: survey meters, pagers, etc.)?

	DEV Economies		
	CDA	HKC	JPN
PRDs	No	No	Yes
Types			Type 1
Model			**n.a.**
Trademark			**n.a.**
Average age			7
Nb Units			200

	DING Economies					
	CHL	MAS	PE	THA		VN
PRDs	No	No	No	Yes		No
Types				Type 1	Type 2	
Model				RPM470	RADIATION PAGER	
Trademark				Other	Other	
Average age				3	3	
Nb Units				8	20	

Comments submitted:

- **THA** mentions the use of other types of PRDs: TSA RPM470, RADIATION PAGER by Sensor Tech. Engineering.



Q_51: Use of ASPs

Have you installed advanced spectroscopic portals (ASP) at your major ports?

Observations: None of the responding APEC Economies has installed ASPs at its major ports. Only **THA** mentions that 20 ASPs are planned to be installed at its major ports, in a near future.

SECONDARY INSPECTION: OTHER COMMON TOOLS

Q_52: Use of other insection tools

Are you using the following tools for secondary inspection?

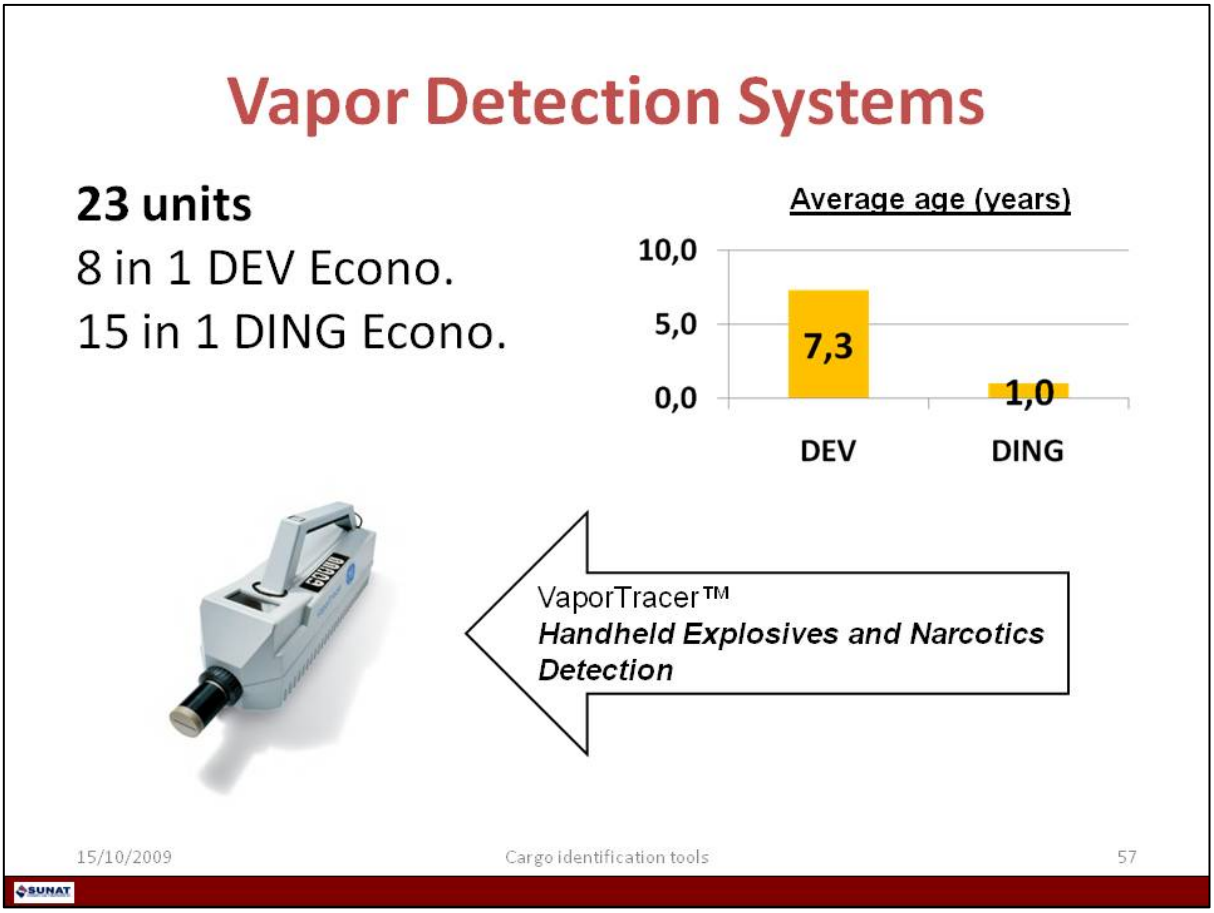
	DEV Economies		
	CDA	HKC	JPN
Vapor detection systems	No	Yes	**n.a.**
Trace detection systems	Yes	Yes	Yes
Busters	Yes	Yes	**n.a.**
Canines	Yes	Yes	Yes

	DING Economies					
	CHL	MAS	MEX	PE	THA	VN
Vapor detection systems	No	No	Yes	No	No	No
Trace detection systems	No	No	**n.a.**	Yes	No	Yes
Busters	No	No	**n.a.**	Yes	No	Yes
Canines	Yes	Yes	Yes	Yes	No	Yes

Q_53: Use of Vapor Detection Systems

What type(s) of Vapor Detection Systems?

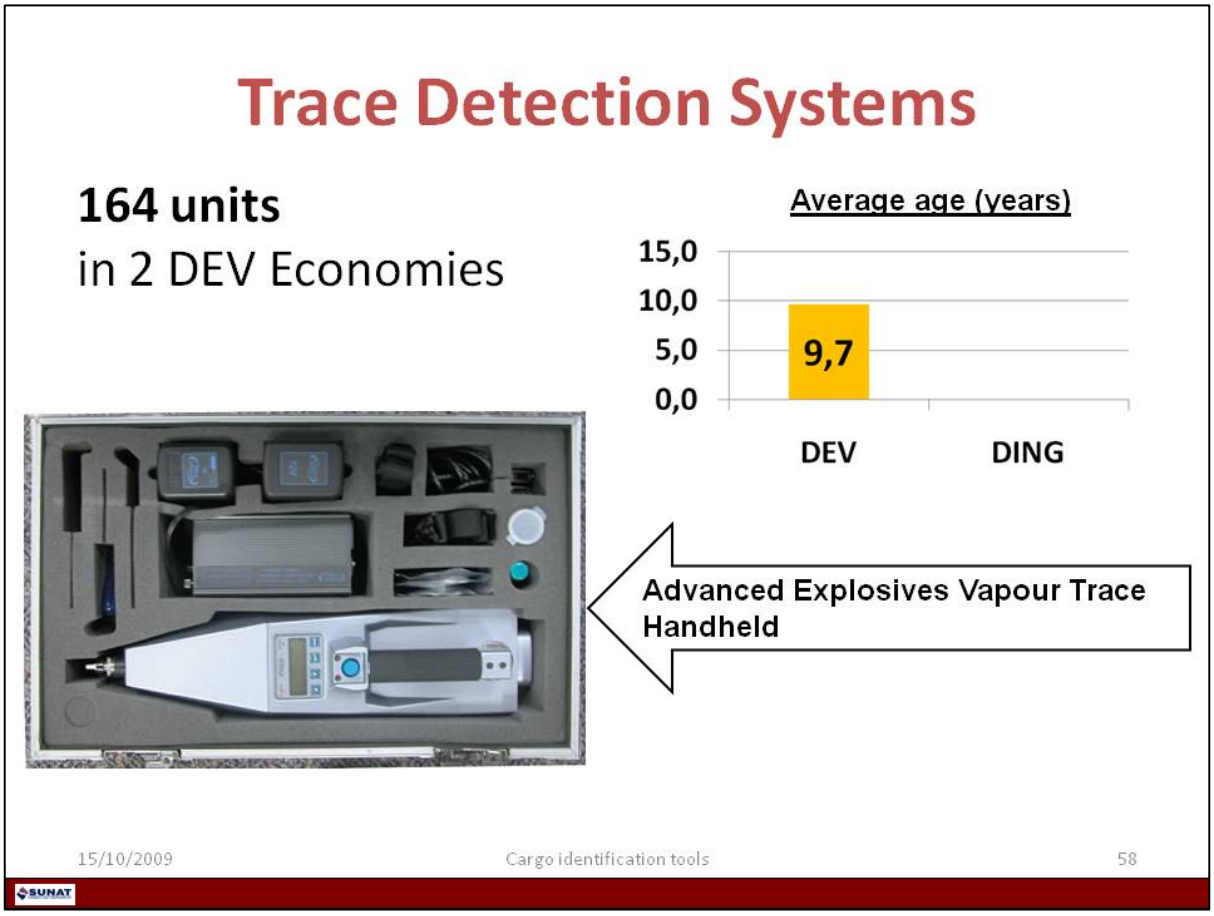
	DEV Economies			DING Eco.
	HKC			MEX
	Type 1	Type 2	Type 3	Type 1
Model	Sabre 2000	Telaire 7001	MAX-4AP-25	VAPOR TRACER
Trademark	Other	Other	Other	Other
Average age	6	9	7	1
Nb Units	4	3	1	15



Q_54: Use of Trace Detection Systems

What type(s) of Trace Detection Systems?

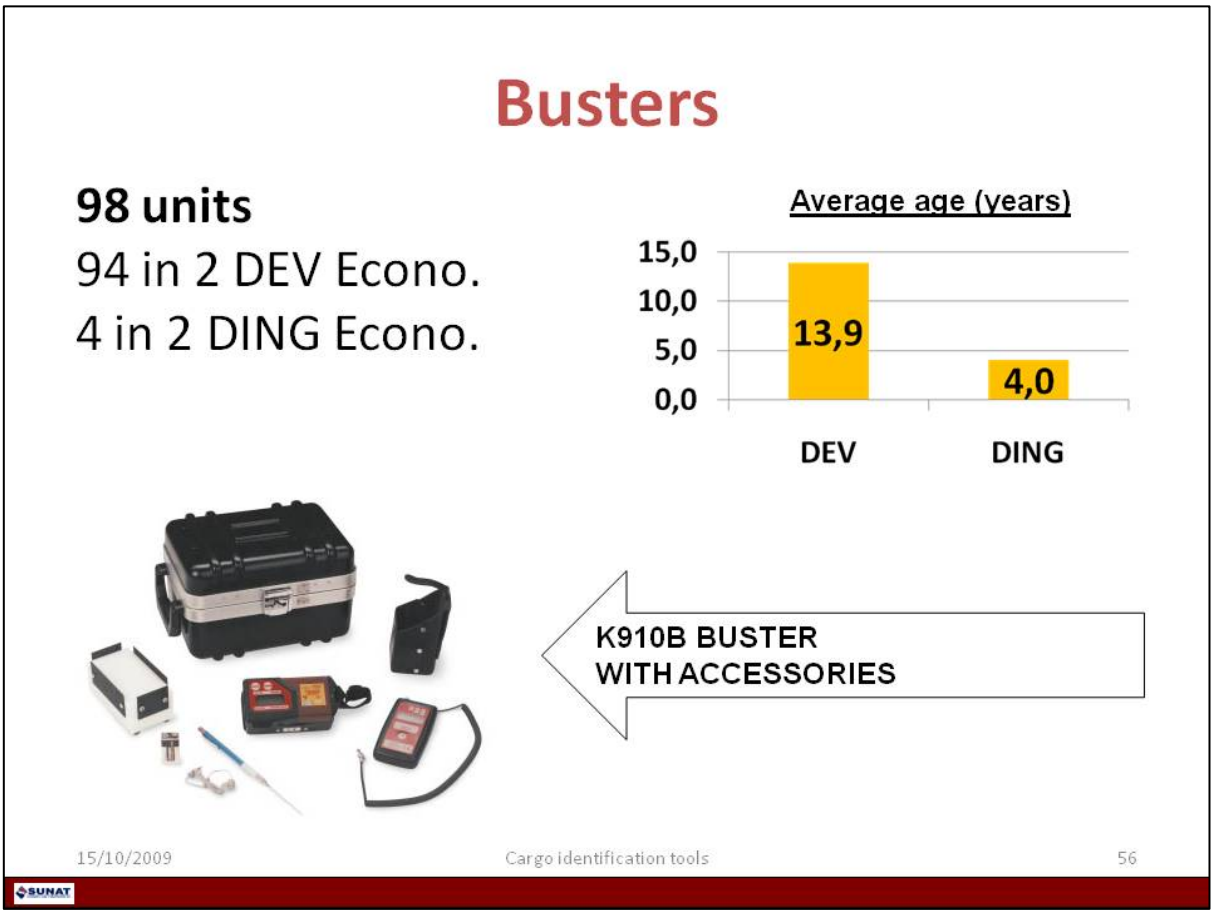
	DEV Economies							
	CDA				HKC			
	Type 1	Type 2	Type 3	Type 4	Type 1	Type 2	Type 3	Type 4
Model	Ionscan	Itemizer3	Sabre 2000	Sabre 4000	Itemizer 98	Ionscan DM 400	Sabre 400B	Sabre 400B
Trademark	Smith Detection	Other	Smith Detection	Smith Detection	Other	Other	Smith Detection	Smith Detection
Average age	15	3	5	4	13	11	5	6
Nb Units	80	32	40	4	4	2	1	1



Q_55: Use of Busters

What type(s) of Busters?

	DEV Economies		DING Eco.	
	CDA	HKC	PE	VN
	Type 1	Type 1	Type 1	Type 1
Model	Merlin	K910B	K910B	K910B
Trademark	Other	Other	Smith Detection	Smith Detection
Average age	14	10	4	4
Nb Units	92	2	2	2



Q_56: Use of Canines

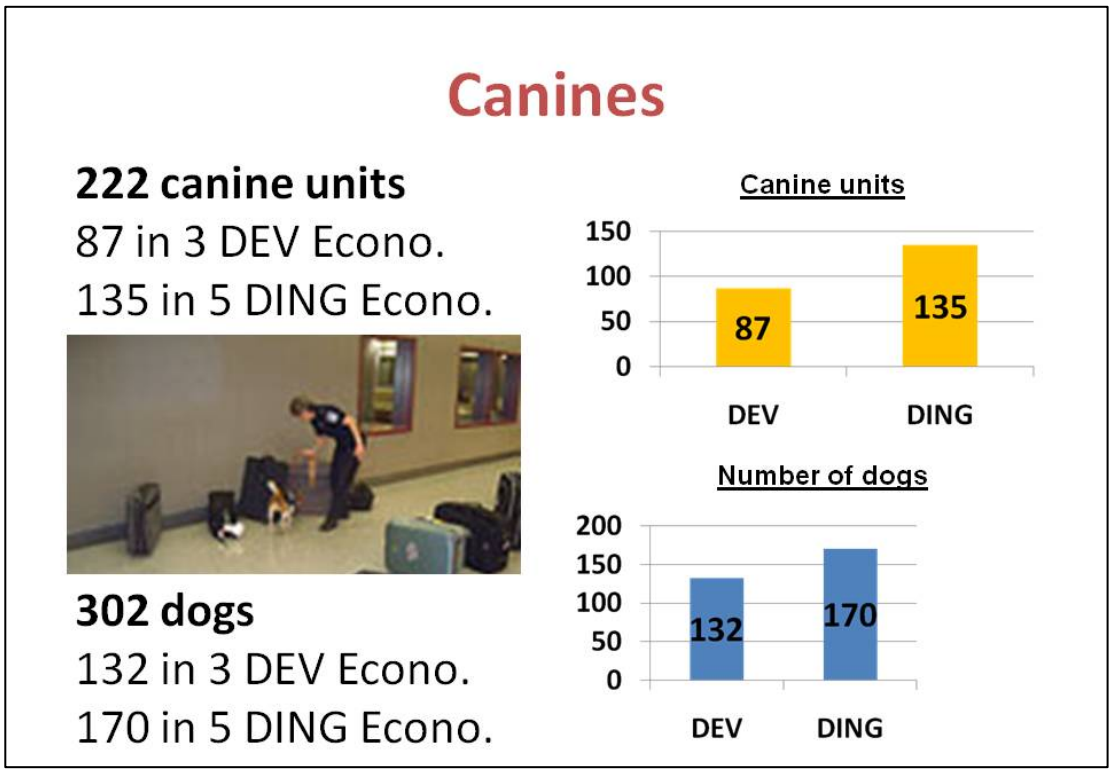
Regarding canine units:

	DEV Economies		
	CDA	HKC	JPN
How many canine units	70	8	9
Teams per canine unit	1	46	**n.a.**
Dogs per team	1	2	**n.a.**

	DING Economies				
	CHL	MAS	MEX	PE	VN
How many canine units	50	1	44	20	20
Teams per canine unit	50	3	2,23	1	1
Dogs per team	1	12	1	1	1

Comments submitted:

- **HKC** mentions that it has different set up at different offices. In total, there are 53 dogs.



ANNEXES

Annex 1: The Questionnaire;

Annex 2: Background information note on cargo identification tools;

Annex 3: Print-out of the database containing the answers received for Part ONE;

Annex 4: Print-out of the database containing the answers received for Part TWO.

Annex 5: Consultant's Mission Report and annexes regarding the APEC SCCP seminar

Each annex has been prepared as a physically separated document, with its own cover-page. These documents are submitted together with the present Report.

Asia-Pacific
Economic Cooperation

CTI – Sub-Committee on Customs Procedures (SCCP)

Annex I
to the report

Experience exchange
on the use of tools and Information Technology
for goods identification

QUESTIONNAIRE

SUNAT
Lima, Peru
18 December 2009

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Asia-Pacific
Economic Cooperation

SUB-COMMITTEE ON CUSTOMS PROCEDURES

QUESTIONNAIRE

To collect experience exchanges
in the adoption of tools and IT for Goods Identification

Proposed by the Peruvian Delegation

APEC 2009

To be completed by
30 June 2009

Introduction

In the post-9/11 context, Customs administrations have been addressing efforts and resources to maintain and enhance security by, inter alia, improving the inspection process without hindering the movement of cargo at borders. Existing inspection processes have underscored longstanding inadequacies in interagency information collection, sharing, and analysis. A better and wider use of available technologies has received greater attention in many countries as an option to reduce these inadequacies.

The SCCP decided to conduct a study to improve the use of tools and IT for goods identification. This study will be held in Lima – Peru, in 2009.

Questionnaire

This questionnaire has been developed for the SCCP by SUNAT-Peru with the assistance of an external consultant. It is intended to be used to collect experiences of the economies that have adopted (or that are going to adopt) international tools and IT for cargo identification, in the context of their border inspection process. The information on these experiences covers the necessary reforms to comply with new standards and requirements, as well as the practical aspects related with operational modalities of implementing the tools and IT for cargo identification, as they are presently undertaken by APEC economies

The questionnaire is being addressed to the security-concerned units within the Customs administrations of the APEC Member Economies.

The National Superintendency of Tax Administration (SUNAT-Peru) *will be in charge of consolidate and evaluate the questionnaires results and of the development of the final report of the project for its dissemination within member economies.*

Scope of the questionnaire:

This questionnaire comprises two parts. The first part (Part ONE) includes 27 questions necessary to understand the context of the use of cargo identification tools. The second part (Part TWO) includes 29 questions refering to the cargo identification technologies currently in use. These questions are important to complete the picture emerging from Part ONE. They are optional.

The context of use of cargo identification tools includes questions related to: your Agency mission; Inspection locations; Documentation; Inspection process; Reporting; inspection technology; Human resource development issues.

The cargo identification technologies have been grouped according to their (main) use in primary inspection or secondary inspection. Questions related to primary inspection refer to RPMs, NIIDs and Track devices. Questions related to secondary inspection refer to RIIDs, PRDs and other common tools including canines.

The Questionnaire is intended to be user-friendly and easy to answer by inputing directly into the respective sheets of present EXCEL worksheet. You can only enter information in the YELLOW cells, by selecting from the proposed list or typing a number (value or percentage). PURPLE cells are used to enter "free text", comments, additional information.

In total, there are 56 questions that can be accessed by scrolling down the two sheets of this EXCEL file.

Once completed, please save this file under the filename: "Questionnaire APEC-2009 from xxxxx.xls" with "xxxxx" being the name of your Economy. Example: Questionnaire APEC-2009 from Peru.xls

Support towards completion of the Questionnaire

If you need assistance in completing this Questionnaire, please send an email to the Project Overseer.

Contact details are provided at the end of this questionnaire.

Questionnaire Returns – 30 June 2009

Please send this completed questionnaire as an EXCEL file to jsullca@sunat.gob.pe (with copy to maxence.orthlieb@gmail.com) by 30 June 2009.

The *Sub Committee on Customs Procedures (SCCP)* thanks you for your participation in completing this questionnaire.

Part ONE:
Context of the use of cargo identification technologies

Section 1: Agency Mission

Q_1 What are the missions of your agency (at ports of entry)?

Health	
Safety	
Immigration	
Environmental Protection	
Border Security	
Trade Compliance	
Currency	
Stolen Property	
Narcotics Trafficking Interdiction	
Weapons/Explosives	
Criminal Finance	
National Law Enforcement	
Other	
If Other, please specify:	

Q_2 What is your principal enforcement strategy? (Indicate a relative percentage of effort for each)

Intelligence and Targeting	
Documentary Discrepancy	
Investigation	
Laboratory Analysis	
Random Inspection	
Statistical Sampling or Modeling	
Intrusive Examination	
Non-intrusive Examination	
Other	
Please specify the other enforcement strategy	

Section 2: Inspection Locations

Q_3 Where does your agency review of Customs import or export documentation take place?

Port of Entry – Local Office	
Regional Office	
Headquarters	
Remote	
Other	
If Other, please specify:	

Q_4 Where is the initial non-intrusive examination of target population physically occur?

