

X-RAY CONTAINER INSPECTION SYSTEM



Border Crossing Facility Management and Customs Transit System

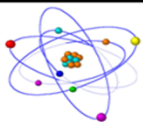
May 11, 2016

Thai Customs Department

Presented by

Mr. Chaiyatat Nivasabutr

Director of Customs Control Technology Center



Customs Control Technology Center, Investigation and Suppression Bureau
The Royal Thai Customs Department, Ministry of Finance





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2. X-Ray Container Inspection System

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1. วัตถุประสงค์ขององค์กร

“An excellent Customs service to achieve sustainable development of Thailand economy and global trade connectivity”



1. Facilitate trade and promote national logistics system
2. Promote national economy by Customs-related measures and international trade information
3. Protect and secure society based on Customs control system
4. Collect revenue in a fair, transparent and efficient manner

World Trade



Facilitate →

← Customs Control

Intelligence
Profiling
Targeting

Solution

Information
Technology
Non Intrusive
Instrument

High Risk Inspection

X-RAY CONTAINER INSPECTION SYSTEM

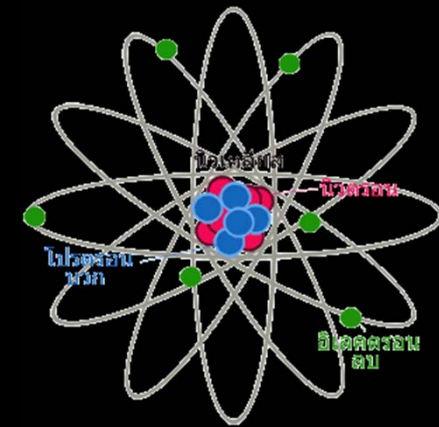
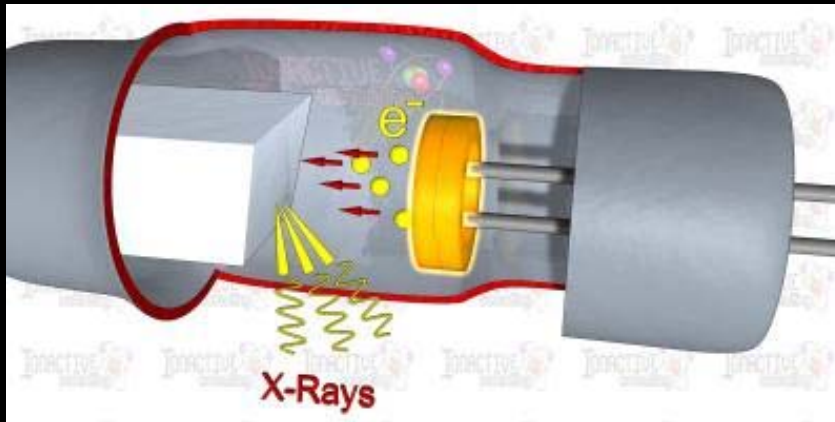
Background history

United States has requested cooperation from friendly countries to set up the second line of defense after the terrorist incident 911

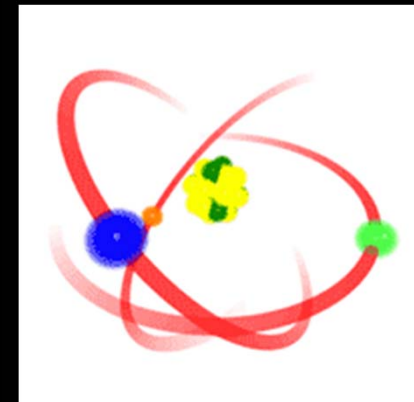
July 22, 2003 The Cabinet approved the first X-Ray Container Inspection System Project of Thai Customs



X-RAY CONTAINER INSPECTION SYSTEM



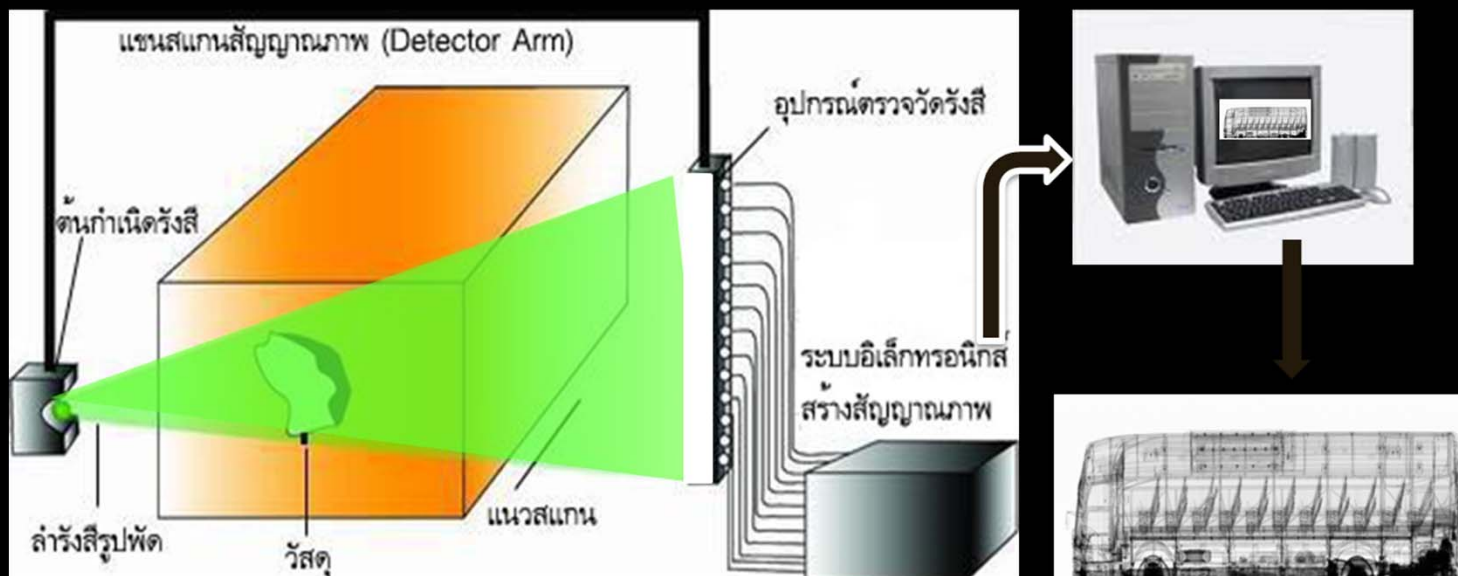
Electric power is the source of X-Ray



X-RAY CONTAINER INSPECTION SYSTEM



Techniques to create the image
of the X-Ray system.