Apron, Dockside or at Anchor	
Within the Airport/Port Complex	
Co-located with another Agency	
Other	
If Other, please specify:	

Q_5 Where is the principal location that you review the data from an initial non-intrusive examination of the target population? (Indicate a relative percentage of review for each)

Apron, Dockside or at Anchor	
Within the Airport/Port Complex	
Within 5 miles of Airport/Port Complex	
Remote Site (greater than 5 miles)	
Co-located with another Agency	

Q_6 Where is the final physical examination or inspection performed of target population?

Airport/Marine Terminal/dockside	
Port of Entry	
Off site Examination	
Bonded Warehouse	
Ultimate Consignee's Facility	
Other	
If Other, please specify:	

Q_7 Where is the principal office that exercises each of the following inspection functions?

	Apron, Dockside or at Anchor	*Within the Port Complex*	*Co-located with another Agency*	*Other*
Administrative and Data Analysis				
Documentary Review and Reporting				
Intelligence and Targeting				
Screening Examination				
Physical Inspection				

Q_8 Has a cost-recovery mechanism been established regarding the use of cargo inspection tools?

Who directly contributes to this mechanism?

If Others, please specify:

Section 3: Documentation

Q_9 With regards to the indicators below, what do you consider to be an effective deterrence level for your target population? (Please indicate a number or a percentage, and specify if "Other")

Number of Annual Inspections	
Percentage of Annual Passengers	
Percentage of Container Volume Throughput	
Percentage of Inspection Target Population	
Other: (please specify)	
Other: (please specify)	
Other: (please specify)	

Section 4: Inspection process

Q_10 What are the basic elements of your agency's port of entry inspection process?

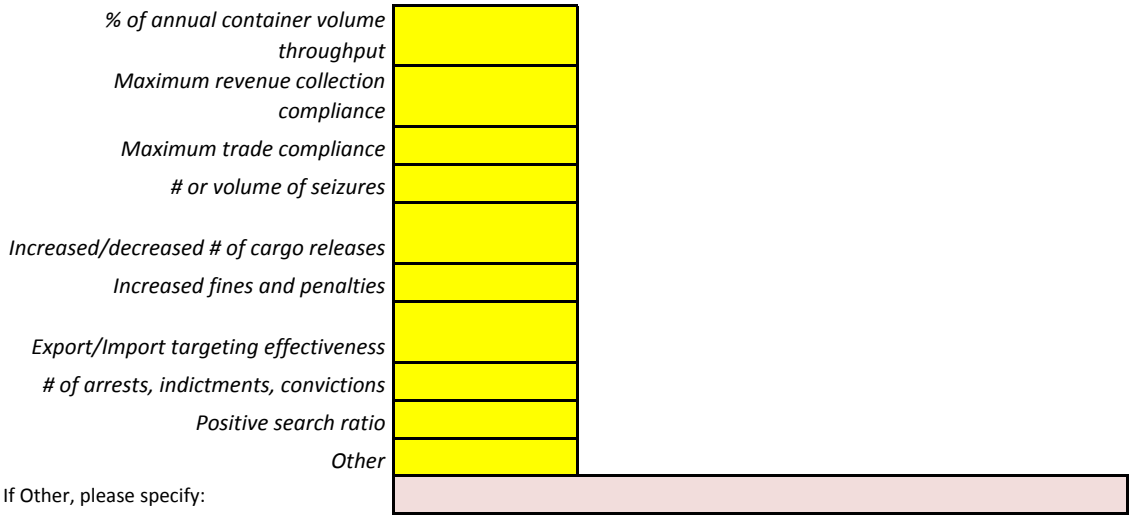
Data analysis and Profiling	
Documentary Review and Reporting	
Intelligence and Targeting	
Investigation	
Laboratory Analysis	
Non-intrusive Screening and Examination	
Random or Statistical Sampling	
Physical Intrusive Examination	
Inspection Technology	
Other	
If Other, please specify:	

Q_11 What is the primary inspection target for each function in ports of entry?
(Indicate a relative percentage of enforcement effort for each)

Baggage	
Bulk Freight	
Container Freight	
Vessel/Aircraft	
Other	
If Other, please specify:	

Q_12 If your primary target is container freight, what is your primary inspection target within the container?

Q_13 To measure inspection and enforcement effectiveness, which of the following performance indicators are considered important?



Q_14 What specific criteria in order of importance do you use to target particular containers for nonintrusive examination using inspection technology or for physical examination?

Section 5: Reporting

Q_15 To which level of the Control and Enforcement instution are inspection results reported?

Port of Entry – Local Office	
Regional Office	
Headquarters	
Remote	
Other	
If Other, please specify:	

Q_16 What type(s) of inspection results are reported?

Successfull identifications	
Failures	
Volume/number of cargo units inspected (throughput)	
Other	
If Other, please specify:	

Q_17 Where are the inspection results recorded?

Manually in local Records Book	
Customs computerized system	
Port Authority computerized system	
Other	
If Other, please specify:	

Q_18 Are inspections results shared with other concerned institutions? |

With the Port Authority?	
With other Customs Administrations abroad?	
With other Institutions?	
If Other institutions, please specify:	

Section 6: Inspection technology

Q_19 What is the degree of mobility in the inspection technology that you utilize?
(Please indicate a percentage)

Fixed	
Portable/Transportable	
Mobile	

Q_20 What kind of inspection technology do you currently utilize for your target population?
(Please indicate the relative percentage of each technology)

X-ray	
Gamma Ray	
Fast/Thermal Neutron	
Radioactive Isotope Detector	
Radiation Detector	
Vapor/Trace Detector	
Other	
Please specify the other technologies	

Q_21 What inspection technology does your agency primarily utilize for non intrusive screening and examination of each of the following? (Please indicate the technology)

Passengers:	
Baggage:	
Freight at ports of entry:	

Section 7: Human Resource Development issues

Q_22 What is the relative percentage of effort (in terms of staffing and funding) for your agency between **physical examination** (intrusive) and **technology screening** (non-intrusive examination) of target populations?

	Staffing	Funding
Physical Examination		
Technology Screening		
TOTAL	100%	100%

Q_23 How many **LOCAL** specialized personnel (Full Time Equivalent - FTE) do work in the following areas?

Enforcement and control procedures	
Operations of cargo identification tools	
Interpretation of results	
Information Technology	
Other	
Please specify the other areas	

Q_24 How many **FOREIGN** specialized personnel (Full Time Equivalent - FTE) do work in the following areas?

Enforcement and control procedures	
Operations of cargo identification tools	
Interpretation of results	
Information Technology	
Other	
Please specify the other areas	

Please indicate the **total number of FOREIGN personnel** (FTE) involved in national security-related issues:

Q_25 Does your institution provide/organize training in the following areas?

	Locally	Abroad
Enforcement and control procedures		
Operations of cargo identification tools		
Interpretation of results		
Information Technology		
Other		
Please specify the other areas		

Q_26 Have you established an audit mechanism for the goods control process?

Please detail this mechanism:

Q_27 Is primary inspection carried out using active NII devices?

If Yes, please specify what type of screening methods:

Screening Method	Risks Detected	
X-Ray	Explosives, stolen/mislabeled goods, illegal drugs	
Gamma Ray	Explosives, stolen/mislabeled goods, illegal drugs	
Pulsed Fast Neutron Analysis	Explosives, illegal drugs	
Thermal Neutron Activation	Explosives	

Any particular view on Cargo Identification issues?

Comments on Part ONE of this Questionnaire

Contact Details

Please provide the contact details of the person the Project Overseer can contact if clarification of any answers provided on this questionnaire is required.

Main contact person:	
Address:	
City & Zip Code:	
Country:	
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If you are having difficulty answering any of these questions, please contact:

Mr. James Walt Sullca Cornejo
Peruvian Tax Collection and Customs Administration Systems area - SUNAT

Postal address:	National Intendency of System Information Av. Andrés Reyes N° 320 San Isidro, Lima, Peru
Phone Number:	**+51 1 219 04 30 ext. 20346/20341**
Fax Number:	**+51 1 219 04 30 ext. 20787**
Email:	jsullca@sunat.gob.pe

Our Group thanks you for your cooperation in completing this questionnaire.
This is an important initiative and we look forward to working with you on this project in 2009.

Part TWO:
Cargo identification equipment currently used

This Part of the Questionnaire will review the technologies used for primary inspection, for secondary inspection as well as support facilities (Alarm stations) and staffing (Secondary Inspection Teams).

PRIMARY INSPECTION and Radiation Portal Monitors (RPMs)

Q_28 Is primary inspection carried with RPMs?

Q_29 What type(s) of RPMs?

	Model	Trademark	Mobility	Average age (years)	Number of units
Type #1					
Type #2					
Type #3					
Type #4					
Type #5					

If Other, please specify:

Q_30 Who owns the RPM(s)?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					
If a private service provider under contract:					
Contract signed with					
If Other, please specify:					
Duration of the contract (years)					
Cost-basis for the contract					

Q_31 Who provides RPM maintenance?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					
If a private service provider under contract:					
Contract signed with					
If Other, please specify:					
Duration of the contract (years)					
Cost-basis for the contract					

Q_32 Where are located the RPMs?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					

Q_33 Has the installation of the RPMs created a re-organisation of land use within the Port area?

Type #1	Type #2	Type #3	Type #4	Type #5

PRIMARY INSPECTION and Non-Intrusive Inspection Devices (NIIDs)

Q_34 Is primary inspection carried out using active NII devices?

If Yes, please specify what type of screening methods:

Screening Method	Risks Detected	
X-Ray	Explosives, stolen/mislabeled goods, illegal drugs	
Gamma Ray	Explosives, stolen/mislabeled goods, illegal drugs	
Pulsed Fast Neutron Analysis	Explosives, illegal drugs	
Thermal Neutron Activation	Explosives	

Q_35 What type(s) of X-Ray device(s)?

	Model	Trademark	Mobility	Average age (years)	Number of units
Type #1					
Type #2					
Type #3					
Type #4					
Type #5					

If Other, please specify:

Q_36 Who owns the X-Ray device(s)?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					
If a private service provider under contract:					
Contract signed with					
If Other, please specify:					
Duration of the contract (years)					
Cost-basis for the contract					

Q_37 Who provides tool maintenance?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					
If a private service provider under contract:					
Contract signed with					
If Other, please specify:					
Duration of the contract (years)					
Cost-basis for the contract					

Q_38 Where are located the X-Ray devices?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					

Q_39 What type(s) of Gamma Ray device?

	Model	Trademark	Mobility	Average age (years)	Number of units
Type #1					
Type #2					
Type #3					
Type #4					
Type #5					

If Other, please specify:

Q_40 Who owns the Gamma-Ray device(s)?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					

If a private service provider under contract:

Contract signed with					
If Other, please specify:					
Duration of the contract (years)					
Cost-basis for the contract					

Q_41 Who provides tool maintenance?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					

If a private service provider under contract:

Contract signed with					
If Other, please specify:					
Duration of the contract (years)					
Cost-basis for the contract					

Q_42 Where are located the Gamma-Ray devices?

	Type #1	Type #2	Type #3	Type #4	Type #5
If Other, please specify:					

Q_43 What type(s) of Fast Neutron Analysis (FNA) device?

	Model	Trademark	Mobility	Average age (years)	Number of units
Type #1					
Type #2					
Type #3					
Type #4					
Type #5					

If Other, please specify:

Q_44 What type(s) of Thermal Neutron Activation (TNA) device?

	Model	Trademark	Mobility	Average age (years)	Number of units
Type #1					
Type #2					
Type #3					
Type #4					
Type #5					

If Other, please specify:

Q_45 Has the installation of the NIIDs created an additional re-organisation of land use within the Port area (in addition to the installation of RPMs)?

	X-Ray	Gamma Ray	FNA	TNA
Level of reorganization				

PRIMARY INSPECTION and Track Devices

Q_46 Have you installed the following types of track devices at major ports and airports handling international cargo?

	Port #1	Port #2	Airport #1	Airport #2
OCR and Image recognition system				
If Yes, please specify:				
Electronic seal technology				
If Yes, please specify:				
Integrated Surveillance Intelligence System				
If Yes, please specify:				

Q_47 Have you organized joint inspection lanes using both RPM and NIID technology, plus eventually, other cargo tracking device(s)?

If Yes, please describe the organization of your joint inspection lane(s):

If Yes, are the Alarm Stations serving both RPMs and NIIDs?

Q_48 The operation of the scanning process requires a team of officers. The composition of this team depends on the configuration of the site.

Could you indicate the size of this team at major ports and airports handling international cargo? Please refer to the following profiles.

	Port #1	Port #2	Airport #1	Airport #2
Scanner manager who ensures efficient operations of the scanning unit(s), including liaison with port/terminal authority and Customs intelligence officers.				
Marshaller who controls the movement of cargo and containers into and out of the scanning area.				
Image analyst who interprets the images from the scanning equipment. In case of mobile unit, the image analyst may also be the driver of the scanner.				
Technical staff who service and maintain the scanner.				
Radiation expert who ensures compliance with national (Health) regulations and issues scanning operation licences.				

	Type	Number
Other (Specify type and number of staff)		
Other (Specify type and number of staff)		
Other (Specify type and number of staff)		

SECONDARY INSPECTION:
Radioactive Isotope Identification Devices (RIIDs) and Personal Radiation Detectors (PRDs)

Secondary inspection equipment is utilized to isolate the location of a radioactive source and to perform isotopic identification of the container's contents. This secondary equipment assists the operator in differentiating between naturally occurring radioactive material (NORM) and weapons grade materials of concern.

Identification equipment ranges from hand-held radioactive isotope identification devices (RIIDs), Personal Radiation Detectors (PRDs) to large-scale advanced spectroscopic portals (ASP).

Q_49 Is secondary inspection carried out using RIIDs (for ex.: HPGe, NaI, or others)?

What type(s) of RIIDs?

	Model	Trademark	Average age (years)	Number of units
Type #1				
Type #2				
Type #3				
Type #4				
Type #5				

If Other, please specify:

Q-50 Is secondary inspection carried out using PRDs (for ex: survey meters, pagers, etc.)?

What type(s) of PRDs?

	Model	Trademark	Average age (years)	Number of units
Type #1				
Type #2				
Type #3				
Type #4				
Type #5				

If Other, please specify:

Q_51 Have you installed advanced spectroscopic portals (ASP) at your major ports?

How many?

Are you planning to install ASPs at your major ports, in a near future?

How many?

SECONDARY INSPECTION: Other common tools

Other tools are also used for secondary inspection. These tools include vapor and trace detection systems, busters and canines.

Q_52 Are you using the following tools for secondary inspection?

Vapor detection systems	
Trace detection systems	
Busters	
Canines	

Q_53 What type(s) of Vapor Detection Systems?

	Model	Trademark	Average age (years)	Number of units
Type #1				
Type #2				
Type #3				
Type #4				
Type #5				

If Other, please specify:

Q_54 What type(s) of Trace Detection Systems?

	Model	Trademark	Average age (years)	Number of units
Type #1				
Type #2				
Type #3				
Type #4				
Type #5				

If Other, please specify:

Q_55 What type(s) of Busters?

	Model	Trademark	Average age (years)	Number of units
Type #1				
Type #2				
Type #3				
Type #4				
Type #5				

If Other, please specify:

CANINES: Drug- and explosives-detecting canines are widely considered by security experts to be the most effective way to screen cargo since they have the fewest drawbacks of any method currently available. Dogs have a very sensitive sense of smell, and they can be trained to passively alert handlers of the presence of explosive materials or drugs. Properly trained canines very rarely give false positive alerts. Canines can be trained to detect either explosives or drugs, but should never be trained to detect both. Usually, a canine unit consists of 2 to 4 teams with 1 handler and 1 to 2 dogs per team.

Q_56 How many canine units do you have?

How many teams per canine unit do you have?

How many dogs per team do you have?

Any particular view on Cargo Identification tools?

Comments on Part TWO of this Questionnaire

Contact Details

Please provide the contact details of the person the Project Overseer can contact if clarification of any answers provided on this questionnaire is required.

Main contact person:	
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Asia-Pacific
Economic Cooperation

CTI – Sub-Committee on Customs Procedures (SCCP)

Annex II
to the report

Experience exchange
on the use of tools and Information Technology
for goods identification

Background Information to the Questionnaire

SUNAT
Lima, Peru
18 December 2009

Background information on issues related to Goods Identification

The following documents form part of a basic background information on issues related to Goods Identification:

Brief note on Non-Intrusive Inspection Devices (NIID)

NIID were originally developed to address the threat of smugglers using increasingly sophisticated techniques to conceal narcotics deep in commercial cargo and conveyances. These systems, in many cases, give Customs inspectors the capability to perform thorough examinations of cargo without having to resort to the costly, time consuming process of unloading cargo for manual searches, or intrusive examinations of conveyances by methods such as drilling and dismantling.

Non-Intrusive Inspection (NII) technology serves as a force multiplier and to complement the work of Customs officers, canine enforcement officers and Border Patrol agents in guarding countries from terrorism. These technologies serve a vital function in day-to-day inspection and movement of tens of thousand of passengers, pedestrians, vehicles, trucks, cargo containers and baggage, at our borders and ports of entry.

NIID can be grouped into **active detection** systems and **passive detection** systems.

ACTIVE DETECTION SYSTEMS

The active detection systems emit x-rays or gamma rays to stimulate the material within the cargo unit so that detectors may analyze the effects of stimulation and produce an image of a container's content. Customs officers analyze these images to determine where there are anomalies associated with the cargo listed on the manifest.

Gamma-ray radiography uses a radioactive source, such as Cobalt-60 or Cesium-137. The X-ray systems typically use an energy spectrum ranging from 2.5 to 9 MeV. These units can be fixed, semi-fixed or mobile. Some operate by the driver passing through the equipment, while others require the driver to exit the vehicle while the unit passes over the container or the conveyance is pulled through the NII system. Caution must be exercised when utilizing NII equipment, as healthy safety concerns associated with radiation emissions need to be addressed in accordance with national, local and union regulations.

Gamma Ray

Gamma ray systems are active detection systems that use a radioactive element to produce gamma rays, which are directed at the cargo unit. An image is displayed on a screen as the gamma rays interact with the material in the container. These machines may be fixed in place, or they may be placed on a vehicle for mobility. The downsides to gamma ray systems are that they cannot identify specific threats, and they have difficulty differentiating between materials when scanning high-density cargo. Costs range from $500,000 to about $3 million per machine, and they can scan a cargo unit in 2 to 5 minutes.

Examples of Gamma ray systems may include:

- Vehicle and Container Inspection System (VACIS), a fixed gamma ray technology used to scan tankers, commercial trucks, sea and air containers at the rate of 20 vehicles per hour.
- Rail Vehicle and Container Inspection System (R-VACIS), a fixed gamma ray technology used to freight cars at the rate of five miles per hour or 260 rail cars per hour.
- Pallet VACIS, a fixed gamma ray technology used to scan pallets at the throughput rate of 24 pallets per hour.

- Mobile Vehicle and Container Inspection System (M-VACIS), a mobile, truck-mounted gamma ray technology used to scan tankers, commercial trucks, sea and air containers at the rate of 20 vehicles per hour.
- Mobile Truck X-ray (MTXR), a mobile x-ray system used to scan commercial vehicles at the rate of 6 vehicles per hour.
- Mobile Sea Container X-Ray System (MCXR), a prototype, self-propelled x-ray system used to examine sea containers at the throughput rate of 25 containers per hour.

X-Ray

X-ray systems generally take a few minutes to scan a standard 40-foot container. More advanced x-ray systems can take only a few seconds. However, total inspection cycle times may range from 7-15 minutes or longer due to image analysis.

Examples of X-ray systems may include:

- Backscatter and Transmission X-Ray Scanning: The backscatter X-ray technology is complementing the transmission X-rays that penetrate layers of materials and are capable of detecting weapons, metallic bomb components concealed in cargo, etc. Transmission X-rays can miss out on items such as plastic weapons, explosives and drugs that are usually transparent to X-rays, particularly if they are placed in false compartments on the surface of cargo containers. The backscatter X-ray technology allows easy detection of contraband hidden in false compartments and near the surface region of a typical container/truck.
- Truck X-Ray (TXR) system, a fixed x-ray system used to scan commercial vehicles at the rate of 6 vehicles per hour.

Neutron techniques

Pulsed Fast Neutron Analysis (FNA)

The Fast Neutron Analysis (FNA) is among the low-cost methods in neutron techniques with the ability to probe deep into the material content of the object and recognise multiple signatures. However, the imaging is limited to smaller objects.

The Pulsed FNA, though expensive, is an improvement over the above method. It uses short bursts of neutrons travelling at specific velocity to scan the complete volume of the containers and measure cargo density to identify the chemical composition of the container's contents. Pulsed neutrons are directed at the cargo unit, interact with the cargo's material, and "create gamma rays with energies characteristic of its elemental composition" that are used to display an image of the contents on a screen. This can reveal the presence of any material with specific elemental concentrations similar to known threat objects and materials. It can require building modifications due to its size. The cost per machine ranges from $10 million to $25 million, and inspection time takes a minimum of one hour per cargo unit.

Thermal Neutron Activation (TNA)

Thermal neutrons are directed at the cargo unit and absorbed by the material within. As a result, a gamma ray photon is emitted and its energy signature is detected by sensors, which can then determine specific element concentrations that might be a sign of an explosive. Thermal neutron activation systems can either be fixed in place or mounted on a vehicle for mobility. The applications include detection of explosives and drugs. TNA is designed to prevent vehicle and container bombs. It is the simplest of all

neutron-based techniques and can be deployed independently. Costs range from $500,000 to $3 million per machine. The system takes a minimum of one hour to scan a cargo unit.

PASSIVE DETECTION SYSTEMS

Passive detection systems do not require the stimulation of materials to determine a threat presence. In general, these systems are transportable systems.

Radiation Portal Monitor (RPM)

The RPM is a detection device that provides Customs with a passive, non-intrusive means to screen trucks, cargo containers, rail cars, passenger vehicles, and other conveyances for radiation emanating from nuclear devices, dirty bombs, special nuclear materials, natural sources, and isotopes commonly used in medicine and industry.

RPMs detect the presence of gamma and neutron radiation and are used in the interdiction and location of radioactive materials. As passive systems, no safety concerns exist during regular equipment operations. RPMs are used wherever there is a CSI port. Customs officers monitoring RPMs are also equiped with Personnel Radiation Detectors (PRDs) and Radiation Isotope Identification Device (RIID) to determine the presence of radiation. They are used for officer safety and warn an officer of a radiation danger.

Radiation Isotope Identifier (RIID)

The RIID is a hand-held instrument capable of detecting gamma and neutron emissions from radioactive sources, including nuclear, medical and industrial isotopes. Customs officers use this device to determine the exact identity of a radioactive source causing an alarm. RIIDs typically cost about $3,000 to $18,000.

Personal Radiation Detector (PRD)

All radioactive substances emit radiation (i.e., x-rays, alpha rays, neutrons), which is detected and measured by a detector in the radiation detection system. High levels of specific types of radiation may indicate a threat object. Radiation detectors are small and are easily portable, and they can be operated either by a battery, a computer, or electronically. Machines typically cost between $10,000 and $50,000 and can scan a cargo unit in 30 to 60 seconds.

The PRD is a small, but highly sensitive, device carried by Customs officers at ports of entry and Customs Border Patrol agents at roadway checkpoints. It will sound an alarm if radiation is detected during an inspection or enforcement operation. It is a portable gamma ray radiation detector for use in interdiction and location of radioactive materials, especially nuclear materials. Handheld radiation detection equipment is generally less expensive than fixed radiation portal monitors, in part, because there are no installation costs associated with providing handheld equipment.

Note: Radiation pagers are small radiation detection devices worn on belts by border security personnel to continuously monitor levels of radiation in the area. Pagers are considered personal safety devices and, therefore, should not be relied upon to implement secondary inspections. Radiation pagers cost about $1,500.

Vapor and Trace Detection systems

Vapor detection machines are equipped with a sensor that collects air samples from around the cargo unit. Spectrographic analysis is performed to determine the molecular makeup of the material within the unit. Commercial information indicates that this technology can identify more than 20 different narcotics or explosive compounds. Vapor detection machines are relatively small and light, and they can be battery-

operated, computer-operated, or electrically-operated. Vapor detection is a passive detection system, meaning it does not require the stimulation of materials to determine a threat presence.

Trace detection devices use a swipe to wipe the cargo unit and pick up particulate matter. Spectrographic analysis is performed on the swipe to determine the molecular makeup of the material picked up on the unit. Like vapor detection devices, trace detection devices are relatively small and can be operated by battery, computer, or electronically. According to US Transportation Security Administration (TSA), these machines have "shown few problems" when screening cargo.

Both vapor and trace detection systems have a cost per unit ranging from $30,000 to $50,000, and can process a cargo shipment in about 30 to 60 seconds.

Itemizer

An Itemizer is a trace particle detection device capable of identifying both explosives and narcotics. The device is portable and based upon ion trap mobility spectrometry capable of detecting and identifying 40 different narcotics or explosive compounds.

Canine

Drug- and explosives-detecting canines are widely considered by security experts to be the most effective way to screen cargo since they have the fewest drawbacks of any method currently available. Dogs have a very sensitive sense of smell, and they can be trained to passively alert handlers of the presence of explosive materials or drugs. Properly trained canines very rarely give false positive alerts. Canines can be trained to detect either explosives or drugs, but should never be trained to detect both. Canines used for drug detection may work 2 or 4 hour shifts each day with periodic rest. Canines trained to detect explosives may only work 30 to 60 minutes before taking a 20-minute rest. Canines can clear 400 to 500 cargo parcels for both drugs and explosives in about 30 minutes. It is very important for a canine to receive extensive training, care, and rest for it to perform properly. Yearly maintenance costs can range from $7,000 to $50,000 per canine unit (a canine unit consists of 2 to 4 teams with 1 handler and 1 to 2 dogs per team).

TRACK DEVICES

Optical Character Recognition (OCR) and Image recognition

Within a container port, inspections are typically tracked by container numbers. The process of identifying the container number ranges from manual input using approximately 4 mounted video or still image cameras to automated Optical Character Recognition (OCR). These cameras are positioned in close proximity of the scanning equipment. OCR is utilized in all current SFI deployments to facilitate the speed and accuracy of data transmission. Without OCR, manually inputting the container numbers for all non-alarming containers could potentially become a full-time job.

Radio Frequency Identification Device (RFID)

This technology is used for tracking cargo and vehicles. RFID tags can be used to track container movements based on a radio frequency signal. Radio frequency transceivers are now in common use. The latest radiation detection portals and container scanning equipment are being combined into a single unit and capture images of trucks moving at speeds up to ten mph. Large ports would need several devices to ensure that the screening process would not slow the flow of trucks.

Integrated Surveillance Intelligence System (ISIS)

It consists of the Remote Video Surveillance (RVS) camera systems, sensors, and the Integrated Computer Assisted Detection (ICAD) database. ISIS serves to detect intrusion, aid in agent dispatching, and estimating attempts of illegal entry.

Integrated Surveillance Intelligence System (ISIS)

It consists of the Remote Video Surveillance (RVS) camera systems, sensors, and the Integrated Computer Assisted Detection (ICAD) database. ISIS serves to detect intrusion, aid in agent dispatching, and estimating attempts of illegal entry.

Table 4.1. Technology characteristics

	Descriptions	Indicates potential presence of threat	Provides material discrimination	Time for inspection	Installation	Cost (in 2005)
Active systems						
Acoustic	An ultrasonic transducer is put into the container and a sensor detects the reflection and forms an image.	Yes, in liquids	No	2-5 minutes/ object	Portable/ desktop equipment, which can be operated by battery or wall plug power	$$
Gamma ray	The gamma rays interact with the object and are displayed as an image.	Yes	No		Mobile, fixed or relocatable sites. Fixed and relocatable sites require local infrastructure of power, road access, personnel facilities and attention to radiation safety	$$$
Pulsed Fast Neutron Analysis (PFNA)	Pulsed neutrons are directed at the object and create gamma rays with energies characteristic of its elemental composition.	Yes	Yes	90+ minutes/ object		$$$$$
Thermal Neutron Activation (TNA)	Sophisticated sensors detect the energy of the gamma ray photon emitted when the thermal neutron is absorbed by material within the object.	Yes	Yes			$$$
X-ray						
Standard transmission	The transmission of x-rays is directed through the cargo to a detector and presents one “shadowgram” image to that overlays all items in the beam path.	Yes	No	2-5 minutes/ object		$$$/$$$$
Dual energy transmission	Two different x-ray energy spectra are used. Generally ineffective for large cargoes.	n.a.	Not in high density cargos			n.a.
Dual view transmission	Two views of the object are displayed.	Yes	No			$$$$
Backscatter with transmission	Two or more views are displayed. Backscatter images highlight items in the object that contain low atomic number elements.	Yes	Yes			$$$
Passive systems						
Canine use	Dogs are trained to alert the presence of explosives and other threat objects.	Yes	Yes	0.5-1 minute/ object	Requires care, feeding and shelter, together with trained handlers	$
Radiation detection	A detector measures the ionizing radiation or other characteristic radiation emitted from a radioactive substance.	Yes	Yes		Portable/ desktop equipment, which can be operated by battery or wall plug power	$
Trace detection/ vapour detection	A “sniffer” type sensor collects and analyses air samples.	Yes	Yes			$

Cost key: **$** ≤ $50 k; **$$** ≤ 100 k; **$$$** ≤ $1 M; **$$$$** ≤ $5 M; **$$$$$** ≥ $10 M.

Source: This table was created based upon the information in COAC Border Security Technical Advisory Group Volume 6 – Report on Non-intrusive Detection Technologies.
This table appears on page 50 of the document accessible from http://www.internationaltransportforum.org/europe/ecmt/pubpdf/05ContainerSec.pdf

Table 2.1: Breakdown of Screening Method Characteristics

	COST (in 2004)	SCREEN FOR	TIME TO INSPECT	MAT'L DISCR.	MAT'L ID	INSTALLATION
ACTIVE SYSTEMS						
X-ray	$1 - 10 million	Explosives, stolen/mislabeled goods, illegal drugs	2 - 5 min	No	No	Mobile or fixed.Fixed sites needpower, road access, personnel facilities, and attention to radiation safety. Vehicles needed for mobility.
Standard	$1 - 5 million		2 - 5 min	No	No	
Dual View	$10 million		2 - 5 min	No	No	
Backscatter	$2 - 5 million		2 - 5 min	No	No	
Gamma Ray	$500,000 - $3 million		2 - 5 min	No	No	
Pulsed Fast Neutron Analysis	$10 - 25 million	Explosives, illegal drugs	1 hr +	Yes	Yes	
Thermal Neutron Activation	$500,000 - $3 million	Explosives	1 hr +	Yes	Yes	
PASSIVE SYSTEMS						
Vapor Detection	$30,000 - $50,000	Prohibited gases	30 - 60 sec	Yes	Yes	Portable or desktop equip. operated by battery or wallplug.
Trace Detection	$30,000 - $50,000	Explosives, illegal drugs	30 - 60 sec	Yes	Yes	
Radiation Detection	$10,000 - $50,000	Radioactive materials	30 - 60 sec	No	Yes, for radioactive material	
Canines	$7,000 - $120,000 per unit per year	Explosives, illegal drugs	10 - 60 sec	Limited by amt. of training	Yes	Require care, feeding, shelter.

Source: U.S. Treasury Advisory Committee on Commercial Operations of the United States Customs Service
This table appears on page 26 of the document accessible from http://www.cts.virginia.edu/docs/UVACTS-5-14-63.pdf

Cost estimations of cargo identification tools[1] in the context of a small container port

Small Container Port – Port Authority Level Installation

Table 11. Small Container Port – Port Authority Initialization Costs (US$)

	Description	Equipment Quantity	Initialization Cost
Primary Inspection	RPM	2	870 000
	NII	2	6 453 334
Secondary Inspection	HPGe	1	70 000
	NaI RIID	2	20 600
	Survey Meter	2	6 800
	Pager	12	12 000
	ASP	0	0
Stations	RPM Alarm Station	1	0
	Secondary Inspection Team	1	0
Fiber Optic Lease	Port Fiber Network	N/A	0
	Total Initialization Cost		**7 432 734**

Table 12. Small Container Port – Port Authority Annual Operational Costs (US$)

	Description	Maintenance Fee	FTE	Personnel Cost
Primary Inspection	RPM	11 000	0	0
	NII	569 333	18	2 480 454
Secondary Inspection	HPGe	7 000	0	0
	NaI RIID	2 060	0	0
	Survey Meter	11 000	0	0
	Pager	4 080	0	0
	ASP	0	0	0
Stations	RPM Alarm Station	0	5	573 530
	Secondary Inspection Team	0	5	631 273
Fiber Optic Lease	Port Fiber Network	0	0	400 000
	Subtotal Cost	604 473		4 085 257
	Total Operational Cost	**4 689 730**		

***FTE** refers to the Full Time Equivalent staffing required to operate the tool.*

[1] Tables extracted from the MSc thesis "100% Container Scanning: Security Policy Implications for Global Supply Chains" by Allison C. Bennett and Yi Zhuan Chin, Massachusetts Institute of Technology, June 2008 (http://web.mit.edu/screspons e/repository/Bennett_Chin_MIT_Thesis_June_08.pdf)

Table 13. Small Container Port – Port Authority Annual Costs (US$)
Based on 10 Year Equipment Life-Cycle

	Description	Annual Cost
Initialization cost	RPM	98 000
	NII	3 695 121
Operating cost	HPGe	14 000
	NaI RIID	4 120
	Survey Meter	11 680
	Pager	5 280
	ASP	0
Stations	RPM Alarm Station	573 530
	Secondary Inspection Team	631 273
Fiber Optic Lease	Port Fiber Network	400 000
	Total Annual Cost	**5 433 004**

Small Container Port – Terminal Operator Level Installation

Table 15. Small Container Port – Terminal Operator Initialization Costs (US$)

	Description	Equipment Quantity	Initialization Cost
Primary Inspection	RPM	4	1 740 000
	NII	4	12 906 668
Secondary Inspection	HPGe	2	140 000
	NaI RIID	4	41 200
	Survey Meter	4	13 600
	Pager	24	24 000
	ASP	0	0
Stations	RPM Alarm Station	2	0
	Secondary Inspection Team	2	0
Fiber Optic Lease	Port Fiber Network	N/A	0
	Total Initialization Cost		**14 865 468**

Table 16. Small Container Port – Terminal Operator Annual Operational Costs (US$)

	Description	Maintenance Fee	FTE	Personnel Cost
Primary Inspection	RPM	22 000	0	0
	NII	1 138 667	36	4 960 908
Secondary Inspection	HPGe	14 000	0	0
	NaI RIID	4 120	0	0
	Survey Meter	22 000	0	0
	Pager	8 160	0	0
	ASP	0	0	0
Stations	RPM Alarm Station	0	10	1 147 060
	Secondary Inspection Team	0	10	1 262 545
Fiber Optic Lease	Port Fiber Network	0	0	400 000
	Subtotal Cost	1 208 947		7 770 513
	Total Operational Cost	**8 979 460**		

FTE *refers to the Full Time Equivalent staffing required to operate the tool.*

Table 17. Small Container Port – Terminal Operator Annual Costs (US$) Based on 10 Year Equipment Life-Cycle

	Description	Annual Cost
Initialization cost	RPM	196 000
	NII	7 390 242
Operating cost	HPGe	28 000
	NaI RIID	8 240
	Survey Meter	23 360
	Pager	10 560
	ASP	0
Stations	RPM Alarm Station	1 147 060
	Secondary Inspection Team	1 262 545
Fiber Optic Lease	Port Fiber Network	400 000
	Total Annual Cost	**10 466 007**

Cost estimations of cargo identification tools[2] in the context of a large container port

Large Container Port – Port Authority Level Installation

Table 19. Large Container Port – Port Authority Initialization Costs (US$)

	Description	Equipment Quantity	Initialization Cost
Primary Inspection	RPM	4	1 740 000
	NII	4	12 906 668
Secondary Inspection	HPGe	2	140 000
	NaI RIID	4	41 200
	Survey Meter	4	13 600
	Pager	24	24 000
	ASP	0	0
Stations	RPM Alarm Station	2	0
	Secondary Inspection Team	2	0
Fiber Optic Lease	Port Fiber Network	N/A	0
	Total Initialization Cost		**14 865 468**

Table 20. Large Container Port – Port Authority Annual Operational Costs (US$)

	Description	Maintenance Fee	FTE	Personnel Cost
Primary Inspection	RPM	22 000	0	0
	NII	1 138 667	36	4 960 908
Secondary Inspection	HPGe	14 000	0	0
	NaI RIID	4 120	0	0
	Survey Meter	22 000	0	0
	Pager	8 160	0	0
	ASP	0	0	0
Stations	RPM Alarm Station	0	10	1 147 060
	Secondary Inspection Team	0	10	1 262 545
Fiber Optic Lease	Port Fiber Network	0	0	400 000
	Subtotal Cost	1 208 947		7 770 513
	Total Operational Cost	**8 979 460**		

[2] Tables extracted from the MSc thesis "100% Container Scanning: Security Policy Implications for Global Supply Chains" by Allison C. Bennett and Yi Zhuan Chin, Massachusetts Institute of Technology, June 2008 (http://web.mit.edu/screspons e/repository/Bennett_Chin_MIT_Thesis_June_08.pdf)

Table 21. Large Container Port – Port Authority Annual Costs (US$)
Based on 10 Year Equipment Life-Cycle

	Description	Annual Cost
Initialization cost	RPM	196 000
	NII	7 390 242
Operating cost	HPGe	28 000
	NaI RIID	8 240
	Survey Meter	23 360
	Pager	10 560
	ASP	0
Stations	RPM Alarm Station	1 147 060
	Secondary Inspection Team	1 262 546
Fiber Optic Lease	Port Fiber Network	400 000
	Total Annual Cost	**10 466 008**

Large Container Port – Terminal Operator Level Installation

Table 23. Large Container Port – Terminal Operator Initialization Costs (US$)

	Description	Equipment Quantity	Initialization Cost
Primary Inspection	RPM	20	8 700 000
	NII	20	64 533 340
Secondary Inspection	HPGe	10	700 000
	NaI RIID	20	206 000
	Survey Meter	20	68 000
	Pager	240	240 000
	ASP	0	0
Stations	RPM Alarm Station	2	0
	Secondary Inspection Team	2	0
Fiber Optic Lease	Port Fiber Network	N/A	0
	Total Initialization Cost		**74 447 340**

Table 24. Large Container Port – Terminal Operator Annual Operational Costs (US$)

	Description	Maintenance Fee	FTE	Personnel Cost
Primary Inspection	RPM	110 000	0	0
	NII	5 693 334	180	24 804 540
Secondary Inspection	HPGe	70 000	0	0
	NaI RIID	20 600	0	0
	Survey Meter	110 000	0	0
	Pager	81 600	0	0
	ASP	0	0	0
Stations	RPM Alarm Station	0	50	5 735 300
	Secondary Inspection Team	0	50	6 312 725
Fiber Optic Lease	Port Fiber Network	0	0	400 000
	Subtotal Cost	6 085 534		37 252 565
	Total Operational Cost	**43 338 099**		

Table 25. Large Container Port – Terminal Operator Annual Costs (US$) Based on 10 Year Equipment Life-Cycle

	Description	Annual Cost
Initialization cost	RPM	980 000
	NII	36 951 210
Operating cost	HPGe	140 000
	NaI RIID	41 200
	Survey Meter	116 800
	Pager	105 600
	ASP	
Stations	RPM Alarm Station	5 735 300
	Secondary Inspection Team	6 312 725
Fiber Optic Lease	Port Fiber Network	400 000
	Total Annual Cost	**50 782 835**

MAIN TECHNOLOGY PROVIDERS (2008)

This information has been extracted from pages 72 and following, of the MSc thesis "*100% Container Scanning: Security Policy Implications for Global Supply Chains*" presented by Allison C. Bennett and Yi Zhuan Chin at the Massachusetts Institute of Technology (June 2008). This thesis can be downloaded from http://ctl.mit.edu/index.pl?iid=10139 (Bennett_Chin_MIT_Thesis_June_08.pdf)

Nuctech

Nuctech Company Limited, which originated out of Tsinghua University China, has exported scanning technology solutions to more than 70 countries. They claim to hold the largest market share in the field of high-energy security inspection systems. Although an international standard has yet to be established for RPMs and NII scanners, US government agencies are currently conducting a comprehensive evaluation of Nuctech's NII scanner and RPMs in Beijing, China. Nuctech's NII prices range from US$1.9 million to $3.5 million. The average throughput for Nuctech's NII equipment in actual operations is 20-25 vehicles per hour, with a unit that requires the driver to exit the vehicle prior to scanning. Nuctech's Fast Scan System for RPM allows vehicles to drive through the portals at a speed of 5-15 km/hour, with theoretical throughput of 150 vehicles per hour. Nuctech's mobile scanner is 4 MeVs, with a radiation safety zone requirement of 43 meters long and 38 meters wide. This safety zone is established to reduce the amount of radiation received by personnel in the area. Unlike the RPM equipment, NII emits radiation. Nuctech's mobile model requires the driver to exit the vehicle prior to scanning. The drive through scanner is 2.5 MeV, with a radiation safety zone is 20 meters long and 7 meters wide

SAIC

SAIC, a US-based company is another major supplier of NII equipment. Their P7500 is currently deployed in a number of CUSTOMS installations overseas, including the SFI installation in Southampton, United Kingdom. This 7.5 MeV high-energy X-ray also advertises a theoretical scanning capability of 150 containers per hour. The price for this system is US$2.4 million (SAIC, 2007).

Smith Detection

Smith Detection, a United Kingdom based public company, is active in NII equipment sales around the world. According to the authorized federal supply schedule catalogue price, valid through July 31, 2001, the cost for a low throughput Mobile Scan Cab2000 is US$1.33 million, while the high throughput HCV Mobile 2500II NII is US$2.96 million. Currently the delivery schedule of these 2 units is 8 to 10 months. The warranty consists of 1 year for parts, labor and travel, with additional details outlined in individual proposals. Smith also provides a system-training course for $10,653 per week.

TSA

Additionally, TSA Systems, a vendor to DOE international installation, provided their July 2007 standard product price list. The list was referenced to obtain an estimate for survey meters utilized in secondary inspection. Prices vary based on capability, but the approximate single unit purchase price is $3,400 (personal communication, April 10, 2008). At SFI Ports and under the Megaports Initiative, high-purity germanium (HPGe) (for gamma detection) and moderated 3He tubes (for neutron detection) based RIID systems are used in addition to NaI systems. These HPGe detectors have better resolution when compared to NaI detectors; however, they are not currently being deployed at US ports. We contacted one vendor, Ortec, which provided us single unit pricing for the Ortec Detective-EX, which contains both a gamma and neutron identifier at US$70,000 (personal communication, April 17, 2007). A summary of vendor pricing is included in the Table below.