X-RAY CONTAINER INSPECTION SYSTEM

The Fix Type

Lame Chabang Port Customs Bureau

X-Ray Station 1 (Export) 2 Sets

X-Ray Station 2 (Import) 2 Sets



The Big Tunnel, get clear Images and the speed of scanning is 30 Containers per hour.



X-RAY CONTAINER INSPECTION SYSTEM

The Relocatable Type

Installed 2 Sets @ Bangkok Port
and ICD Lad Krabang.

Installed 1 set @ Maesai Customs
House, Mukdahan Customs House,
Nongkhai Customs House, Sadao
Customs House, Padang Besa
Customs House and Pranburi Check
Point

Total = 10 Sets

Medium size, It is able to relocate after first installation and the speed of scanning is 25
Containers per hour



X-RAY CONTAINER INSPECTION SYSTEM

The Mobile Type

Install 2 Sets @ Chiangkhong Customs House

Install 1 Set @ Customs House :
Nakorn Panom, Thali, Bueng Kan,
Mukdahan, Chongmek, Khongyai,
Maesod, Chumporn, Songkhla and
Sungai Ko-Lok

Total = 12 Sets

Small Size, It is Movable, Clear Color Picture and the speed of scanning is 20 Containers per hour.

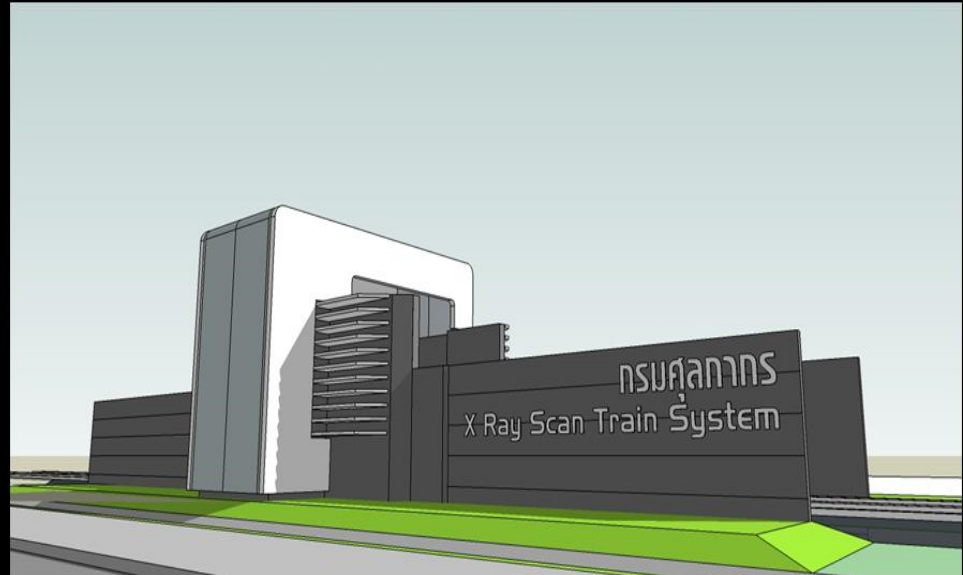


X-RAY CONTAINER INSPECTION SYSTEM

The Train Type

Installed 1 set on the Railway @
Lam Chabang Port Customs Bureau

It can scan the train while running
through the X-Ray tunnel at the speed
between 8 – 30 Kilometer per hour.



It is the biggest size of all types, clear color picture and it can send the X-Ray images
from Lam Chabang to ICD Lad Krabang before the train arrives the ICD.



3. The agencies responsible for the X-Ray System

The Customs Control Technology Center : CCTC



- Policy Making
- Set up the KPI
(Key Performance Indicator)
- Monitoring
- Set up Training program
- Set up new projects
- Maintenance / Outsource
- Policy
- Network Manager

Customs Bureau, Customs House



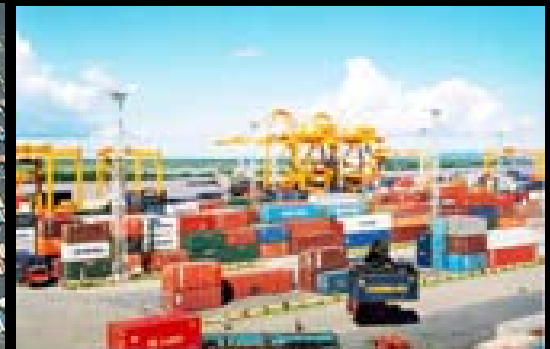
- X-Ray System Operator
- Follow the KPI and report
- Inspect and Release Cargo
- On the Job Training
- Training Platform Operator