Equipment Type	***Equipment Cost (in 2007)***
Nuctech NII	$1,900,000 -$3,500,000
SAIC P7500 NII	$2,400,000
Smith Detection Cab2000	$1,330,000
Smith Detection HCV Mobile 2500II NII	$2,960,000
TSA Survey Meter	$3,400
Ortec Detective-EX HPGe	$70,000

Some of the major ports in APEC Member Economies

The following non-exhaustive list includes some of the major ports in APEC Member Economies that make use of port security technologies (18 ports in 16 APEC economies):

- Port of Melbourne, Australia
- Port of Vancouver, Canada
- Port of Shanghai, China
- Port of Shenzhen, China*
- Port of Hong Kong*
- Port of Tanjung Priok, Indonesia
- Port of Yokohama, Japan
- Port of Busan, Korea
- Port Klang, Malaysia
- Port of Auckland, New Zealand*
- Port of Callao, Peru
- Port of Manila, Philippines
- Port of Singapore
- Port of Kaohsiung, Chinese Taipei*
- Port of Laem Chabang, Thailand
- Port of Los Angeles, USA*
- Port of New York/New Jersey, USA*
- Port of Ho Chi Minh, Viet Nam

Asia-Pacific
Economic Cooperation

CTI – Sub-Committee on Customs Procedures (SCCP)

Annex III
to the report

Experience exchange
on the use of tools and Information Technology
for goods identification

Database of answers
to Part ONE
of the Qestionnaire

SUNAT
Lima, Peru
18 December 2009

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Questionnaire:
Answers to Part ONE

			AUS	CDA	HKC	JPN	NZ	CT	USA		CHL	PRC	MAS	MEX	PE	THA	VN	
Q_1		Health	Yes	Yes	Yes	0	No	No	Yes		No	No	Yes	Yes	Yes	Yes	No	
		Safety	No	Yes	Yes	0	Yes	Yes	Yes		No	Yes	Yes	Yes	Yes	Yes	Yes	
		Immigration	Yes	Yes	No	0	Yes	No	Yes		No	No	No	No	No	No	No	
		Environmental Protection	No	Yes	Yes	0	No	No	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Border Security	Yes	Yes	Yes	0	Yes	Yes	Yes		Yes	Yes	Yes	Yes	No	No	No	
		Trade Compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Currency	Yes	Yes	Yes	0	No	Yes	Yes		No	Yes	Yes	Yes	No	Yes	Yes	
		Stolen Property	Yes	Yes	Yes	0	Yes	Yes	Yes		Yes	Yes	No	No	No	Yes	No	
		Narcotics Trafficking Interdiction	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Weapons/Explosives	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Criminal Finance	Yes	Yes	Yes	0	Yes	Yes	Yes		No	Yes	Yes	Yes	Yes	Yes	Yes	
		National Law Enforcement	Yes	Yes	Yes	0	Yes	Yes	Yes		No	Yes	Yes	Yes	Yes	Yes	Yes	
		Other	Yes	0	Yes	0	0	No	0		Yes	0	No	No	No	No	No	
		If Other, please specify:	na / Flora / CIT	0	, IPRs, legitie based on		and revenu	0	0	try from the trade trat		0	0	0	0	0	0	
Q_2		Intelligence and Targeting	0	35	25	0	70	45	0		25	25	30	10	30	5	80	
		Documentary Discrepancy	0	35	15	0	0	20	0		5	25	10	15	10	5	10	
		Investigation	0	0	10	0	30	5	0		20	5	5	10	5	5	5	
		Laboratory Analysis	0	0	0	0	0	5	0		5	5	5	15	10	5	2	
		Random Inspection	0	1	10	0	0	20	0		10	1	5	10	2	40	5	
		Statistical Sampling or Modeling	0	0	0	0	0	0	0		5	25	25	5	30	5	3	
		Intrusive Examination	0	9	10	0	0	0	0		15	6	5	25	5	5	20	
		Non-intrusive Examination	0	20	30	0	0	5	0		15	8	15	10	8	30	3	
		Other	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
		Please specify the other enforcement strategy	0	0	0	0	f goods flov	Canines	ered enforcement stra		0	0	0	0	0	0	0	
Q_3		Port of Entry – Local Office	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Regional Office	Yes	Yes	Yes	Yes	No	No	0		Yes	Yes	Yes	No	No	No	Yes	
		Headquarters	Yes	Yes	No	Yes	No	No	Yes		Yes	No	Yes	Yes	Yes	Yes	No	
		Remote	Yes	Yes	No	Yes	No	No	Yes		No	No	No	No	No	No	Yes	
		Other	0	No	No	0	Yes	No	0		No	0	No	Yes	No	No	No	
		If Other, please specify:	0	0	0	0	oss the mai	0	0		0	0	0	entral offic	0	0	0	

Questionnaire:
Answers to Part ONE

			AUS	CDA	HKC	JPN	NZ	CT	USA		CHL	PRC	MAS	MEX	PE	THA	VN	
Q_4		Apron, Dockside or at Anchor	Yes	Yes	Yes	0	0	No	0		No	No	No	Yes	Yes	Yes	Yes	
		Within the Port Complex	Yes	Yes	Yes	0	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Co-located with another Agency	No	No	Yes	0	0	No	0		Yes	No	No	No	No	No	Yes	
		Other	No	No	Yes	Yes	0	No	0		Yes	No	No	0	Yes	No	0	
		If Other, please specify:	0	0	y Control Po	ns Inspectio	0	0	0		Border	0	0	0	rage termir		0	
Q_5		Apron, Dockside or at Anchor	0	15	25	0	0	0	0		0	0	0	40	10	0	10	
		Within the Airport/Port Complex	0	30	65	0	80	100	1		60	100	100	60	90	100	90	
		Within 5 miles of Airport/Port Complex	0	30	0	0	0	0	0		0	0	0	0	0	0	0	
		Remote Site (greater than 5 miles)	0	25	10	0	20	0	0		15	0	0	0	0	0	0	
		Co-located with another Agency	0	0	0	0	0	0	0		25	0	0	0	0	0	0	
Q_6		Airport/Marine Terminal/dockside	Yes	Yes	Yes	0	0	Yes	0		Yes	Yes	No	Yes	Yes	Yes	Yes	
		Port of Entry	Yes	Yes	Yes	0	0	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Off site Examination	Yes	Yes	Yes	0	Yes	No	Yes		Yes	Yes	No	No	No	Yes	No	
		Bonded Warehouse	Yes	Yes	No	0	Yes	Yes	Yes		Yes	Yes	Yes	No	Yes	Yes	Yes	
		Ultimate Consignee's Facility	Yes	No	Yes	0	0	No	0		Yes	Yes	Yes	No	No	Yes	Yes	
		Other	0	No	Yes	Yes	0	0	0		No	Yes	No	0	Yes	Yes	0	
		If Other, please specify:	0	0	at various	ns Inspectio	0	0	0		0	Customs Su	0	0	rage Termi	rage Termi	0	

Questionnaire:
Answers to Part ONE

				AUS	CDA	HKC	JPN	NZ	CT	USA		CHL	PRC	MAS	MEX	PE	THA	VN	
Q_7	*Apron, Dockside or at Anchor*	Administrative and Data Analysis		0	No	No	0	0	No	0		No	No	No	Yes	No	No	No	
		Documentary Review and Reporting		0	Yes	No	0	0	No	0		Yes	No	No	Yes	No	No	No	
		Intelligence and Targeting		0	No	No	0	0	No	0		No	No	No	Yes	No	No	Yes	
		Screening Examination		0	Yes	No	0	0	Yes	Yes		No	No	No	Yes	No	No	No	
		Physical Inspection		Yes	Yes	No	0	0	No	Yes		Yes	No	No	Yes	No	No	No	
	Within the Port Complex	Administrative and Data Analysis		0	Yes	Yes	0	0	Yes	0		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Documentary Review and Reporting		0	Yes	Yes	0	0	Yes	Yes		Yes	Yes	Yes	Yes	No	Yes	Yes	
		Intelligence and Targeting		0	Yes	Yes	0	0	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Screening Examination		Yes	Yes	Yes	0	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Physical Inspection		Yes	Yes	Yes	0	0	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	Co-located with another Agency	Administrative and Data Analysis		0	No	No	0	0	No	0		No	No	No	Yes	No	No	Yes	
		Documentary Review and Reporting		0	No	No	Yes	Yes	No	0		No	No	No	No	No	No	No	
		Intelligence and Targeting		0	No	No	0	Yes	No	Yes		No	No	No	No	No	No	Yes	
		Screening Examination		0	No	No	0	0	No	0		Yes	No	No	No	No	No	Yes	
		Physical Inspection		0	No	No	0	0	No	0		No	No	No	Yes	No	No	Yes	
	Other	Administrative and Data Analysis		Yes	Yes	Yes	0	Yes	No	Yes		Yes	0	No	0	No	No	Yes	
		Documentary Review and Reporting		Yes	Yes	Yes	0	0	No	0		Yes	0	No	0	Yes	No	Yes	
		Intelligence and Targeting		Yes	Yes	Yes	0	0	No	Yes		Yes	0	No	0	No	No	Yes	
		Screening Examination		0	No	Yes	Yes	0	No	0		No	0	No	0	No	No	No	
		Physical Inspection		0	Yes	Yes	Yes	Yes	No	Yes		No	0	No	0	No	No	No	
Q_8		Has a cost-recovery mechanism been established ?		Yes	No	No	No	Yes	No	No		No	No	No	No	No	No	No	
		Who contributes to this mechanism?		0	0	0	0	argo concer	0	0		0	0	0	0	0	0	0	
		If Others, please specify:		0	0	0	0	0	0	0		0	0	0	0	0	0	0	

Questionnaire:
Answers to Part ONE

			AUS	CDA	HKC	JPN	NZ	CT	USA	CHL	PRC	MAS	MEX	PE	THA	VN
Q_9		Number of Annual Inspections	0	0	0	0	225000	ˇ	0	75	0,05	0,05	25	0,05	0,05	0
		Percentage of Annual Passengers	0	0	0	0	2	0	0	0	5	1	10	1	0	0
		Percentage of Container Volume Throughput	0	0	30	0	2	0	0	0	4	3	15	3	95	0
		Percentage of Inspection Target Population	0	0	70	0	2	ˇ	0	25	1	100	50	100	0	0
		Other: (please specify)	0	0	ase detecte	0	agement o	0	uestion is unclear	0	0	0	ormation is	0	0	0
		Other: (please specify)	0	0	arrest /con	0	of arriving	0	0	0	0	0	0	0	0	0
		Other: (please specify)	0	0	gnments fo	0	ng of incom	0	0	0	0	0	0	0	0	0
Q_10		Data analysis and Profiling	Yes	Yes	Yes	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Documentary Review and Reporting	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Intelligence and Targeting	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Investigation	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		Laboratory Analysis	No	No	Yes	0	0	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
		Non-intrusive Screening and Examination	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Random or Statistical Sampling	No	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Physical Intrusive Examination	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Inspection Technology	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Other	0	No	No	0	0	No	0	No	0	0	0	0	0	0
		If Other, please specify:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q_11		Baggage	0	18	15	0	20	20	0	15	20	5	20	5	0	5
		Bulk Freight	0	2	25	0	10	30	0	40	15	4	30	4	5	5
		Container Freight	0	40	35	0	60	50	0	40	45	90	30	90	90	60
		Vessel/Aircraft	0	40	5	0	10	0	0	5	20	1	20	1	5	30
		Other	0	0	20	0	0	0	0	0	0	0	0	0	0	0
		If Other, please specify:	0	0	ehicle chec	0	0	0	pection target at every	0	0	0	0	0	0	0

Questionnaire:
Answers to Part ONE

			AUS	CDA	HKC	JPN	NZ	CT	USA	CHL	PRC	MAS	MEX	PE	THA	VN
Q_12		Illegal Aliens	No	No	Yes	0	0	0	0	No	Yes	0	No	0	No	Yes
		Plants	No	No	No	0	0	0	0	No	Yes	0	Yes	0	Yes	Yes
		Animals	No	No	No	0	0	0	0	No	Yes	0	Yes	0	Yes	Yes
		Weapons/Explosives	Yes	No	Yes	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	0	Yes	Yes
		Narcotics	Yes	Yes	Yes	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Currency	No	No	No	0	0	0	0	No	Yes	0	Yes	0	Yes	Yes
		Merchandise Trade Compliance	Yes	No	Yes	0	Yes	Yes	0	Yes	Yes	Yes	Yes	0	Yes	Yes
		Organics	No	No	No	0	0	0	0	No	0	0	No	0	Yes	Yes
		Please specify	0	0	0	0	0	0	0	0	0	0	0	0	0	CITES
		Inorganic	No	No	No	0	0	0	0	No	0	0	No	0	Yes	0
		Please specify	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	No	Yes	0	Yes	0	0	No	Yes	0	0	0	No	0
		Please specify	0	0	ble commo	0	tionable ma	IPR, CITES	ything illegal	0	配额管理、	0	0	0	0	0
Q_13		% of annual container volume throughput	Yes	No	Yes	0	No	Yes	0	No	No	Yes	Yes	Yes	Yes	Yes
		Maximum revenue collection compliance	0	No	Yes	0	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
		Maximum trade compliance	0	No	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		# or volume of seizures	Yes	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
		Increased/decreased # of cargo releases	0	No	Yes	0	0	No	0	No	No	Yes	Yes	No	Yes	Yes
		Increased fines and penalties	0	No	Yes	0	0	Yes	0	Yes	No	Yes	Yes	No	No	No
		Export/Import targeting effectiveness	Yes	Yes	Yes	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		# of arrests, indictments, convictions	0	Yes	Yes	0	0	No	0	No	No	Yes	Yes	No	Yes	No
		Positive search ratio	0	Yes	Yes	0	Yes	No	0	Yes	No	Yes	Yes	Yes	No	Yes
		Other	0	No	No	0	0	0	0	No	0	0	0	0	0	0
		If Other, please specify:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q_14		Criteria # 1	0	e have dev	igence and	0	pecific aler	or contrab	hare this information	New Importe	intelligence	untry of ori	risk analysis	try of desti	porters and	nation on the containe
		Criteria # 2	0	0	g of risk ind	0	dings - supp	ry of origin,	0	Kind of Mercha	mpany scor	ype of carg	dom select	specif Alert	pecify tarif	ected countries or reg
		Criteria # 3	0	0	rter/expert	0	time impo	go descript	0	Country of Or	risk analysis	porter's pro	ort of entr	core export	destinatio	high risk
		Criteria # 4	0	0	consignmen	0	ost unit rat	Consignee	0	Importer Behavior	0	r's compliar	e of contai	0	0	0
		Criteria # 5	0	0	0	0	ource count	stoms brok	0	0	0	0	Experience	0	0	0

Questionnaire:
Answers to Part ONE

			AUS	CDA	HKC	JPN	NZ	CT	USA		CHL	PRC	MAS	MEX	PE	THA	VN	
Q_15		Port of Entry – Local Office	0	Yes	Yes	Yes	Yes	Yes	0		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Regional Office	0	Yes	Yes	0	0	No	0		Yes	Yes	Yes	No	No	No	Yes	
		Headquarters	Yes	Yes	Yes	0	Yes	No	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Remote	0	Yes	Yes	0	0	No	0		No	No	No	Yes	No	No	Yes	
		Other	0	No	No	0	Yes	0	0		No	No	0	No	0	0	0	
		If Other, please specify:	0	0	0	0	ing Center	0	0		0	0	0	0	0	0	0	
Q_16		Successfull identifications	Yes	Yes	Yes	Yes	Yes	No	0		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Failures	Yes	Yes	Yes	Yes	0	No	0		Yes	Yes	Yes	Yes	No	Yes	Yes	
		Volume/number of cargo units inspected (throughput)	Yes	Yes	Yes	Yes	Yes	Yes	0		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Other	0	No	Yes	0	0	0	0		No	0	0	No	0	0	Yes	
		If Other, please specify:	0	that are no	hod, vehicl	0	0	0	an; what is a "failure" f		0	0	0	0	0	0	ted information	
Q_17		Manually in local Records Book	0	Yes	Yes	0	0	No	0		No	Yes	Yes	Yes	Yes	Yes	Yes	
		Customs computerized system	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		Port Authority computerized system	0	No	Yes	0	0	Yes	0		No	No	No	No	No	No	No	
		Other	0	No	Yes	0	0	0	0		No	No	0	Yes	0	0	0	
		If Other, please specify:	0	0	e computer	0	0	0	0		0	0	0	e true inte	0	0	0	
Q_18		Are inspections results shared with other concerned institutions?	0	No	Yes	No	0	No	Yes		Yes	0	Yes	Yes	Yes	No	Yes	
		With the Port Authority?	No	No	Yes	0	0	No	0		No	No	Yes	No	No	No	Yes	
		With other Customs Administrations abroad?	Yes	Yes	Yes	0	Yes	No	Yes		No	No	Yes	Yes	Yes	No	Yes	
		With other Institutions?	Yes	Yes	Yes	0	Yes	No	0		Yes	No	Yes	Yes	Yes	No	Yes	
		If Other, please specify:	0	esults with	forcement	0	encies, son	0	mation sharing, Treasury, Mobiliza		0	rug Enforce	orcement a	The Police		ired or requested		
Q_19		Fixed	0	30	38	0	20	90	0		60	15	80	69	0	100	0	
		Portable/Transportable	0	52	15	0	40	5	0		25	50	20	25	50	0	0	
		Mobile	0	18	47	0	40	5	0		15	35	0	6	50	0	0	

Questionnaire:
Answers to Part ONE

			AUS	CDA	HKC	JPN	NZ	CT	USA	CHL	PRC	MAS	MEX	PE	THA	VN
Q_20		X-ray	0	38	75	0	80	90	0	100	50	65	52	50	100	0
		Gamma Ray	0	4	0	0	0	0	0	0	0	0	22	0	0	0
		Fast/Thermal Neutron	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Radioactive Isotope Detector	0	10	0	0	0	0	0	0	15	5	1	5	0	0
		Radiation Detector	0	8	0	0	10	10	0	0	15	0	1	0	0	0
		Vapor/Trace Detector	0	40	20	0	10	0	0	0	10	5	6	20	0	0
		Other	0	0	5	0	0	0	0	0	10	25	18	25	0	0
		If Other, please specify:	0	0	etective do	0	0	0	0	0	Dogs	Dogs	Phazir	Dogs	0	ners, inspection tools c
Q_21		Passengers:	0	and Trace D	etal detecto	0	0	0	0	X-Ray	Radiation D	0	etal detect	Rayos X		0
		Baggage:	0	X-ray	ners, metal	X-ray	Fixed x-ray	X-Ray	0	X-Ray	Radiation D	Rapiscan	X-Ray	Rayos X		X-ray
		Freight at ports of entry:	0	on, gamma	-scanners, i	X-ray	ile, fixed ar	X-Ray	0	X-Ray	Radiation D	X-ray	, Gamma, I	Rayos X	x-ray	X-ray
Q_22	Staffing	Physical Examination	0	0	65	0	67	75	0	80	70	80	60	80	70	70
		Technology Screening	0	0	35	0	33	25	0	20	30	20	40	20	30	30
	Funding	Physical Examination	0	0	55	0	60	0	0	10	30	20	40	20	20	0
		Technology Screening	0	0	45	0	40	0	0	90	70	80	60	80	80	0
Q_23		Enforcement and control procedures	0	0	50	0	50	0	0	100	10	1	0	1	5	70
		Operations of cargo identification tools	0	0	39	0	25	0	0	100	60	8	0	8	3	10
		Interpretation of results	0	0	21	0	10	0	0	100	10	4	0	4	5	2
		Information Technology	0	0	10	0	5	0	0	50	20	1	0	1	3	5
		Other	0	0	0	0	0	ˇ	0	0	0	0	0	0	0	13
		If Other, specify:	0	0	0	0	elligence =	ndle such n	oyees, but d	ee 320 enf	orcement of	mber is perc	0	0	0	bove number is in rela
Q_24		Enforcement and control procedures	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Operations of cargo identification tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Interpretation of results	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Information Technology	0	0	11	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		If Other, please specify:	0	0	0	0	0	non	0	0	0	0	for customs	0	0	0
		Total number of FOREIGN personnel	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Questionnaire:
Answers to Part ONE

				AUS	CDA	HKC	JPN	NZ	CT	USA		CHL	PRC	MAS	MEX	PE	THA	VN	
Q_25	Locally	Enforcement and control procedures		0	0	40	0	100	ˇ	0		50	0	20	0	2	10	0	
		Operations of cargo identification tools		0	0	82	17	100	ˇ	0		25	0	30	0	25	2	0	
		Interpretation of results		0	0	52	15	100	ˇ	0		0	0	4	0	4	2	0	
		Information Technology		0	0	77	0	10	ˇ	0		10	0	5	0	2	2	0	
		Other		0	0	0	23	0	0	0		0	0	0	0	0	0	0	
	Abroad	Enforcement and control procedures		0	0	0	0	40	ˇ	0		15	0	10	0	1	0	0	
		Operations of cargo identification tools		0	0	0	0	0	ˇ	0		0	0	10	0	5	0	0	
		Interpretation of results		0	0	0	0	40	ˇ	0		0	0	1	0	1	0	0	
		Information Technology		0	0	0	0	0	ˇ	0		0	0	5	0	0	0	0	
		Other		0	0	0	0	0	0	0		0	0	0	0	0	0	0	
		If Other, please specify:		0	0	0	er-Terrorisr	0	0	stically and abroad for		0	0	0	0	0	0	part from the above m	
Q_26		Have you established an audit mechanism for the goods control process?		Yes	No	Yes	No	Yes	Yes	yes		Yes	Yes	Yes	Yes	No	No	Yes	
		Please detail this mechanism:		0	0	puter syste	0	nned by in re in charge		rnal procedure	nent is in charge for a	nternal Aud	Clearance	ss by a priv		0	0	0	
Q_27		Is primary inspection carried out using active NII devices?		0	No	Yes	Yes	Yes	No	no		Yes	No	Yes	Yes	Yes	Yes	Yes	
		X-Ray		Yes	Yes	Yes	Yes	Yes	Yes	0		Yes	0	Yes	Yes	Yes	Yes	Yes	
		Gamma Ray		0	Yes	No	0	0	No	0		No	0	No	Yes	No	No	No	
		Pulsed Fast Neutron Analysis		0	0	No	0	0	No	0		No	0	No	No	No	No	No	
		Thermal Neutron Activation		0	0	No	0	0	No	0		No	0	No	No	No	No	No	

Combinations	193		193	193	193	193	193	193	193	**1544**	193	193	193	193	193	193	193	**2509**
Not used	0		128	67	36	156	88	63	134	**672**	46	64	55	55	56	58	67	**401**
% Responses	100%		34%	65%	81%	19%	54%	67%	31%	**56%**	76%	67%	72%	72%	71%	70%	65%	**84%**

Asia-Pacific
Economic Cooperation

CTI – Sub-Committee on Customs Procedures (SCCP)

Annex IV
to the report

Experience exchange
on the use of tools and Information Technology
for goods identification

Database of answers to Part TWO of the Questionnaire

SUNAT
Lima, Peru
18 December 2009

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Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_28		RPMs ?	Yes	No	Yes	No		No	No	Yes	No	Yes	No	
Q_29	Type #1	Model	Portal	0	0	0		0	0	)AGN / PM-7	0	ortal Monitc	0	
		Trademark	SAIC	0	0	0		0	0	SAIC	0	0	0	
		Mobility	Fixed	0	Fixed	0		0	0	Fixed	0	Fixed	0	
		Average age	5	0	7	0		0	0	2	0	2	0	
		Nb Units	32	0	15	0		0	0	1	0	20	0	
	Type #2	Model	Carborne	0	0	0		0	0	0	0	0	0	
		Trademark	SAIC	0	0	0		0	0	0	0	0	0	
		Mobility	Mobile	0	Fixed	0		0	0	0	0	0	0	
		Average age	5	0	7	0		0	0	0	0	0	0	
		Nb Units	12	0	1	0		0	0	0	0	0	0	
	Type #3	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #4	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #5	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
Q_30	Type #1	Who Owns RPMs	Customs	0	e service pr	0		0	0	Airport Auth	0	Other	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	Customs	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	S/TH enactir	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #2	Who Owns RPMs	Customs	0	e service pr	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	Customs	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #3	Who Owns RPMs	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #4	Who Owns RPMs	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #5	Who Owns RPMs	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	

Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_31	Type #1	RPMs Maintenance	Customs	0	e service pro	0		0	0	e service pro	0	Other	0	
		If Other	0	0	0	0		0	0	0	0	S/TH enactir	0	
		Contract signed with	0	0	Customs	0		0	0	Airport Auth	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	1	0	0	0	
		Cost-basis	0	0	0	0		0	0	nnual amou	0	0	0	
	Type #2	RPMs Maintenance	Customs	0	e service pro	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	Customs	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #3	RPMs Maintenance	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #4	RPMs Maintenance	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #5	RPMs Maintenance	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
Q_32	Type #1	RPMs Location	Dockside	0	Other	0		0	0	the Port Co	0	the Port Co	0	
		If Other	Dockside	0	Other	0		0	0	the Port Co	0	the Port Co	0	
	Type #2	RPMs Location	Other	0	Other	0		0	0	0	0	0	0	
		If Other	Other	0	Other	0		0	0	0	0	0	0	
	Type #3	RPMs Location	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
	Type #4	RPMs Location	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
	Type #5	RPMs Location	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
Q_33		Type #1	Minor	0	Unchanged	0		0	0	Minor	0	Minor	0	
		Type #2	Unchanged	0	Unchanged	0		0	0	0	0	0	0	
		Type #3	0	0	0	0		0	0	0	0	0	0	
		Type #4	0	0	0	0		0	0	0	0	0	0	
		Type #5	0	0	0	0		0	0	0	0	0	0	
Q_34		Primary inspection w/NII devices?	No	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	
		X-Ray	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	
		Gamma Ray	Yes	No	No	0		No	No	Yes	No	No	No	
		FNA	No	No	No	0		No	No	0	No	No	No	
		TNA	No	No	No	0		No	No	0	No	No	No	

Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_35	Type #1	Model	7555/7085	ystem (of N	Large-scale	HCV-MOBIL 3000		0	THScan	0100T, 1451	Backscatter	HSCAN FG90	Backscatter	
		Trademark	Smith Detecti	Other	0	Smith Detection		Smith Detecti	Other	nith Detecti	nith Detecti	Nuctech	Smith Detection	
		Mobility	Fixed	Fixed	Fixed	Mobile		Mobile	Fixed	Fixed	Mobile	Fixed	Mobile	
		Average age	7	18	7	1		1	4	5	2	3	2	
		Nb Units	43	6	16	2		3	4	69	1	2	1	
	Type #2	Model	100100	RAPISCAN Vehicle X-ray Inspection	0	Luggage screening Instrument		0	Scanvan	536SV	Scanvan	MT1500	Scanvan	
		Trademark	Smith Detecti	Nuctech	0	Other		Other	Other	Other	nith Detecti	Nuctech	Smith Detection	
		Mobility	Mobile	Fixed	0	Fixed		Fixed	Mobile	Mobile	Mobile	Mobile	Mobile	
		Average age	6	6	0	8		5	3	4	2	5	2	
		Nb Units	29	1	0	32		25	1	4	2	12	2	
	Type #3	Model	9075	Fixed X-ray Machine	0	0		0	Rapiscan	HCV V1	Rapiscan	ecked Bagga	Rapiscan	
		Trademark	Smith Detecti	Nuctech	0	0		0	Other	nith Detecti	Other	nith Detecti	Other	
		Mobility	Portable	Fixed	0	0		0	Fixed	Mobile	Mobile	Mobile	Mobile	
		Average age	2	5	0	0		0	3	8	3	3	3	
		Nb Units	41	4	0	0		0	7	1	1	-	1	
	Type #4	Model	Rapiscan	X-ray Van	0	0		0	Bodyscan	100XD	Bodyscan	rry-on Bagga	Bodyscan	
		Trademark	Other	Smith Detection	0	0		0	Other	Other	nith Detecti	nith Detecti	Smith Detection	
		Mobility	Fixed	Mobile	0	0		0	Fixed	Fixed	Fixed	Mobile	Fixed	
		Average age	12	7	0	0		0	1	1	3	3	3	
		Nb Units	12	4	0	0		0	3	35	3	-	3	
	Type #5	Model	0	X-ray Van	0	0		0	0	ZVB	0	0	0	
		Trademark	0	Other	0	0		0	0	Other	0	0	0	
		Mobility	0	Mobile	0	0		0	0	Mobile	0	0	0	
		Average age	0	7	0	0		0	0	1	0	0	0	
		Nb Units	0	1	0	0		0	0	10	0	0	0	
		If Other	0	); Vehicle X	0	0		0	0	S&E ZBV, AS	Rapi	0	Rapi	
Q_36	Type #1	Who Owns X-Rays	Customs	Customs	e service pr	Customs		Customs	Customs	Customs	Other	Customs	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Contract signed with	0	0	Customs	0		0	0	0	Other	0	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Duration	0	0	0	0		0	0	0	2	0	2	
		Cost-basis	0	0	0	0		0	0	0	nnual amou	0	Annual amount	
	Type #2	Who Owns X-Rays	Customs	Customs	e service pr	Customs		Other	Customs	Customs	Other	Customs	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Contract signed with	0	0	Customs	0		0	0	0	Other	0	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #3	Who Owns X-Rays	Customs	Customs	0	0		0	Customs	Customs	Customs	Airport Auth	Customs	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	Other	0	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #4	Who Owns X-Rays	Customs	Customs	0	0		0	Customs	Customs	Other	Airport Auth	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Contract signed with	0	0	0	0		0	0	0	Other	0	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #5	Who Owns X-Rays	0	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	

Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_37	Type #1	X-Rays Maintenance	Customs	Other	e service pro	e service provide	Private	service pro	e service pro	e service pro	Other	Customs	Other	
		If Other	0	onic and M	0	0		0	0	0	US Embassy	0	US Embassy	
		Contract signed with	0	0	Customs	Customs		Customs	Customs	Customs	Other	0	Other	
		If Other	0	0	0	0		0	0	0	nited limite	0	United limited	
		Duration	0	0	0	3		0	0	3	3	0	3	
		Cost-basis	0	0	0	0	Annual amou		0	nnual amou	nnual amou	0	Annual amount	
	Type #2	X-Rays Maintenance	Customs	Other	e service pro	e service provide	Private	service pro	e service pro	e service pro	Other	Customs	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Contract signed with	0	0	Customs	Customs		Other	Customs	Customs	Other	0	Other	
		If Other	0	0	0	0		SAG Chile	0	0	nited limite	0	United limited	
		Duration	0	0	0	1		0	0	3	3	0	3	
		Cost-basis	0	0	0	0	Annual amou		0	nnual amou	nnual amou	0	Annual amount	
	Type #3	X-Rays Maintenance	Customs	Other	0	0		0	e service pro	e service pro	Other	Airport Auth	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Contract signed with	0	0	0	0		0	Customs	Customs	Other	0	Other	
		If Other	0	0	0	0		0	0	0	nited limite	0	United limited	
		Duration	0	0	0	0		0	0	0	3	0	3	
		Cost-basis	0	0	0	0		0	0	unit inspec	nnual amou	0	Annual amount	
	Type #4	X-Rays Maintenance	Customs	Other	0	0		0	e service pro	e service pro	Other	Airport Auth	Other	
		If Other	0	0	0	0		0	0	0	US Embassy	0	US Embassy	
		Contract signed with	0	0	0	0		0	Customs	Other	Other	0	Other	
		If Other	0	0	0	0		0	0	US EMBASSY	nited limite	0	United limited	
		Duration	0	0	0	0		0	0	2	3	0	3	
		Cost-basis	0	0	0	0		0	0	nnual amou	nnual amou	0	Annual amount	
	Type #5	X-Rays Maintenance	0	0	0	0		0	0	e service pro	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	Other	0	0	0	
		If Other	0	0	0	0		0	0	US EMBASSY	0	0	0	
		Duration	0	0	0	0		0	0	2	0	0	0	
		Cost-basis	0	0	0	0		0	0	nnual amou	0	0	0	
Q_38	Type #1	X-Rays Location	Other	Other	Other	the Port Complex	Flexible (Mobi		the Port Co	Other	the Port Co	the Port Co	the Port Complex	
		If Other	Passenger	s Examinat	ns Inspectio	0		0	0	Airport	0	0	0	
	Type #2	X-Rays Location	Flexible (Mobi	xible (Mob	Other	Other		Other	the Port Co	Other	the Port Co	the Port Co	the Port Complex	
		If Other	0	0	ns Inspectio	airport	Broders and Air		0	Airport	0	0	0	
	Type #3	X-Rays Location	Dockside	Other	0	0		0	the Port Co	the Port Co	the Port Co	the Port Co	the Port Complex	
		If Other	0	0	0	0		0	0	0	0	0	0	
	Type #4	X-Rays Location	Dockside	Other	0	0		0	Other	Other	Other	the Port Co	Other	
		If Other	0	pound, Lan	0	0		0	n the Airpor	Airport	n the Airpor	0	n the Airport	
	Type #5	X-Rays Location	0	0	0	0		0	0	exible (Mobi	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
Q_39	Type #1	Model	VACIS	0	0	0		0	0	LEGACI	0	0	0	
		Trademark	SAIC	0	0	0		0	0	SAIC	0	0	0	
		Mobility	Mobile	0	0	0		0	0	Fixed	0	0	0	
		Average age	6	0	0	0		0	0	6	0	0	0	
		Nb Units	12	0	0	0		0	0	16	0	0	0	
	Type #2	Model	Pallet VACIS	0	0	0		0	0	DVANCE CO	0	0	0	
		Trademark	SAIC	0	0	0		0	0	SAIC	0	0	0	
		Mobility	Fixed	0	0	0		0	0	Fixed	0	0	0	
		Average age	5	0	0	0		0	0	5	0	0	0	
		Nb Units	4	0	0	0		0	0	30	0	0	0	
	Type #3	Model	0	0	0	0		0	0	RR VACIS	0	0	0	
		Trademark	0	0	0	0		0	0	SAIC	0	0	0	
		Mobility	0	0	0	0		0	0	Fixed	0	0	0	
		Average age	0	0	0	0		0	0	8	0	0	0	
		Nb Units	0	0	0	0		0	0	10	0	0	0	
	Type #4	Model	0	0	0	0		0	0	PALLET VACI	0	0	0	
		Trademark	0	0	0	0		0	0	SAIC	0	0	0	
		Mobility	0	0	0	0		0	0	Fixed	0	0	0	
		Average age	0	0	0	0		0	0	4	0	0	0	
		Nb Units	0	0	0	0		0	0	1	0	0	0	
	Type #5	Model	0	0	0	0		0	0	ICIS	0	0	0	
		Trademark	0	0	0	0		0	0	SAIC	0	0	0	
		Mobility	0	0	0	0		0	0	Fixed	0	0	0	
		Average age	0	0	0	0		0	0	2	0	0	0	
		Nb Units	0	0	0	0		0	0	1	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	

Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_40	Type #1	Who Owns Gamma-Rays	Customs	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	ort Authorit	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #2	Who Owns Gamma-Rays	Customs	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	ort Authorit	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #3	Who Owns Gamma-Rays	0	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	ort Authorit	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #4	Who Owns Gamma-Rays	0	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
	Type #5	Who Owns Gamma-Rays	0	0	0	0		0	0	Airport Auth	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	0	0	0	0	
		Cost-basis	0	0	0	0		0	0	0	0	0	0	
Q_41	Type #1	Gamma-Rays Maintenance	Customs	0	0	0		0	0	e service pr	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	ort Authorit	0	0	0	
		Duration	0	0	0	0		0	0	3	0	0	0	
		Cost-basis	0	0	0	0		0	0	nnual amou	0	0	0	
	Type #2	Gamma-Rays Maintenance	Customs	0	0	0		0	0	e service pr	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	ort Authorit	0	0	0	
		Duration	0	0	0	0		0	0	3	0	0	0	
		Cost-basis	0	0	0	0		0	0	nnual amou	0	0	0	
	Type #3	Gamma-Rays Maintenance	0	0	0	0		0	0	e service pr	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	ort Authorit	0	0	0	
		Duration	0	0	0	0		0	0	3	0	0	0	
		Cost-basis	0	0	0	0		0	0	nnual amou	0	0	0	
	Type #4	Gamma-Rays Maintenance	0	0	0	0		0	0	e service pr	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	Customs	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	3	0	0	0	
		Cost-basis	0	0	0	0		0	0	nnual amou	0	0	0	
	Type #5	Gamma-Rays Maintenance	0	0	0	0		0	0	e service pr	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Contract signed with	0	0	0	0		0	0	Airport Auth	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
		Duration	0	0	0	0		0	0	1	0	0	0	
		Cost-basis	0	0	0	0		0	0	nnual amou	0	0	0	
Q_42	Type #1	Gamma-Rays Location	Other	0	0	0		0	0	the Port Co	0	0	0	
		If Other	Marine/Highw	0	0	0		0	0	0	0	0	0	
	Type #2	Gamma-Rays Location	Other	0	0	0		0	0	the Port Co	0	0	0	
		If Other	Marine	0	0	0		0	0	0	0	0	0	
	Type #3	Gamma-Rays Location	0	0	0	0		0	0	the Port Co	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
	Type #4	Gamma-Rays Location	0	0	0	0		0	0	the Port Co	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
	Type #5	Gamma-Rays Location	0	0	0	0		0	0	the Port Co	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	

Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_43 (FNA)	Type #1	Model	None	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #2	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #3	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #4	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #5	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
Q_44 (TNA)	Type #1	Model	None	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #2	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #3	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Mobility	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #4	Model	0	0	0	0		0	0	PALLET VACIS	0	0	0	
		Trademark	0	0	0	0		0	0	SAIC	0	0	0	
		Mobility	0	0	0	0		0	0	Fixed	0	0	0	
		Average age	0	0	0	0		0	0	4	0	0	0	
		Nb Units	0	0	0	0		0	0	1	0	0	0	
	Type #5	Model	0	0	0	0		0	0	ICIS	0	0	0	
		Trademark	0	0	0	0		0	0	SAIC	0	0	0	
		Mobility	0	0	0	0		0	0	Fixed	0	0	0	
		Average age	0	0	0	0		0	0	2	0	0	0	
		Nb Units	0	0	0	0		0	0	1	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
Q_45 (Re-organization)		X-Ray	Unchanged	Minor	0	0		0	Unchanged	Minor	Unchanged	0	Unchanged	
		Gamma Ray	Unchanged	0	0	0		0	0	Major	0	0	0	
		FNA	0	0	0	0		0	0	0	0	0	0	
		TNA	0	0	0	0		0	0	0	0	0	0	
Q_46	OCR	Port #1	No	Yes	0	0		Yes	No	Yes	No	0	No	
		Port #2	0	Yes	0	0		No	No	0	No	0	No	
		Airport #1	0	0	0	0		Yes	No	0	No	0	No	
		Airport #2	0	0	0	0		No	No	0	No	0	No	
		If Other	0	ehicle Recor	0	0	rt, Los Libertadores C		0	IC ICIS SYSTE	0	0	0	
	Electronic Seal	Port #1	0	No	No	0		No	No	0	No	0	No	
		Port #2	0	No	0	0		No	No	0	No	0	No	
		Airport #1	0	0	No	0		No	No	0	No	0	No	
		Airport #2	0	0	0	0		No	No	0	No	0	No	
		If Other	0	0	0	0		0	0	0	0	0	0	
	Integrated surveillance	Port #1	0	No	0	0		No	No	0	No	Yes	No	
		Port #2	0	No	0	0		No	No	0	No	Yes	No	
		Airport #1	0	0	0	0		No	No	0	No	Yes	No	
		Airport #2	0	0	0	0		No	No	0	No	Yes	No	
		If Other	0	0	0	0		0	0	0	0	0	0	
Q_47		Joint Inspections	Yes	No	Yes	0		No	No	Yes	No	No	No	
		Organization	Linear	0	0	0		0	0	CLUDES RPM	0	0	0	
		Alarm stations	No	0	0	0		0	0	Yes	0	0	0	

Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_48	Scanner manager	Port #1	1	3	0	0		1	1	0	2	1	2	
		Port #2	0	7	0	0		0	1	0	0	0	0	
		Airport #1	0	0	0	0		1	1	0	0	0	0	
		Airport #2	0	0	0	0		0	1	0	0	0	0	
	Marshaller	Port #1	2	9	0	0		1	2	0	2	3	2	
		Port #2	0	7	0	0		0	2	0	0	0	0	
		Airport #1	0	0	0	0		1	1	0	0	0	0	
		Airport #2	0	0	0	0		0	1	0	0	0	0	
	Image analyst	Port #1	1	3	0	0		2	3	0	8	1	8	
		Port #2	0	7	0	0		0	3	0	0	0	0	
		Airport #1	0	0	0	0		3	2	0	0	0	0	
		Airport #2	0	0	0	0		0	2	0	0	0	0	
	Technical staff	Port #1	1	0	0	0		0	1	0	1	3	1	
		Port #2	0	0	0	0		0	1	0	0	0	0	
		Airport #1	0	0	0	0		0	1	0	0	0	0	
		Airport #2	0	0	0	0		0	1	0	0	0	0	
	Radiation expert	Port #1	0	0	0	0		0	1	0	1	her departme	1	
		Port #2	0	0	0	0		0	1	0	0	0	0	
		Airport #1	0	0	0	0		0	1	0	0	0	0	
		Airport #2	0	0	0	0		0	1	0	0	0	0	
	Other #1	Type	Driver of mobile	0	0	0		0	0	0	0	0	0	
		Number	1	0	0	0		0	0	0	0	0	0	
	Other #2	Type	0	0	0	0		0	0	0	0	0	0	
		Number	0	0	0	0		0	0	0	0	0	0	
	Other #3	Type	0	0	0	0		0	0	0	0	0	0	
		Number	0	0	0	0		0	0	0	0	0	0	
Q_49		Secondary inspection w/RIIDs?	Yes	No	Yes	0		No	No	0	Yes	Yes	Yes	
	Type #1	Model	GR-135	0	0	0		0	0	0	GR-135	entifinder NG	GR-135	
		Trademark	SAIC	0	0	0		0	0	0	SAIC	Other	SAIC	
		Average age	5	0	7	0		0	0	0	4	3	4	
		Nb Units	28	0	3	0			0	0	1	8	1	
	Type #2	Model	0	0	0	0		0	0	0	0	HPGe	0	
		Trademark	0	0	0	0		0	0	0	0	Other	0	
		Average age	0	0	7	0		0	0	0	0	3	0	
		Nb Units	0	0	1	0		0	0	0	0	1	0	
	Type #3	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	7	0		0	0	0	0	0	0	
		Nb Units	0	0	1	0		0	0	0	0	0	0	
	Type #4	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #5	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	pe Identifier	0	
Q_50		Secondary inspection w/PRDs?	No	0	Yes	0		No	No	0	No	Yes	No	
	Type #1	Model	0	0	0	0		0	0	0	0	RPM470	0	
		Trademark	0	0	0	0		0	0	0	0	Other	0	
		Average age	0	0	7	0		0	0	0	0	3	0	
		Nb Units	0	0	200	0		0	0	0	0	8	0	
	Type #2	Model	0	0	0	0		0	0	0	0	DIATION PAG	0	
		Trademark	0	0	0	0		0	0	0	0	Other	0	
		Average age	0	0	0	0		0	0	0	0	3	0	
		Nb Units	0	0	0	0		0	0	0	0	20	0	
	Type #3	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #4	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #5	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	N PAGER by S	0	
Q_51		ASP? TODAY	No	No	No	0		No	No	0	No	0	No	
		How many	0	0	0	0		0	0	0	0	0	0	
		ASP? FUTURE	No	0	No	0		No	No	0	No	Yes	No	
		How many	0	0	0	0		0	0	0	0	20	0	
Q_52		Vapor	No	Yes	0	0		No	No	Yes	No	No	No	
		Trace	Yes	Yes	Yes	0		No	No	0	Yes	No	Yes	
		Busters	Yes	Yes	0	0		No	No	0	Yes	No	Yes	
		Canines	Yes	Yes	Yes	ˇ		Yes	Yes	Yes	Yes	No	Yes	