The use of X-ray System to inspect cargo containers

1 Release Without Inspection

2 Physical Inspection

3 Scanned by X-Ray Machine



Set up profile for X-Ray Inspection

Information

Screening

Analysis
Risk
Assessment

Inspect
High Risk
Cargo

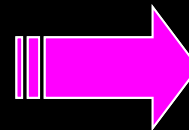
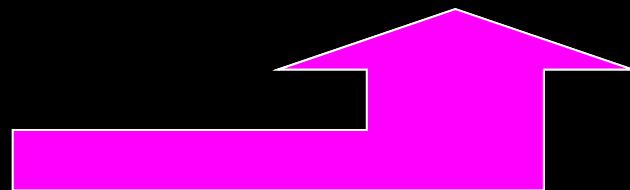
Pre-Analysis

No case

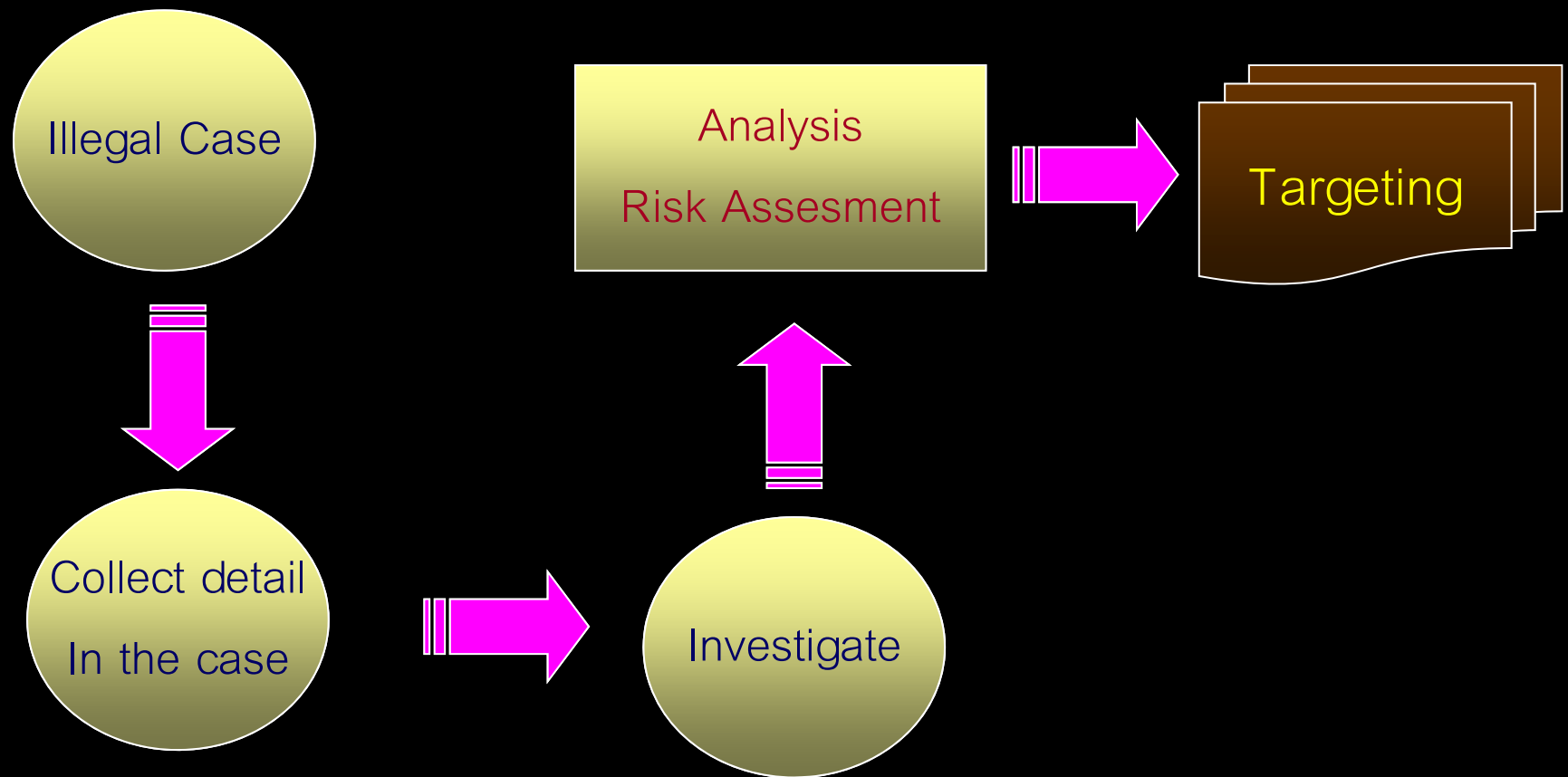