Questionnaire:
Answers to Part TWO

			CDA	HKC	JPN	CT		CHL	MAS	MEX	PE	THA	VN	
Q_53 (Vapor)	Type #1	Model	None	Sabre 2000	0	0		0	0	APOR TRACE	0	0	0	
		Trademark	0	other	0	0		0	0	Other	0	0	0	
		Average age	0	6	0	0		0	0	1	0	0	0	
		Nb Units	0	4	0	0		0	0	15	0	0	0	
	Type #2	Model	0	Telaire 700	0	0		0	0	0	0	0	0	
		Trademark	0	other	0	0		0	0	0	0	0	0	
		Average age	0	9	0	0		0	0	0	0	0	0	
		Nb Units	0	3	0	0		0	0	0	0	0	0	
	Type #3	Model	0	MAX-4AP-2	0	0		0	0	0	0	0	0	
		Trademark	0	other	0	0		0	0	0	0	0	0	
		Average age	0	7	0	0		0	0	0	0	0	0	
		Nb Units	0	1	0	0		0	0	0	0	0	0	
	Type #4	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #5	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	GE	0	0	0	
Q_54 (Trace)	Type #1	Model	Ionscan	Itemizer 98	0	0		0	0	0	onscan 400B	0	onscan 400B	
		Trademark	Smith Detecti	Other	0	0		0	0	0	nith Detecti	0	nith Detection	
		Average age	15	13	7	0		0	0	0	3	0	3	
		Nb Units	80	4	8	0		0	0	0	6	0	6	
	Type #2	Model	Itemizer3	nscan DM 4	0	0		0	0	0	Sabre 4000	0	Sabre 4000	
		Trademark	Other	Other	0	0		0	0	0	nith Detecti	0	nith Detection	
		Average age	3	11	0	0		0	0	0	1	0	1	
		Nb Units	32	2	0	0		0	0	0	14	0	14	
	Type #3	Model	Sabre 2000	Sabre 400B	0	0		0	0	0	TravelIR II	0	TravelIR II	
		Trademark	Smith Detecti	nith Detecti	0	0		0	0	0	nith Detecti	0	nith Detection	
		Average age	5	5	0	0		0	0	0	2	0	2	
		Nb Units	40	1	0	0		0	0	0	1	0	1	
	Type #4	Model	Sabre 4000	th Sabre 4	0	0		0	0	0	Hazmat ID	0	Hazmat ID	
		Trademark	Smith Detecti	nith Detecti	0	0		0	0	0	nith Detecti	0	nith Detection	
		Average age	4	6	0	0		0	0	0	2	0	2	
		Nb Units	4	1	0	0		0	0	0	1	0	1	
	Type #5	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
		If Other	0	0	0	0		0	0	0	0	0	0	
Q_55 (Busters)	Type #1	Model	Merlin	trbandDete	0	0		0	0	0	K910B	0	K910B	
		Trademark	Other	Other	0	0		0	0	0	nith Detecti	0	nith Detection	
		Average age	14	10	0	0		0	0	0	4	0	4	
		Nb Units	92	2	0	0		0	0	0	2	0	2	
	Type #2	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #3	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #4	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
	Type #5	Model	0	0	0	0		0	0	0	0	0	0	
		Trademark	0	0	0	0		0	0	0	0	0	0	
		Average age	0	0	0	0		0	0	0	0	0	0	
		Nb Units	0	0	0	0		0	0	0	0	0	0	
		If Other,	0	0	0	0		0	0	0	0	0	0	
Q_56 (Canines)		How many canine units	70	8	9	2		50	1	44	20	0	20	
		teams per canine unit	1	46	0	11		50	3	2,23	1	0	1	
		dogs per team	1	nt offices, t	0	1		1	12	1	1	0	1	
		VIEW	0	0	0	0		0	0	0	0	0	0	
		COMMENTS	0	0	0	0		0	0	0	0	0	0	

Combinations	519		519	519	519	519	**2076**	518	519	519	519	519	519	**3113**
Not used	0		392	416	457	491	**1756**	461	431	354	392	434	392	**2464**
% Responses	100%		24%	20%	12%	5%	**15%**	11%	17%	32%	24%	16%	24%	**21%**

Non-Intrusive Large Scale Cargo Equipment

Equipment	Sea	Air	Land[1]	Mail/ Courier	Drugs	Explosives	Radiation	Weapons/ Money	Stowaways
Smiths HCV Container X-Ray truck	X				X	X		X	X
Smiths CAB 2000 Fixed Pallet X-Ray	X	X			X	X		X	X
AS&E ZBV Backscatter Van	X	X		X	X	X	X[2]	X	X
Smiths Mobile Cargo Inspection Unit (van and trailer unit)	X	X		X	X	X		X	

Radiation Detection Equipment

Equipment	Sea	Air	Land	Mail/ Courier	Drugs	Explosives	Radiation	Weapons/ Money	Stowaways
GR 135 radioactive isotope identification device	X	X					X		
GR 100 personal radiation detector	X	X					X		

Non-Intrusive Small Scale Cargo Equipment

Equipment	Sea	Air	Land	Mail/ Courier	Drugs	Explosives	Radiation	Weapons/ Money	Stowaways
Fixed Rapid Scan 526 x-ray				X	X	X		X	
Smiths Sabre 4000	X	X			X	X			
GE Itemizer 3		X			X	X			
GE Vapour Tracer 2	X	X		X	X	X			
Narcotic Identification Kits	X	X		X	X				

[1] NZ has no land border, so land is not relevant
[2] While the backscatter has a Radioactive Threat Detection (RTD) option, this is not a capacity that is currently utilized by NZ Customs

Smiths HCV Container X-Ray

Three units, deployed to the two busiest ports (Auckland and Tauranga) and the busiest port in the South Island (Dunedin/Port Chalmers) to screen sea cargo/containers only. All units mobile and deployed outside their home ports as required, with the Tauranga unit regularly deployed to the other ports within the North Island (New Plymouth, Napier and Wellington) and the Dunedin unit regularly deployed to the two closest South Island ports (Timaru and Lyttelton/Christchurc).

Smiths CAB 2000 Fixed Pallet X-Ray

Two units located at Auckland and Christchurch International Airports. Auckland unit only screens air cargo (mainly exports), Christchurch unit can and does screen both air and sea cargo (although sea cargo limited due to the large distance from the Lyttelton/Christchurch port to the international airport.

AS&E ZBV Backscatter Van

Single unit deployed to Auckland, screening air and sea cargo (although predominately sea cargo, and predominately empty sea containers due to the limited penetration of this unit).

Smiths Mobile Cargo Inspection Unit (van and trailer unit)

Seven units, location in Auckland (2), Tauranga, Napier, Wellington, Christchurch and Dunedin/Port Chalmers. Deployed both as a standalone x-ray capacity in terms of the smaller ports that do not have larger assets, and as a support asset for inspection functions where larger assets are available. Auckland units split between the air and sea cargo environments, with the air cargo unit deployed to screen air cargo and also courier/fast freight.

Radiation Detection Equipment –

- Exploranium GR-135 – only one unit, deployed at Auckland within the sea cargo environment
- Exploranium GR-100 – units deployed across the country with the cargo x-ray equipment

Non-Intrusive Small Scale Cargo Equipment –

- Fixed Rapid Scan 526 x-ray – units deployed across all belts within the Auckland International Mail Center (only mail center in NZ). Note units are actually MAF (biosecurity) for imports and AvSec (transport security) for export units, to which Customs share access;
- Smiths Sabre 4000 – 11 units across the country, deployed with the cargo x-ray equipment for use with air and sea cargo, and also to the more general response and inspection teams;
- GE Itemizer 3 – only two units, located within Auckland and Christchurch International Airports although available for general usage (although usage is limited outside passengers and baggage);
- GE Vapour Tracer 2 – only one unit, deployed to the Auckland based response team, so usage in a general cargo inspection environment is limited (only really used where the inspection and associated activity is part of a specific targeted operating which involves the response group);
- Narcotic Identification Kits – deployed across all locations and operational areas.

Asia-Pacific
Economic Cooperation

CTI – Sub-Committee on Customs Procedures (SCCP)

Annex V
to the report

Experience exchange
on the use of tools and Information Technology
for goods identification

Mission Report
on the APEC Workshop,
Lima, 15-16 October 2009

SUNAT
Lima, Peru
18 December 2009

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APEC
Mission Report

NAME: **Maxence Orthlieb** **SIGNATURE:**

SUBJECT: Mission to Lima (Peru)

TO:
Mr Takeshi Komoto
Mr. James Walt Sullca Cornejo
Mr. Carlos Palacios Garcia

MISSION PERIOD FROM: 13 October 2009 **TO:** 18 October 2009

PROJECT/SOURCE OF FUNDING:
CTI 16/2008T9 (Experience Exchange in the Adoption of Tools and IT for Goods Identification)

INSTITUTION(S) OR MEETING(S) AND VENUE(S) National Superintendency of Tax Administration (SUNAT) Associated National Superintendency of Customs Duties Lima, 14-17 May 2008

MAIN PERSON(S) CONTACTED: Government officials from SUNAT (Customs); Representatives from various APEC Member Customs administrations participanting in the APEC Workshop.

OBJECTIVE(S) OF MISSION

Participation in, and contribution to, the APEC Workshop on Experience Exchange in the Adoption of Tools and IT for Goods Identification, organized by SUNAT in Lima on 15-16 October 2009;
Review and coordination of the finalization of the Project report.

BACKGROUND and MISSION HIGHLIGHTS

In early January 2009, the Consultant was engaged by the APEC Sub-Commission on Customs Procedures (SCCP) to carry out an exchange of experiences among APEC Member Economies on the adoption of IT and tools for cargo identification (Project CTI 26/2009t). His work was guided by Mr. James Sullca, Project Overseer, from the National Superintendency of Tax Administration (SUNAT-Peru).

By early June, a Questionnaire was elaborated and distributed to the Member Economies. In early September, fourteen (14) APEC Member Economies (Canada, Chile, China, Hong Kong China, Chinese Taipei, Malaysia, Mexico, New Zealand, Peru, Thailand, the United States and Viet Nam) had submitted an answer to the Questionnaire. By the end of September, the Consultanthad prepared an analysis of these answers and submitted a DRAFT report of this analysis to the Project Overseer and to Mr. Carlos Palacios, both from SUNAT.

As part of his project, Mr. Sullca had scheduled a "validation" workshop to share the results of the Survey and stimulate an exchange of experiences on the use of IT and tools for cargo identification among delegates from APEC Member Economies. This workshop was organized under the auspices of the National Superintendency of Tax Administration (SUNAT-Peru), on Thursday 15and Friday16 October 2009 (see Annex #1: APEC Seminar Participants and Contents).

The Consultant was invited toattend and contribute to the delivery of the workshop. To this end, based on the above-mentioned DRAFT report, he prepared a PowerPoint (PPT) presentation to introduce the scope of the workshop (see Annex #2: Presentation of the Exchange of Experiences on Cargo Identification Tools). This presentation included the relevant aspects of his analysis.

The Consultant travelled to Lima on Tuesday 13. He met with Sullca, Palacios and Ms Maria del Rosario Huamán, at SUNAT Building in Chucuito (near El Callao), on Wednesday 14 to discuss the last substantive and logistics issues related with the delivery. In particular, they reviewed jointly his PPT presentation.

As part of his assignment, the Consultant gave his presentation and attended all the sessions of the workshop on Thursday 15 and Friday 16 October. He prepared a summary of the presentations made by the invited speakers, foreign active participants and other local contributors from public and private sectors. This summary and a compilation of the main issues discussed during the "*Questions and Answers*" sessions are attached (see Annex #3: Summary of presentations; and Annex #4: Summary of relevant questions and answers).

The attendance to the workshop was large considering the technical level of the meeting: in addition to the three invited speakers and 6 active participants, there were some 20 professionals from SUNAT, thePort Authority and

from the private sector (DB port terminal operator; representatives from scanning equipment companies, etc.). The discussions and exchanges that took place during the two days were rich of information and practices. The general feeling gathered from participants and speakers was that the workshop had fullfiled its purpose as a platform for exchanges of views.

Before departing from Lima on Saturday 17, the Consultant met with Sullca and Palacios to coordinate on the finalization of the Project Report. It was agreed that this Report would be based on the DRAFT report already submitted, with the addition of a pertinent section covering the delivery of the workshop and the corresponding discussions. This section would be based on the annexes attached to the present Mission Report.

The Consultant wishes to express his appreciation for the support and cooperation offered by the entire SUNAT Team during his short but very enjoyable stay in Lima.

FOLLOW-UP ACTION(S) AND BY WHOM

- **Clear the DRAFT report and the attached annexes that will be part of the FINAL report of the Project (by the SUNAT Team);**
- **Assemble the cleared "DRAFT report" and the annexes into an all-comprehensive Project report; Provide support, as necessary, in the preparation of the printer-ready copy of the Project report (by the Consultant).**

DETAILED REPORT	DOCUMENTATION RECEIVED
[ ] AVAILABLE [**X**] NOT AVAILABLE	[ ] AVAILABLE [**X**] ATTACHED [ ] NO DOCUMENTATION

APEC Project Overseer: SIGNATURE DATE

James Walt Sullca Cornejo

Annexes

Annex #1 : APEC Seminar Participants and Contents

Annex #2 : Presentation of the Exchange of Experiences on Cargo Identification Tools

Annex #3 : Summary of presentations; and

Annex #4 : Summary of relevant questions and answers

ANNEX #1

APEC Seminar

Experience Exchange in the Adoption of Tools and IT for Goods Identification

Thursday 15 and Friday 16 October 2009

Lima, Peru

Economy	Name	Designation	Organization	Address	Tel	Fax	e-mail address
SPEAKERS:							
Canada	Johny Prasad (Mr)	Manager, Detection Technology Sect.	Canada Border Services Agency	191 Laurier Avenue West, Ottawa ON K1A 0L8	613-954-7580	613-946-9183	Johny.Prasad@cbsa-asfc.gc.ca
Chinese Taipei	Ken CK Chen (Mr.)	Assistant Director-General	Dept. of Customs Administration, Ministry of Finance	2, Ai-guo Wt. Rd., Taipei, Taiwan	8862-2322-8227	8862-2394-1497	kenchen@mail.mof.gov.tw
France	Maxence Orthlieb (Mr.)	Consultant		Villa des Roses 11, Avenue Jules Ferry F-38380 Saint Laurent du Pont, France	334 76 55 49 02		maxence.orthlieb@gmail.com
ACTIVE PARTICIPANTS:							
Chile	Rodolfo Espinoza Santelices	INTELLIGENCE ANALIST	CHILE CUSTOM SERVICE	PLAZA SOTOMAYOR 60 VALPARAISO CHILE	56-32-2200854	56 – 32 - 2254033	rodespinoza@aduana.cl
Indonesia	Vicentius Istiko Murtiadji	Co Scan X-ray Suvervisor, Prime Customs Office	Directorate Gral Customs and Excise of Indonesia	Jalan Pabean No. 1, Tanjung Priok, Jakarta Utara	62-8121052111	62-21-4891845	vistiko@yahoo.com
Malaysia	Pun Sian Wong	Assistant Director of Customs	Royal Malaysian Customs	Level 6 south No 3 Persiaran Perdana, Precint 2, 62596 Putrajaya, Malaysia	603-8882 2687	603-8882-2689	wpsian@yahoo.com, syahya02@yahoo.com
Mexico	Lucero Adriana Zamora García	Subadministradora de Operación Aduanera	Adm. Gral Aduanas (Adm. de Operación Aduanera 7)	Av. Hidalgo No. 77, Mod. IV, Col. Guerrero, C.P. 06300 México D.F.	52 (55) 5802 17	52 (55) 5802 0157	lucero.zamora@sat.gob.mx
Tahiland	Kurkrit Chaisirikul	Customs Technical Officer	The Royal Tahi Customs	Laemb Chabang Port Customs 919 Sukhumrit Rd, Tungsukla, Sriracha, Chomburi 20230	66-86-270-7171	66-38-407894	kurkrit@hotmail.com
Viet nam	Dao Thi Thu Thuy	Customs Expert	Gral Depart. of Vietnam Customs - Reform and Modernization Board	162 NGUYEN VAN CU STR, LONGBIEN DIST, HANOI, VIETNAM	84422207623	84422207600	thuydtt1@customs.gov.vn; thuy290980@yahoo.com

Thursday, 15 October

Day 1 - Seminar on Experience Exchange in the Adoption of Tools and IT for Goods Identification

08:30 - 09:00		**PARTICIPANTS ARRIVAL AND REGISTRATION**
09:00 - 09:10	Mr. Javier Garcia, Representative of SUNAT	Welcome Remarks
09:10 - 09:20	Mr. James Sullca, Project Overseer	Seminar Overview
09:20 - 09:40		Official photograph
09:40 - 10:00		**BREAK**
SESSION I: "SCOPE OF THE WORKSHOP"		
10:00 – 10:40	Mr. Maxence Orthlieb, Project Consultant	Issues and Approach to the Identification of Goods: Outcomes of the questionnaire on Tools and IT for Goods Identification
SESSION II: SECURITY OF SUPPLY CHAIN **Experience in the Peruvian Government**		
10:40 - 11:00	Mr. José Ñaupas, National Port Authority - Peru	International Trade Single Window Project – Port Component
11:00 - 11:20	Mr. Carlos Rodriguez, National Port Administration – Peru	Optimization Processes of Importation / Exportation in Callao Port
Experience in the Peruvian Private Sector		
11:20 - 11:40	Mr. Luis Turbides, Dubai Ports World - Peru	DP World Callao
11:40 - 11:55		**Questions and answers**
12:00 - 14:00		**LUNCH**
SESSION III: IMPLEMENTATION OF TOOLS AND IT FOR GOODS IDENTIFICATION **Experience in Private Sector**		
14:00 - 14:20	Dr. Leonardo Caparrós Gamarra, Unlimited Systems Peru	Key tools for non-intrusive monitoring of goods in the market
14:20 - 14:40	Mary Wong, GS1 Peru	Standards in the identification of goods
14:40 -14:50		**Questions & Answers**
SESSION IV: IMPLEMENTATION OF TOOLS AND IT FOR GOODS IDENTIFICATION. EXPERIENCE IN ASIA – PART I		
14:50 -15:20	Mr. Wong, Pun Sian, Royal Malaysia Customs	Adoption of Tools and IT for Goods Identification
15:20 - 15:50	Mr. Ching-Hsiang Kao, Chinese Taipei, Ministry of Finance – Customs Administration	Experience in Implementation of NII for Goods Identification
15:50 - 16:00		**Questions & Answers**
16:00 - 16:20		**BREAK**
SESSION V: IMPLEMENTATION OF TOOLS AND IT FOR GOODS IDENTIFICATION. EXPERIENCE IN ASIA – PART II		
16:20 - 16:40	Mr. Vincentus, Istiko, Indonesia Customs Service	The Operation of Hi-Co Scan X-ray Container Inspection System
16:40 - 17:00	Ms. Dao, Thi Thu Thuy, Vietnam Customs Service	Customs Inspection Equipment Implementing in Vietnam
17:00 - 17:10		**Questions & Answers**
END OF SESSION		

Friday, 16 October

Day 2 - Seminar on Experience Exchange in the Adoption of Tools and IT for Goods Identification

09:00 - 12:00		**Visit to Callao Maritime Port**
12:00 - 14:00		**LUNCH**
SESSION VI: Summary of the previous day		
14:00 - 14:15	Mr. James Sullca, Project Overseer	
SESSION VII: Track Devices & Tools		
14:15 - 14:45	Mr. Ken CK Chen, Chinese Taipei, Ministry of Finance – Customs Administration	Using RFID to Enhance Trade Security & Facilitation
14:45 - 15:00	Mr. Enrique Zamora, Peruvian Customs - SUNAT	Canine Program K-9
15:00 - 15:05		**Questions & Answers**
SESSION VIII: Implementation of tools and IT for goods identification Experience in America		
15:05 - 15:40	Mr. Johny Prasad, Canada Customs Service	Experience Exchange in the Adoption of Tools and IT for Goods Identification
15:40 - 15:55	Ms. Lucero Zamora, Mexico Customs Service	Passenger Vehicle Customs Control System
15:55 - 16:00		**Questions and answers**
16:00 - 16:15		**BREAK**
SESSION IX: Implementation of tools and IT for goods identification - Experience in South America		
16:15 - 16:45	Mr. Rodolfo Espinoza, Chile Customs Service	Information Technologies Applied in the Analysis of Intelligence and in Customs Selectivity
16:45 - 16:50	Ms. Claudia Castro, Peruvian Customs - SUNAT	Adoption of Tools and IT for Goods Identification
16:45 - 16:50		**Questions & Answers**
Closing the Seminar		
16:50 - 17:00	Mr. Eduardo Ibarra, Representative of SUNAT	
END OF THE SEMINAR		

Asia-Pacific
Economic Cooperation

SUB-COMMITTEE ON CUSTOMS PROCEDURES

Experience Exchange
in the Adoption of Tools and IT
for Goods Identification

Contents

1. ISSUES

Cargo identification

- To protect national interests, any cargo entering a country needs to be fully identified.
- Identification in terms of (inter alia):
  - Characteristics of the product and its conformity with national laws and regulations;
  - Commercial transaction subject to tax and excise;
  - Sanitary, safety and security threats.

Cargo documentation

- Legitimate cargo is always moving with its corresponding documentation;
- Cargo is generally identified for commercial, logistic/transport management purposes… but this identification does not necessarilly address the « security » dimension of the goods.
- Other tools must be used, based on risk management techniques.

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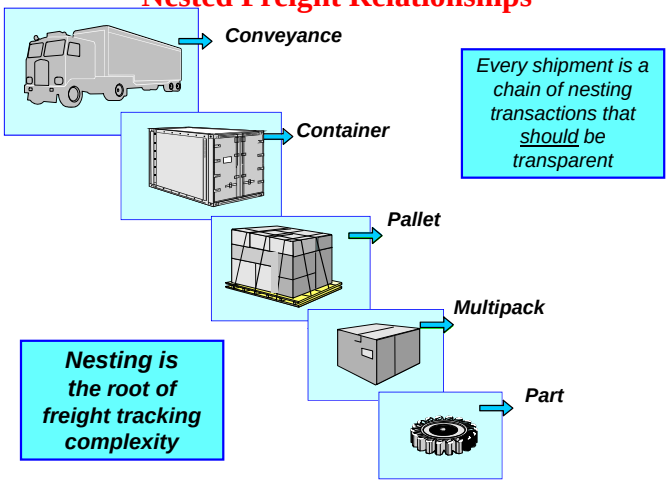
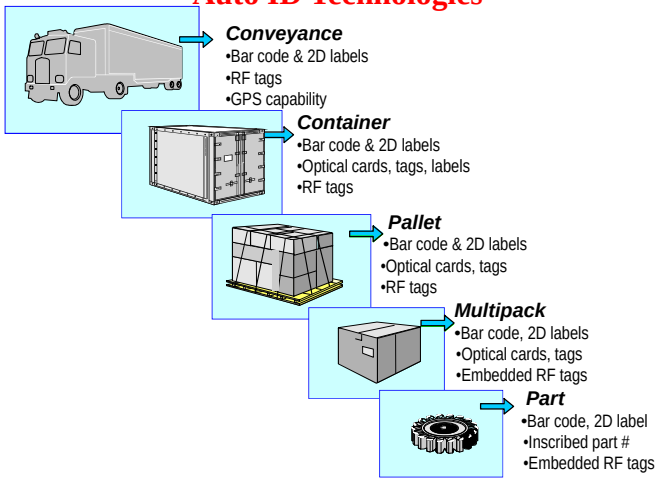
Nested Freight Relationships



Auto ID Technologies



Cargo inspection

- Cargo tracking technology, together with computerized processing of cargo documentation and risk management methods, permits to assess the extent to which cargo should be inspected (documentary inspection, scanning, physical examination).
- Containerized cargo requires particular attention.

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Security of container transport chain

The September 11th attacks galvanised global action to increase the security of the container transport chain. The United States has helped to lead efforts to **develop new international instruments** (such as those negotiated at the IMO) and has put in place numerous **national and bilateral initiatives**.

However, other international organisations (such as the WCO, ILO and ISO), regional groupings (the EU in particular, but ASEAN and APEC as well) and industry actors have also undertaken new work (or re-oriented existing work) to address container security.

Table B.1. **Coverage of current and proposed container security measures**

	Container scanning	Container integrity	Container environment	Container tracking	Container doc. and intelligence
International					
IMO	X		X		X
ILO			X		X
WCO	X		X	X	X
ISO	X	X			
EU		X	X		X
APEC/STAR	X			X	X
UN-ECE/TIR	X	X			X
UN-ECE/International carriage of dangerous goods	X	X	X		
National and bilateral					
CSI (US)	X				
C-TPAT (US)		X	X		X
24 Hour Rule (US)	X				X
Bio-Terrorism Act (US)	X				X
Industry and Industry Government					
BASC		X	X		X
E-Business MoU					X
IRU	X	X	X	X	X
OSC (US)	X	X		X	
SST (US)	X			X	

Source: *CONTAINER TRANSPORT SECURITY ACROSS MODES – ISBN 92-821-0331-5 – © ECMT 2005*

2. APPROACH

Focus of the exchange

- Focus is on the most relevant tools to identify the composition and possible threats of cargo moving into a country.
  - NO focus on cargo identification in terms of RFID, tags, bar codes, UCR number.
  - Focus on scanners and similar devices for cargo and baggage.

Scope of the exchange

- Investigate the environment in which cargo identification takes place.
- Investigate the type of equipment being used.
- No pre-established reference or benchmark.
- Only gather information and stimulate discussion through this workshop.

Limitations of the exchange

- This exchange of experiences may indicate that the spectrum of situations specific to each APEC Economy is so wide and diverse that it may turn difficult to draw reasonable guidelines, principles, best practices, etc..

3. QUESTIONNAIRE

A questionnaire…

- Addressed to Customs administrations thru their representative at the APEC SCCP;
- Structured in two parts:
  - **Part ONE** on the context of the use of cargo identification tools (27 questions in 7 sections);
  - **Part TWO** on the cargo identification technologies currently in use (29 questions in 5 sections).

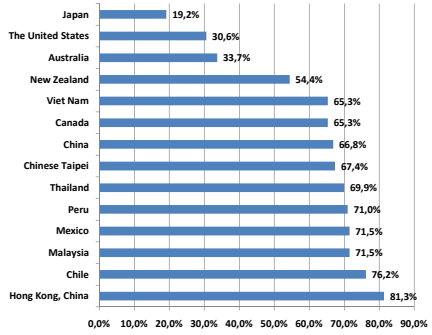
4. RESULTS

4.1 Generalities

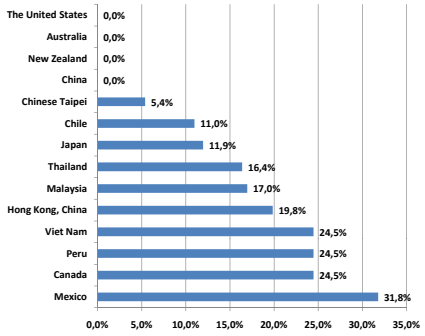
APEC ECONOMIES THAT HAVE RESPONDED TO THE QUESTIONNAIRE

Developed (DEV) Economies		Developing (DING) Economies	
Name	Ident.	Name	Ident.
Australia	AUS	Chile	CHL
Canada	CDA	People's Republic of China	PRC
Chinese Taipei	CT	Malaysia	MAS
Hong Kong, China	HKC	Mexico	MEX
Japan	JPN	Peru	PE
New Zealand	NZ	Thailand	THA
United States of America	USA	Viet Nam	VN
Total	**7**	**Total**	**7**

Part ONE: Rate of response



Part TWO: rate of response



General comments

- The set of answers is balanced between Developed economies (7) and Developing economies (7).
- The answers reflect reasonably the large diversity among the APEC member economies.
- In general, Developing economies provided more answers than Developed economies.
- Three DEV and one DING Economies did not provide answers to the (optional) questions included in Part TWO.

4.2 Part ONE results

Section 1: Agency missions

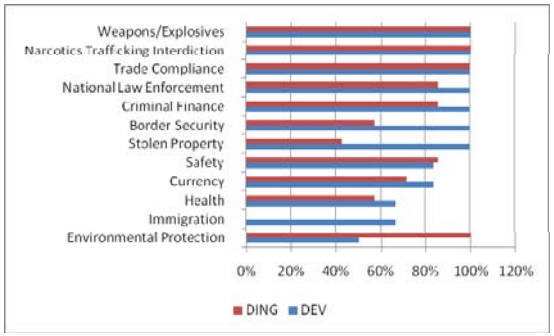
The questions under Section #1 address the **basic missions** and **enforcement strategies** of APEC Member Economies.

There is a certain consensus regarding the missions of the Customs Administration.

Regarding Enforcement strategies, DEV Economies rely on information and processing of information, whereas DING tend to prefer more “traditional” strategies.

This situation may reflect the fact that support to the implementation of the Revised Kyoto Convention recommended practices regarding risk management has not been yet provided in terms of training and technical assistance.

Comparing DING & DEV Economies on missions of the Agency



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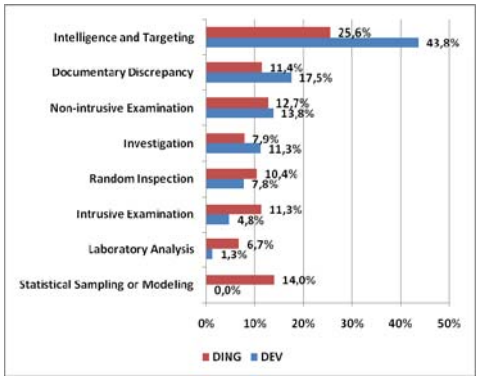
Comparing DING & DEV Economies on enforcement strategies



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Section 2: Inspection locations

The questions under Section #2 address the locations of the various tasks involved in the inspection process.

For both DEV and DING Economies, the Port/Airport complex is the place where most of the inspection tasks are performed.

The performance of these tasks is rarely performed within another agency.

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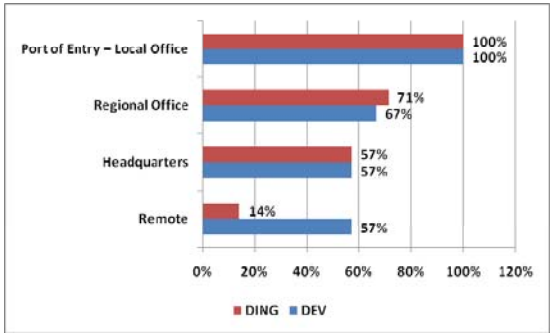
Comparing DING & DEV Economies on place of IM-Export documentation



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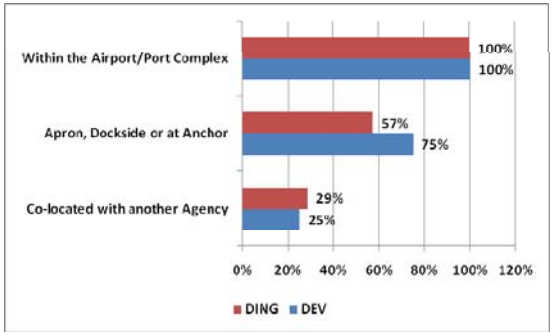
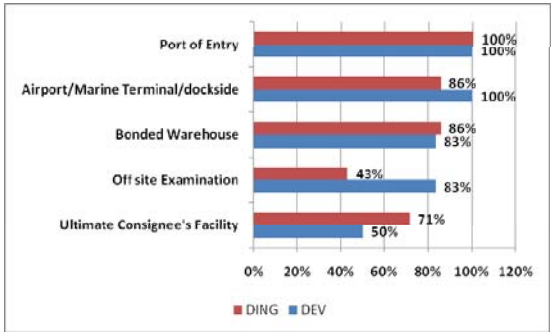
Comparing DING & DEV Economies on place of initial non-intrusive examination



Comparing DING & DEV Economies on place of final physical examination



Section 4: Inspection process (1)

The questions under Section #4 address the inspection process in terms of its main elements, its primary inspection targets, its performance indicators and its criteria to target containers.

There is a strong convergence of views regarding the elements of the inspection process, along the line of WCO-recommended modern Customs practices. **Investigation**, **Random or statistical sampling** and **Laboratory analysis** are among the lower ranking elements.

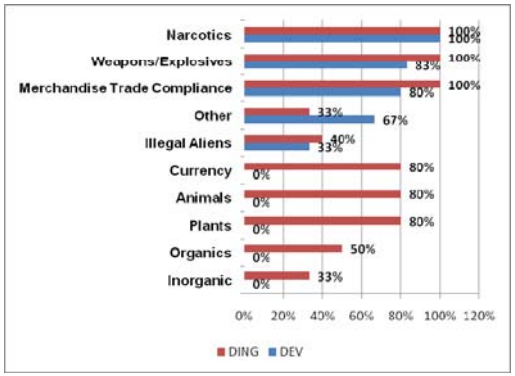
Section 4: Inspection process (2)

Container freight is the primary inspection target, particularly in DING Economies.

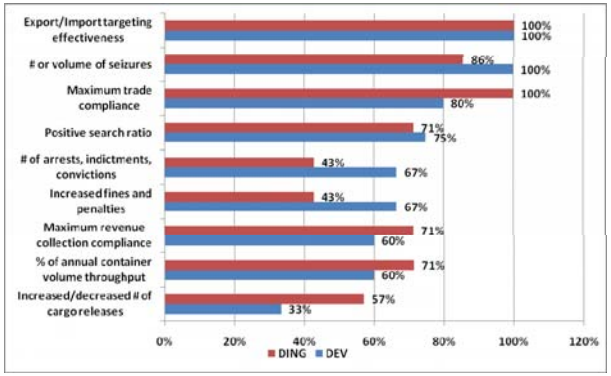
Narcotics, Weapons/explosives and Merchandise trade compliance are the most relevant primary inspection targets, while Export/Import targeting effectiveness and Number/ volume of seizures are the most relevant indicators to measure inspection and enforcement effectiveness.

Among other things, these observations may indicate that the role of Customs Administration in protecting national interests is increasingly geared towards security (rather than trade facilitation), with the support of modern practices and technologies (i.e. risk management).

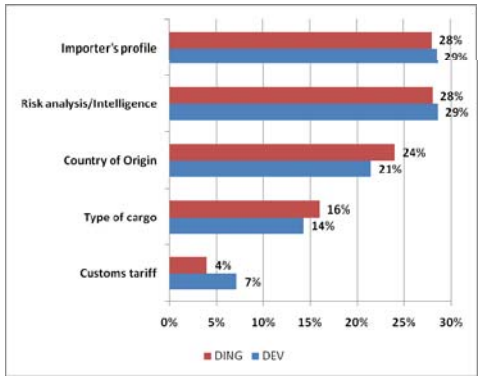
Comparing DING & DEV Economies on primary inspection targets



Comparing DING & DEV Economies on performance indicators



Comparing DING & DEV Economies on criteria for examination

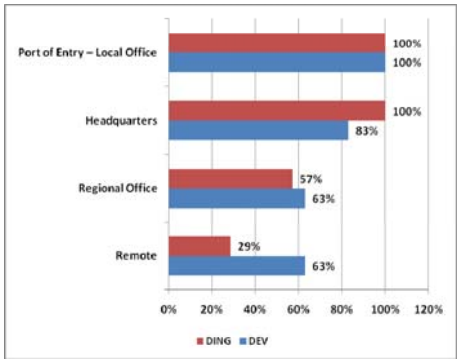


Section 5: Reporting

The questions under Section #5 address the reporting of inspection results, in terms of level of:

- **Reporting** (mostly Headquarters and Port of entry),
- **Types of results reported** (volume of unit inspected and successful identifications),
- **Location of records** (Customs computerized system) and
- **Sharing of results** (eventually with other local institutions and Customs abroad).

Comparing DING & DEV Economies on level of reporting



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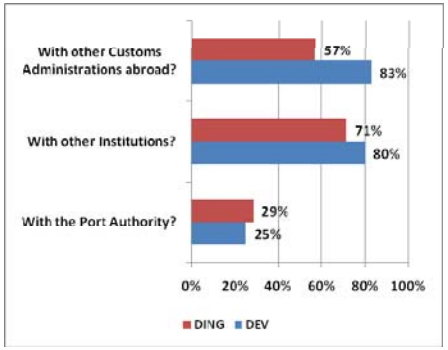
Comparing DING & DEV Economies on sharing of inspections results



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Section 6: Inspection technology

The questions under Section #6 address the general features of the inspection technology used, in terms of mobility, technologies used and for what types of targets.

Regarding **mobility**, responding DEV Economies tend to use more the category "Portable + Mobile" than the category "Fixed" (55% against 45%), a situation opposite to the one observed with responding DING Economies. This might be due to the likely higher operating costs of "Portable + Mobile" versus "Fixed" technologies.

X-ray technology is by far the mostly used technology by both DEV and DING Economies. **Vapor/Trace Detection technology** appears to be the second type of technology used by DEV Economies, while DING Economies use **canines**.

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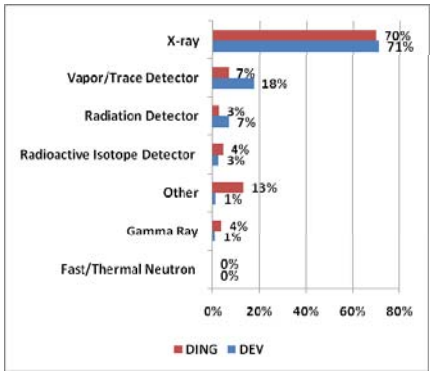
Comparing DING & DEV Economies on inspection technologies used



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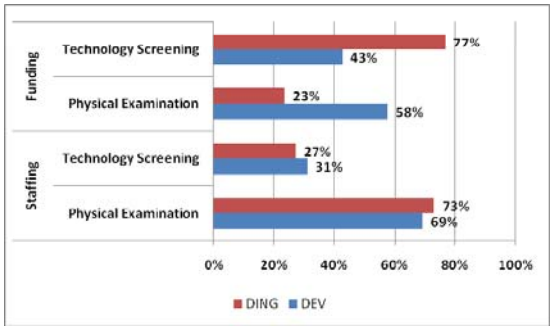
Section 7: Human resources development issues

The questions under Section #7 address the resources invested into the inspection process, the number of local and foreign staff assigned to key inspection-related activities, the volume of staff trained locally and abroad, the established audit mechanisms for the goods control process, and the main active NII devices used in primary inspection.

Funding & staffing resources



Key areas for staffing

Regarding the local personnel employed, the 2 responding DEV Economies strongly favor the areas of “Enforcement and control procedures" and "Operations of cargo identification tools” (average 82 persons) against the two other areas: “Interpretation of results” and “Information Technology” (24).

The situation is slightly more balanced (63-36) in the 6 responding DING Economies.

Key areas for training

Regarding local training, the 3 responding **DEV Economies** focus on "**Operations of cargo identification tools**” and “**Interpretation of results**” (yearly average of 122) versus “**Enforcement and control procedures**" and “**Information Technology**” (yearly average of 76).

The 4 responding **DING Economies** are giving much more weight to local training in “**Enforcement and control procedures**" and "**Operations of cargo identification tools**” (yearly average of 42) against “**Interpretation of results**” and “**Information Technology**” (yearly average of 8).

Training abroad is similarly unbalanced (yearly averages are respectively 14 and 3).

Regarding **audit mechanisms** for the goods control process, the few Economies that have reported the establishment of such a mechanism tend to use **internal audit** and/or **post-clearance audit**.

Finally, regarding the type of NII devices used in primary inspection, X-ray technology remains the most commonly used screening technology.

Comments on Part ONE

- **From Canada:**

"From a technology perspective, the effectiveness of X-ray and GAMMA ray imaging is based on the experience of the officer to learn what a 'normal' shipment is.

Only then can an 'anomaly' be identified for physical examination.

We would appreciate learning from your experience with PFNA and TNA."

Comments on Part ONE

From New Zealand :

"The development of effective screening criteria for suspect cargo, both import and export, is crucial to an effective and efficient intervention mechanism.

For example at the Port of Auckland, New Zealand's busiest with a throughput of 800,000 TEU containers per annum, New Zealand Customs ends up X-ray screening between 5,000 to 6,000 TEUs each year (0.625%- 0.75%), of which they end up physically examining 500. **This is due to capability issues**. Of that small percentage physically examined (1 in 1600), NZ Customs has a 33% hit rate."

4.3 Part TWO results

Radiation Portal Monitors (RPMs)

81 units

60 in 2 DEV Econo.

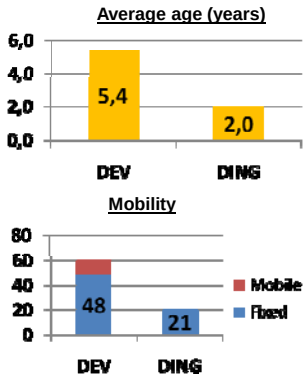
21 in 2 DING Econo.

OWNERSHIP:

- Public entities
- Private sector
- 3rd country enactment

MAINTENANCE:

- Self
- Sub-contracted
- 3rd country enactment

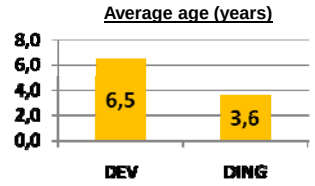


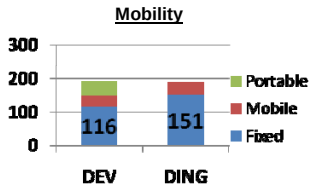
X-Ray systems

381 units
191 in 4 DEV Econo.
190 in 6 DING Econo.

OWNERSHIP:
- Public entities (joint)
- Private sector
- 3rd country enactment

MAINTENANCE:
- Self
- Sub-contracted
- 3rd country enactment





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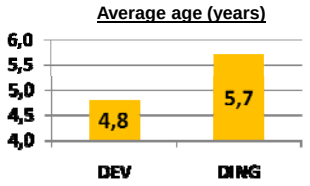
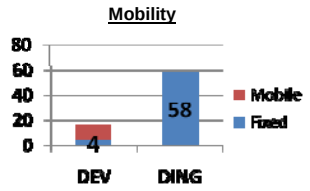
GAMMA Ray systems

74 units
16 in 1 DEV Econo.
58 in 1 DING Econo.

OWNERSHIP:
- Public entities (joint)

MAINTENANCE:
- Self
- Sub-contracted





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Fast Neutron Analysis (FNA)

None of the responding Economies reports the use of FNA device.

Thermal Neutron Activation (TNA)

Only one responding DING Economy (MEX) reports the use of two types of TNA devices. Both are SAIC equipment; one 4-year old fixed Palet VACIS; and one 2-year old fixed ICIS.