Analysis
Risk Assessment

Targeting

Collect
Information



Post Analysis



Pre-Analysis

News

Radio

Television

Website



Intelligence

CEN/WIPO

IP / DSI

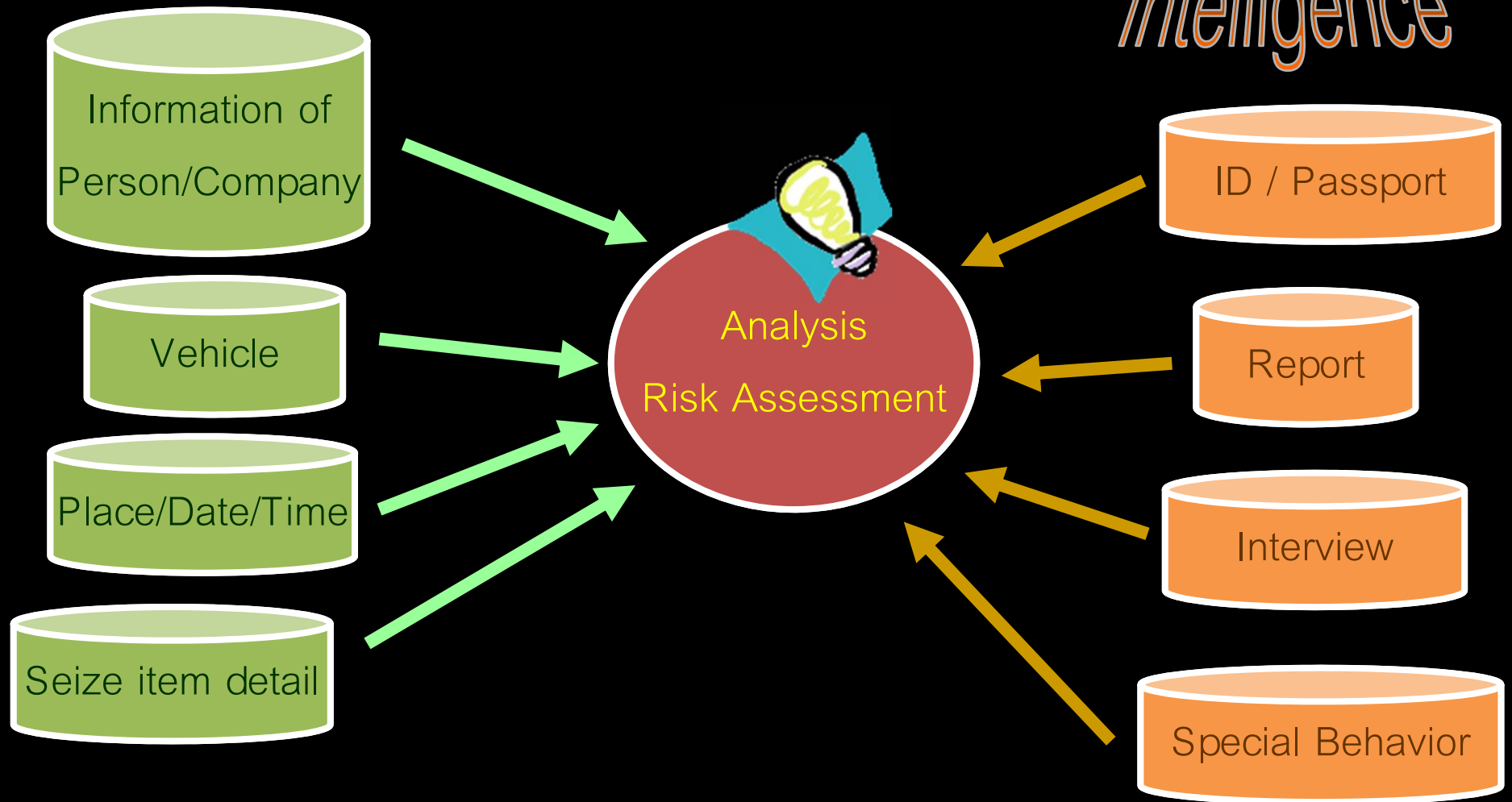
Informant

Regional Customs

Open Sources

Post-Analysis

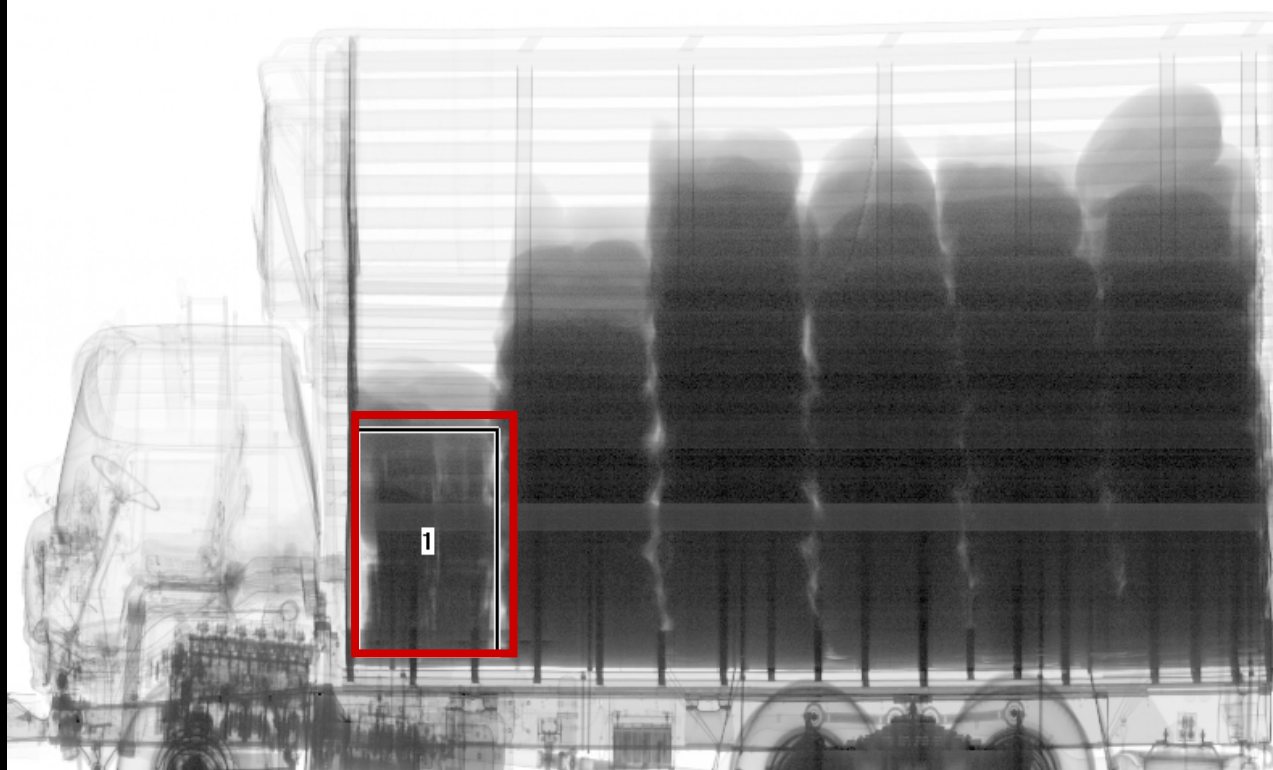
Intelligence



EXAMPLE OF ILLEGAL CASE INSPECTED BY X-RAY

Remark:

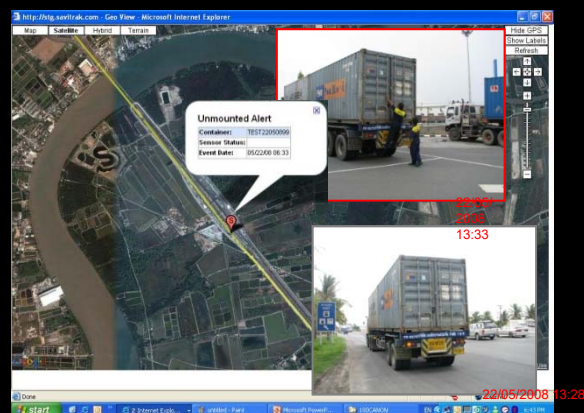
1 - cd



EXAMPLE OF ILLEGAL CASE INSPECTED BY X-RAY



Integration between X-Ray & Others Technologies



Integrating the Technologies

1. Comparing informations between import/export declaration and CCTV video at the inspection area.

The screenshot displays the Thai Customs Department Import System web application. The interface includes a sidebar menu on the left with categories like 'Import System', 'Master & Control', 'Declaration Preparation', 'Manifest', 'Declaration Maintenance', 'Declaration Report', 'Clearance', 'Reassessment', 'Declaration Post Review', 'Reassessment (New)', 'Transit/Transshipment', and 'Inquiry'. The main content area shows a declaration form with the following fields:

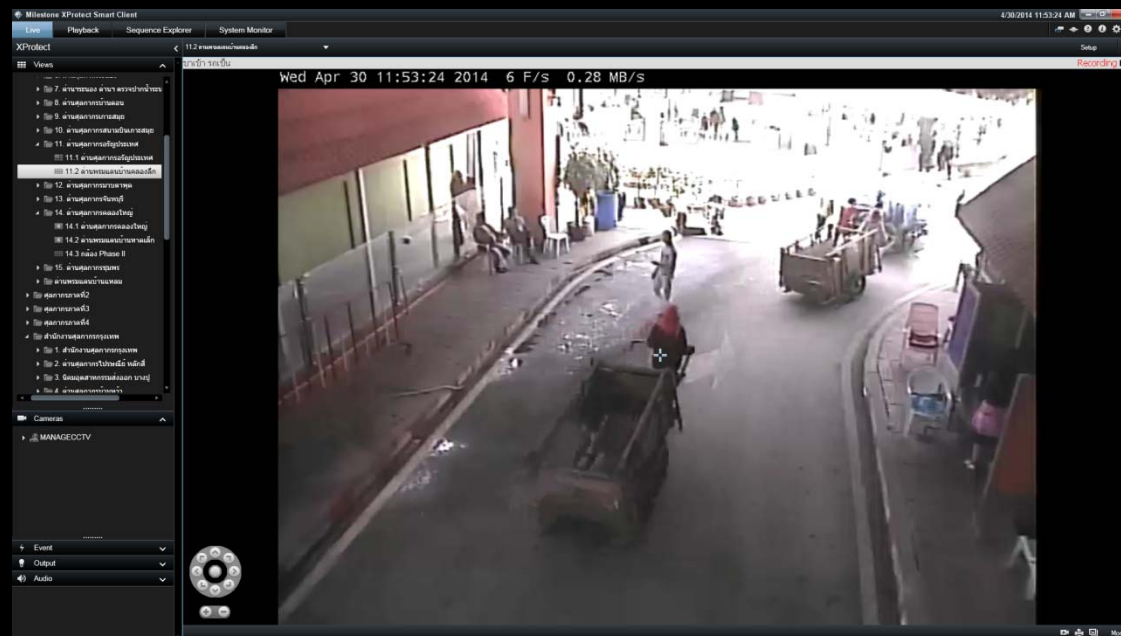
Received Control No	23570422100000003	Approve No	
Reference No	DOHE000000223		
Port of Discharge	2801 สำนักงานศุลกากรท่าเรือแหลมฉบัง		
Vessel Status			
Vessel Name	WAN HAI 221	Voyage	S264
Callsign	S6SK	Expected to Arrival Date	24-04-2557
Container Operator Tax ID	0993000052463	มจก. วันไฮไลน์ส จำกัดการแทนโดย บริษัท วันไฮไลน์ส (ประเทศไทย) จำกัด	
Bill Of Lading	0084X00513		
Company Tax ID	0993000052463	มจก. วันไฮไลน์ส จำกัดการแทนโดย บริษัท วันไฮไลน์ส (ประเทศไทย) จำกัด	
Port of Loading	HKHKG	Hong Kong	
ISO Port of Discharge	THLCH	Laem Chabang	
Port of Delivery	0302	รพท. บ.สยามคอนเทนเนอร์เทอร์มินอล จก. (สาขา 2)	
Place of Delivery	THSCT	SIAM CONTAINER	
Release Port	2801	สำนักงานศุลกากรท่าเรือแหลมฉบัง	
Shipper			
Shipper Name	TOKYO TOZAN TRADING CO., LTD.		
Shipper Address	TOKYO TOZAN TRADING CO., LTD.		
Street and Number			
District			
Sub Province			
Province			
Post Code			

On the right side of the application, there is a 'Declaration No' section with a search bar and a list of declaration numbers: A015-0561008215 and A029-0570408780. The bottom of the screen shows the Windows taskbar with the date 30/4/2557 and time 12:08.



Integrating the Technologies

- Following the Activities at Customs Check Points and compares with the statistic of import/export goods.