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Track devices

- Out of 3 responding **DEV Economies**, only one uses **OCR** in major ports (no use of Electronic seals or Integrated surveillance).
- Out of 6 responding **DING Economies**, two use **OCR** in main port ; none reports the use of Electronic seals; and one uses **Integrated surveillance** in major ports and airports.

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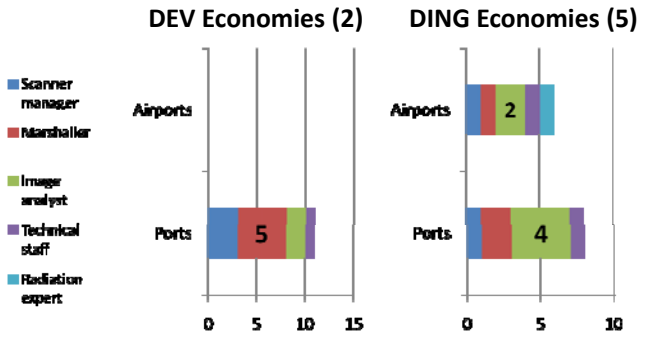
Staffing for scanning process



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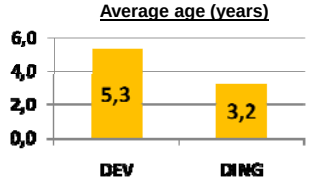
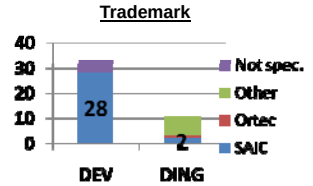
Radioactive Isotope Identification Devices (RIIDs)

44 units
33 in 2 DEV Econo.
11 in 3 DING Econo.





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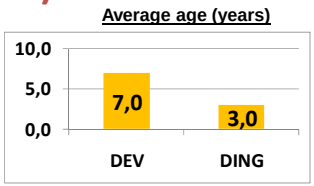
Personal Radiation Detectors (PRDs)

228 units
200 in 1 DEV Econo.
28 in 1 DING Econo.



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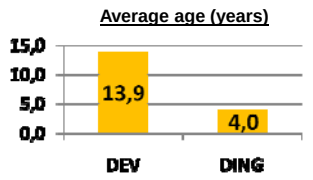
Busters

98 units
94 in 2 DEV Econo.
4 in 2 DING Econo.



K910B BUSTER
WITH ACCESSORIES

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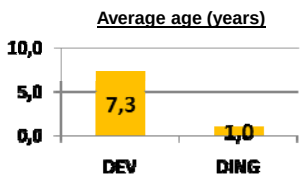
Vapor Detection Systems

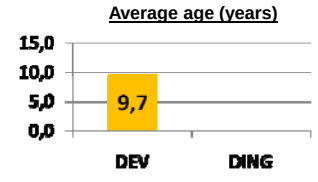
23 units
8 in 1 DEV Econo.
15 in 1 DING Econo.



VaporTracer™
Handheld Explosives and Narcotics Detection

Trace Detection Systems

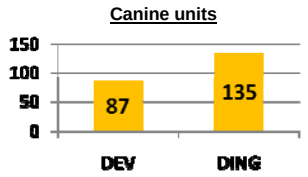
164 units
in 2 DEV Economies



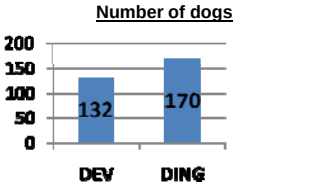
Advanced Explosives Vapour Trace Handheld

Canines

222 canine units
87 in 3 DEV Econo.
135 in 5 DING Econo.



302 dogs
132 in 3 DEV Econo.
170 in 5 DING Econo.



Some interesting findings

- Regarding the average age of X-Ray versus Gamma-ray, DEV Economies have older X-Ray equipment than « new comer » DING Economies, while there is a slightly reverse situation regarding Gamma-Ray.
- Regarding the average age of the other tools, equipment in DEV Ecoconomies is generally (and logically) older than in DING Economies.

APEC Workshop on

"Experience Exchange in the Adoption of Tools and IT for Goods Identification"
Lima, Peru

15 y 16 October, 2009

ANNEX #3:

Summary of the presentations

Welcome Remarks by Mr. Javier Garcia, Representative of SUNAT

Seminar Overview by Mr. James Sullca, SUNAT Project Overseer

The Project Overseer (James Sullca), representative of SUNAT-Peru gave a substantive introduction to the Workshop. He referred to the key functions of a Customs Administration, emphasizing its role in the security and facilitation of global trade. He reminded participants of the main features of the WCO SAFE Framework and stressed the need for Customs administrations to work co-operatively and to use modern technology to inspect high-risk shipments. In particular, he mentioned non-intrusive inspection equipment and radiation detection equipment as essential tools for conducting inspections, without disrupting the flow of legitimate trade. He provided some basic considerations when selecting a scanning equipment. He concluded his presentation by a short reference to the structure of the Survey carried out by SUNAT for the APEC SCCP.

SESSION I: "SCOPE OF THE WORKSHOP"

Issues and Approach to the Identification of Goods, Outcomes of the questionnaire on Tools and IT for Goods Identification by Dr. Maxence Orthlieb, Project Consultant

The Consultant (Maxence Orthlieb) reminded participants that any cargo entering a country needs to be fully identified, be it only to protect national interests in terms of conformity with national laws and regulations, of revenue collection and of sanitary, safety and security threats.

Cargo is generally identified for commercial, logistic/transport management purposes… but this identification does not necessarilly warrant that cargo is legitimate, particularly regarding the « security » dimension of the goods. Therefore other tools must be used, based on risk management techniques. Cargo tracking technology, together with computerized processing of cargo documentation and risk management methods, permits to assess the extent to which cargo should be inspected (documentary inspection, scanning, physical examination).

He informed that the focus of the Questionnaire is on the most relevant tools (called scanners) to identify the composition and possible threats of cargo moving into a country. These tools are called scanners and similar devices for cargo and baggage. The two parts of the Questionnaire covered the environment in which cargo identification takes place and the type of equipment being used. Considering the wide spectrum of situations specific to each APEC Economy, the Questionnaire does not intend to draw guidelines, principles, best practices, but rather to highlight commonalities among the responding APEC Economies.

SESSION II: SECURITY OF SUPPLY CHAIN

Experience in the Peruvian Government:

International Trade Single Window Project – Port Component, by Mr. José Ñaupas, National Port Authority - Peru

Another representative of Peru (José Ñaupas) from the Port Administration made a presentation of the port component of the national Single Window system. He first introduced the concept of Port Single Window (in Spanish: Ventanilla Unica-Puerto VUP) as a component of a wider-scope international trade Single Window concept. This port concept, also called "port community system" in other parts of the world, covers the management of operating licences as well as of shipping and cargo services processes. He then described the main VUP components and methods of operation. He also listed the key expected benefits of such VUPfor the port community, for domestic and international trade, and for Government.

Optimization Processes of Importation / Exportation in Callao Port, by Mr. Carlos Rodriguez, National Port Administration – Peru

Another representative of Peru (Carlos Rodriguez) from the Port Administration made a presentation on the optimization processes on import and export in the port of El Callao. After a brief description of the role, network and business features of ENAPU, he explained the new importation and exportation processes that reduced drastically the transit of foreign trade cargo through the port. These achievements resulted from synergies between the Customs administration (SUNAT) and the Port administration, based on EDI agreement and ICT resources.

Experience in the Peruvian Private Sector

DP World Callao, by Mr. Luis Turbides, Dubai Ports World - Peru

A representative of Dubai Port World (Luis Turbides) presented the key characteristics of the containre terminal under construction. He put particular emphasis to the security infrastructure and technologies that will be installed, including RFID for internal tractors, automated container inspection, gate OCR and Megaports-type radiation portals.

SESSION III: IMPLEMENTATION OF TOOLS AND IT FOR GOODS IDENTIFICATION

Experience in Private Sector

Key tools for non-intrusive monitoring of goods in the market, by Dr. Leonardo Caparrós Gamarra, Unlimited Systems Peru

A representative of Smith Detection (Leonardo Caparrós) gave a very interesting and technical presentation on the technologies developed by his company to improve Customs control and reduce security threats in ports and airports.

Standards in the identification of goods, by Mary Wong , GS1 Peru

A representative of the non-governmental organization GS1 (Ms. Mary Wong) introduced the role of her global organization in promoting international standards towards improved efficiency and visibility in supply and demand chains. She stressed the importance of GS1 tool box for goods identification, including Global Trade Item Number (GTIN), Serial Shipping Container Code (SSCC) and Global Shipment Identification Number (GSIN). She also highlighted how the SSCC could be used as the WCO-recommended Unique Consignement Reference (UCR) Number for Customs purposes.

SESSION IV: IMPLEMENTATION OF TOOLS AND IT FOR GOODS IDENTIFICATION. EXPERIENCE IN ASIA – PART I

Adoption of Tools and IT for Goods Identification, by Mr. Wong, Pun Sian, Royal Malaysia Customs

The representative of Malaysia ((Pun Sian Wong) introduced the Royal Malaysian Customs, its organization structure, vision, mission and ethics and its present challenges to cope with increasing foreign trade (almost 8 millions Customs declarations in 2008). In the context of the Customs-to-Customs pillar of the WCO SAFE Framework of Standards, he described the Customs Verification Initiative (CVI) based on tha adoption of risk management in the cargo clearance process. In support to the US Megaports Initiative, he presented the NII equipment currently in use in Malaysia, as well as the various IT tools used in the cargo clearance process, inluding e-Manifest, Customs Information System, Decision Support System, Electronic Vehicles Information System and the ASEAN/National Single Window. He provided factual information on the impact of CVI in terms of improved delivery and reduced tax evasion. He concluded with the key features of the RMC future expansion programme, stressing the national commitments to current international WCO instruments: the RKC and the SAFE Framework.

Experience in Implementation of NII for Goods Identification, by Mr. Ching-Hsiang kao, Chinese Taipei, Ministry of Finance – Customs Administration

The representative of Chinese Taipei (Simon Kao) described his Economy's experience in the implementation of NII for goods identification. He briefly gave an overview of the port of Kaoshiung and of the new NII Division established in the Customs Office of that port. After indicating the type of devices used and the basic operational steps, he mentioned the conditions of a succesful inspection process. This included the profiling and targeting tools and process, as well as the image interpretation and analysis. He provided participants with three typical achievements in the use of the NII technology: the case of a US$ 2 million counterfeit currency found in cartons of plastic toys; thec ases of cigarettes smuggling; and the case of containerized cargo declared as "Plastic containers" that turned to conceal more than 2 tons of pseudo-ephedrin.

APEC Experience Exchange, by Mr. Kurkrit Chaisirikul, The Royal Thai Customs

The representative of Thailand (Kurkrit Chaisirikul) presented the vision and mission of the Royal Thai Customs and emphasized the importance of risk management to set the proper balance between control and facililtation of trade flows and thereby to increase the competitive advantages of the country. He explained that the use of X-ray scanners resulted in speedy throughput of containers (25 containers per hour). He also presented a number of illustrative cases of detection through x-ray inspection. He finally refered to the implementation of the Megaports Initiative in Thailand.

SESSION V: IMPLEMENTATION OF TOOLS AND IT FOR GOODS IDENTIFICATION. EXPERIENCE IN ASIA – PART II

The Operation of Hi-Co Scan X-ray Container Inspection System, by Mr. Vincentus, Istiko, Indonesia Customs Service

The representative of Indonesia (Vincentlus Itsiko Murtiadji) presented the operation of the Hi-Co scan X-ray container inspection system. First, he gave a detailed inventory of the Customs control equipment presently in use to cover the four zones of the potential smuggling area of Indonesia. With a number of very interesting photos of the installed container X-ray system, he stressed the system capabilities (e.g. up to 20 containers per hour). He then explained the major steps of the process of image interpretation (IMI). He also provided examples of X-Ray images showing how these images can be processed to obtain a clearer identification of the cargo under scrutinity. Finally, he carefully described the three-channel categorization of goods being inspected through the Hi-Co Scan Inspection, a technology that puts more emphasis on controlling/investigating aspects while simplfying the importation process.

Customs Inspection Equipment Implementing in Vietnam, by Ms. Dao, Thi Thu Thuy, Viet Nam Customs Service

The representative of Viet Nam (Dao Thi Thu Thuy) gave a presentation of the present status of implementation of Customs inspection equipment in Viet Nam. This presentation started with a geographical description of the country and of its main areas of Customs operations: 20 international seaports, 6 civil international airports, various land border stations with Laos, China and Cambodia, plus postal offices and Inland Clearance Depots (ICDs)in the two major cities. For each of these main areas, the representative offered a brief statement on the status of adopted tools and IT for cargo identification in terms of equipment in use, targeted cargo, inspection activities carried out and eventual synchronization with Information and Communications Technology (ICT) system. He indicated, in particular, that seaports and ICDs were not equipped. Based on an inspection equipment SWOT analysis, he introduced the on-going plan towards the equipment of appropriate cargo identification tools. The plan is a component of the Viet Nam Customs Modernization project funded by the World Bank; it covers the acquisition of modern technical equipment (X-ray container scanners) operating in synchronization with the ICT system, in major international seaports and land border stations. In the context of theWCO SAFE Framework of Standards, the plan will revamp the business process of import and Customs clearance. It will also enhance Customs capacity to detect illegal items and reduce the release time of imports and exports. The representative concluded with some recommendations, including the use of other technologies such as RFID, the adoption of best practices from developed countries, the need for IT infrastructure and the support from APEC and other international organization towrdsthe improvement of Viet Nam inspection system.

SESSION VI: Summary of the previous day

SESSION VII: Track Devices & Tools

Using RFID to Enhance Trade Security & Facilitation, by Mr. Ken CK Chen, Chinese Taipei, Ministry of Finance – Customs Administration

Another representative of ChineseTapei (Ken CK Chen) presented how the use of RFID can enhance trade security and facilitation. First, he provided some figures on the traffic of the port of Kaohsiung, an Asian transhipment hub for Asia, Australia, Europe and America, ranked in the top 6 major ports worldwide with approx. 2.5 millions import-export TEUs and 1.2 millions transhipped containers. He stressed the major challenges faced by Customs and shipping companies in terms of security and HR (??) resulting in additional costs and delays. He than made the point that RFID e-Seal contributes to trade security (anti-smuggling, increased cargo ovement security) and trade facilitation (Customs efficiency, cost savings). He gave a detailed description of the RFID technology and operation and of the corresponding procedures of using RFID e-Seal for control. Using examples, he explained how containerized cargo, truck and driver can be monitored with the e-Seal, a system that led to 97% reading accuracy after only 7 months of implementation. From this positive experience, he suggested to extend this best practice in other ports of Chinese Taipei, and to share itwith other APEC Customs administrations. He highlighted the role of RFID in supply chain management and connectivity, as a means to increase "cargo visibility", a major concern of Customs administration in the context of the APEC SAFE Framework.

Canine Program K-9, by Mr. Enrique Zamora, Peruvian Customs - SUNAT

Another representative of Peru (Enrique Zamora) from SUNAT gave an information on the national Canine Program K-9, within the Customs department for Prevention of Smuggling and Border Protection. Back in 1994, the first canine unit was created with the first two Customs Officers certified as Dogs Guide who arrived with their dogs from a training course in the UK. With support of the UK and, later, of the USA, the program consolidated as a canine antidrug program. Using various photos, the representative illustrated the major activities covered, from theory to trainings and work-outs, as well as the equipment required (facilities and vehicules. The photos also showed how canine teams operate in carrying out controls in warehouses, airport and port facilities, on ships and on airplanes.

SESSION VIII: Implementation of tools and IT for goods identification Experience in America

Experience Exchange in the Adoption of Tools and IT for Goods Identification, by Mr. Johny Prasad, Canada Customs Service

The representative of Canada Customs Service (Johny Prasad) introduced the mandate and work of the Canada Border Services Agency (CABSA) as the management of Canadian borders. He gave an overview of the use of risk assessment systems and detection technology and related tools. He described the main types of technologies currently in use, as well as the detector dog service. He concluded by stating that CBSA is "*continuously innovating and evaluating new and effective ways to utilize detection technology to aid in the examination of goods and conveyances*".

Passenger Vehicle Customs Control System, by Ms. Lucero Zamora, Mexico Customs Service

The representative of Mexico (Ms Lucero Zamora) from the Mexico Customs Service first presented the new automated passenger vehicule identification process established at the US-Mexico border. This system will run the collected data through different databases and risk analysis tools with a view to enhance Customs' targeting capacities and effectiveness in preventing firearms, ammunition and bulk cash smuggling into Mexico. She then explained the new ICT-based paper-less Mexican Customs, including the implementation of the Single Window concept and the establishment of a simplified export process (SIMPLEX) that will not require the use of Customs broker services. This new clearance process will allow submitting electronically the Customs declaration.

SESSION IX: Implementation of tools and IT for goods identification - Experience in South America

Information Technologies Applied in the Analysis of Intelligence and in Customs Selectivity, by Mr. Rodolfo Espinoza , Chile Customs Service

The representative of Chile Customs Service (Rodolfo Espinoza) explained how his country has been using information technology for analysis of intelligence and Customs selectivity. He described the two computer-assisted models currently used: NEUGENT model and QLIKVIEW model, models that make more effective NII equipment and technology to support the enforcement task of Chilean Customs.

Adoption of Tools and IT for Goods Identification, Ms. Claudia Castro, Peruvian Customs – SUNAT

Another representative of SUNAT (Ms Claudia Castro) presented the work of the Customs unit called "Management of Special Operations" that focuses on Customs enforcement against illegal traffic of goods. She briefly described the main features of the Peruvian Customs computerized system (SIGAD) and the various equipment used in the inspection of goods. She finally showed a number of pictures highlighting the major achievements of the unit in terms of seizures of various types of illegitimate cargo.

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15 y 16 October, 2009

ANNEX #4:
Summary of some of the Questions and Answers

Regarding Sessions I (Scope) and II (Security of Supply Chain)

The Consultant answered two questions:

1. Refering to Canine units and dogs: The distinction between Canine units, teams and dogs was made to cover the situation by which an Economy may have various Canine units, each unit being composed of various teams and each team being in charge of one or more dogs.
2. Refering to the term "Other" used: For various questions, a choice of possible answers was offered. Among this choice was the option "Other", to be used in case none of the offered answers corresponded to the local situation. In general, the selection of the option "Other" implied for the respondent to provide a free-text description of what was the "other" answer. Unfortunately, this free-text description was not systematically provided.

Regarding Session III (Implementation of tools)

The presentation on "Key tools for non-intrusive monitoring of goods in the market" by Dr. Leonardo Caparrós Gamarra of Unlimited Systems Peru, representing the manufacturer Smith Detection, raised interesting questions on the use of older detection equipment to cope with new security challenges. A number of questions were related to the possibe health-damaging effects, as discussed below.

The presentation on "Experience in Implementation of NII for Goods Identification" by Mr. Ching-Hsiang Kao from the Chinese Taipei Customs Administration generated an exchange of views on the interpretation of images from X-Ray versus Gamma-Ray tools.

One participant questionned the danger faced by staff operating scanning equipment. Both the representative of the manufacturer Smith Detection, the representative of DB Ports and the representative of Canada made it clear that there are specific procedures for the operation of scanning equipment by Customs staff. These specific procedures do take into account, when and where appropriate, the health danger eventually generated by certain types of equipment (e.g. Gamma Ray scanners).

Another participant raised the question regarding the possible damage incurred by the cargo/goods being scanned. The representative of Canada explained that tere was no reported medical issues related with the use of scanning equipment within the normal range of use for Customs control purposes. Some categories of cargo/goods are usually not scanned because of their intrinsic nature that tends to trigger an alarm: this is the case, for example, with bananas and ceramics. Other categories are not scanned in Canada (e.g. biological medications, vaccines).

Regarding Sessions IV and V (Implementation experience in Asia)

A participant questionned whether the function of image analysis and interpretation could be outsourced to private sector service provider. Both, the representatives of Mexico and Malaysia clarified that, in their Economies, applicable laws and regulations restrain this function to Customs civil servants.

Regarding the necessary training required for an effective interpretation of the images generated by the scanning equipment, the representative of Indonesia explained that it depends very much on the capacity of staff (the "imagination") to decifer images that are de facto "negative" photos of the scanned cargo. He estimated that a good training would require the analysis and interpretation of about 1000 images. The representative of Thailand added that proper interpretation of images relies on a wide knowledge of the Customs laws, regulations and procedures complemented by an on-the-job practice. Time-wise, a proper training may require up to one year.

The representative of Malaysia suggested ways to increase knowledge regarding image analysis and interpretation. One would be to refer to experts from other Customs administrations; another would be to establish a repositary or compendium of images under the umbrella, for example, of the World Customs Organization.

Regarding Session VII (Track devices and tools)

A participant asked about the major obstacles to the use of RFID tools to enhance trade security and facilitation. The representative of Chinese Taipei explained that one of the major obstacles was the lack of efficient communication among concerned Ministeries that are not all giving the necessary importance to this new technology. Another obstacle is the present limitations of applicable laws and regulations. For example, to expand the use of RFID technology, local

regultations must be amended to require shipping companies to invest in and use the technology.

Regarding Session VIII (Implementation experience in America)

In relation with the presentation by the delegate from Canada refering to the practices of risk management in the context of the use of scanning equipment, a discussion among the participants highlighted that the effectiveness of scanning equipment depends very much on the build-up of databases for profiling users (cargo shippers, passengers). In building-up such databases, the importance of intelligence and questioning users was stressed.

Regarding the new Mexico Customs automated passenger vehicule identification technology installed at the US-Mexico border, a participant asked whether the Mexican system was interconnected with the US Customs. The representative of Mexico explained that interconnection is on its way.