Tue Nov 9 12:09:08 2010

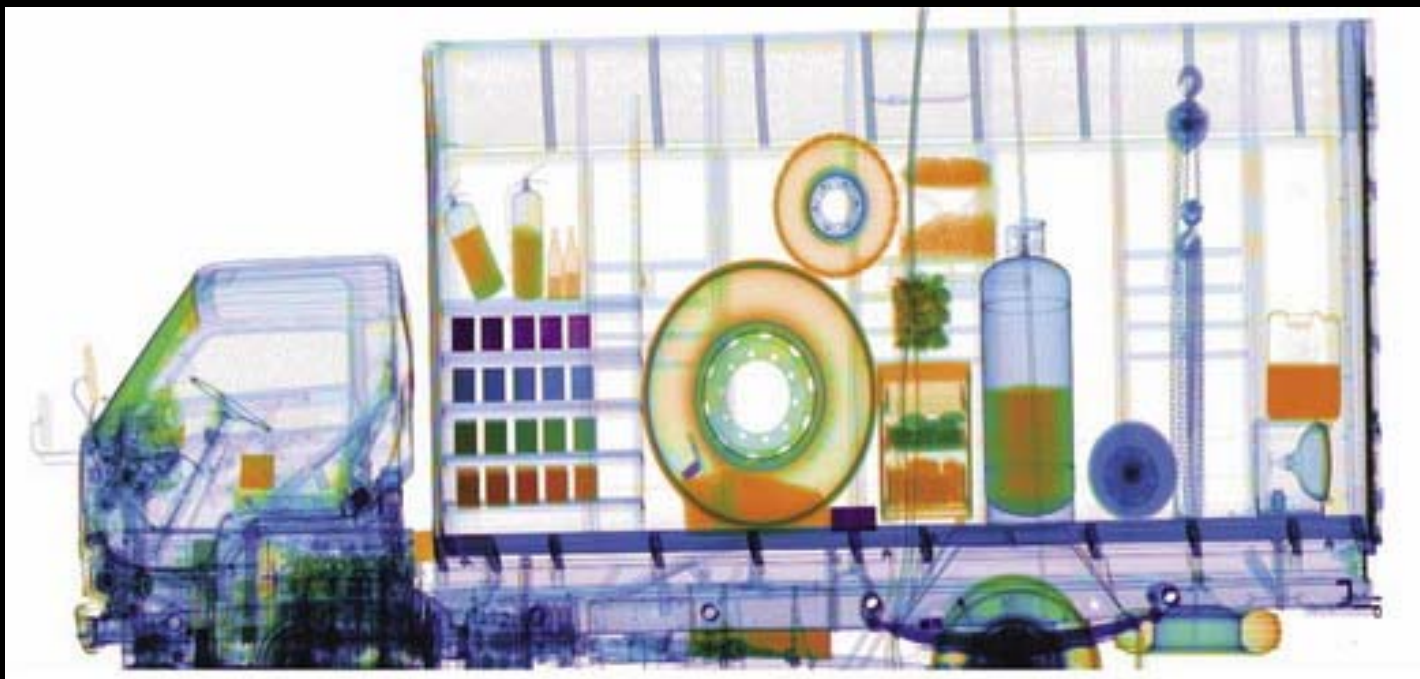


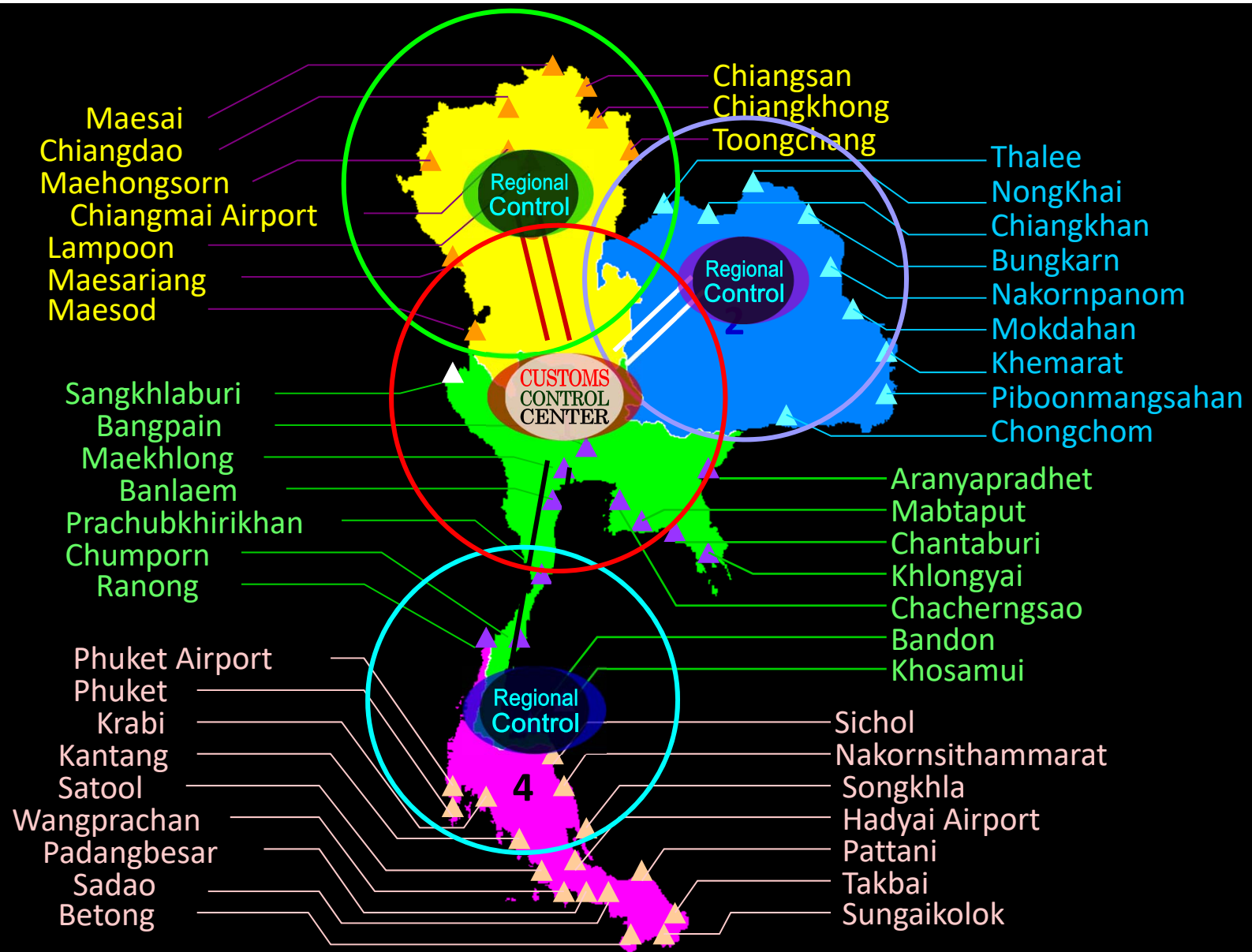
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Integrating the Technologies

3. Comparing informations between import/export declaration and X-Ray image.





Exchange Informations via CCTV Network

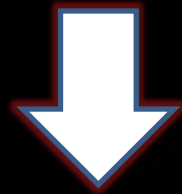


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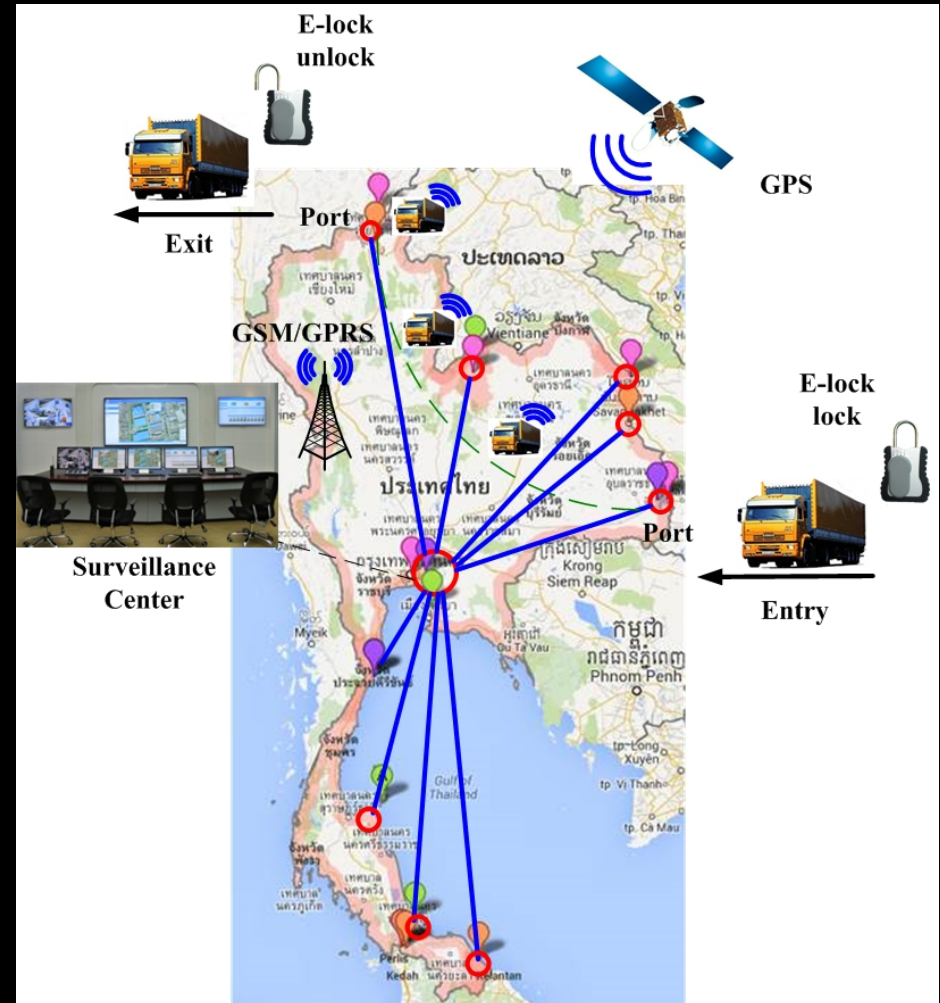
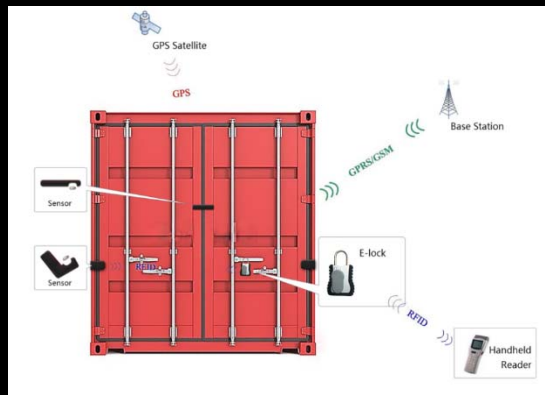


Pilot Project in 2016

X-Ray Image and Tracking System by e-Lock

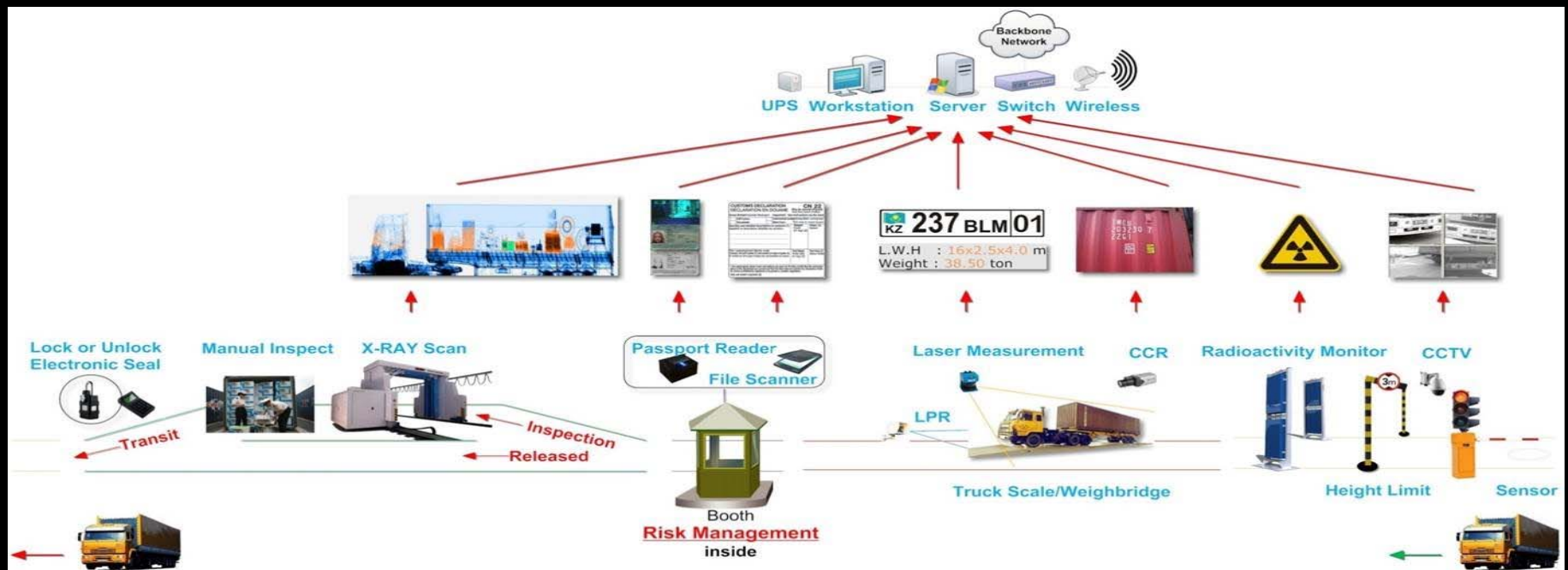


RFID & GPS



Project Over View

- Pilot Project on Transit cargo
- Pilot e-Lock 16 Stations
- Attach X-Ray image at Departure and Arrival e-Lock Station (Optional)
- Connection via CCTV Network
- Use CCTV Camera to monitor the Lock / Unlock Process.



The e-Lock Pilot Project start officialy on April 7, 2016



April 2016 : Testing the e-Lock system

between LCB Port & Mukdahan Customs House

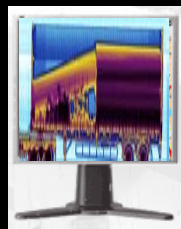
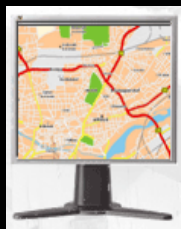
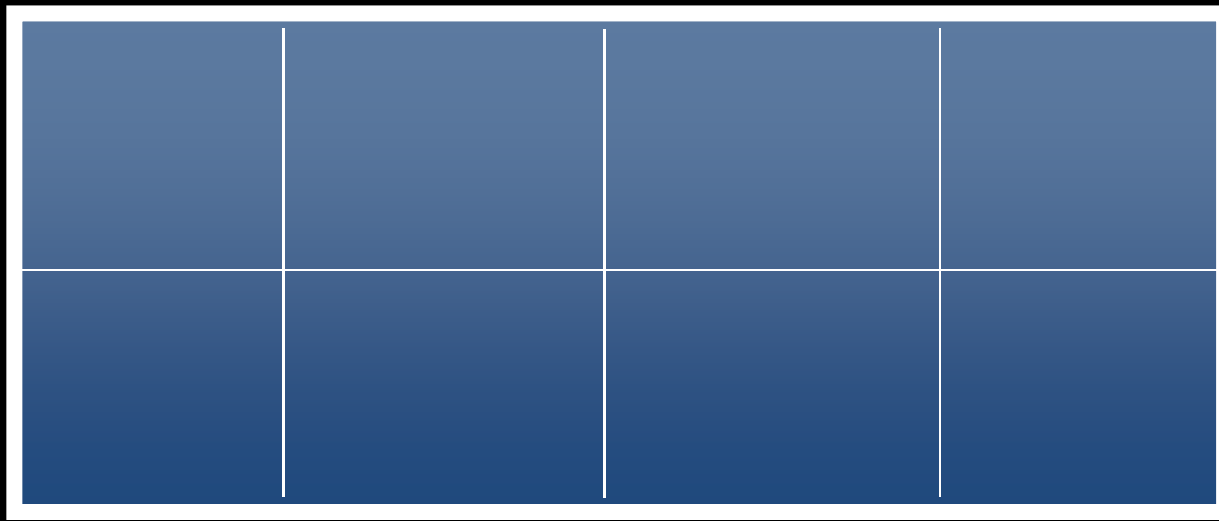
May 2016 : Testing the e-Lock System (all Stations)



ศูนย์เทคโนโลยีการควบคุมทางศุลกากร สำนักสืบสวนและปราบปราม กรมศุลกากร กระทรวงการคลัง



Command and Control Room at Headquarters CCTC, Investigation and Suppression Bureau



ศูนย์เทคโนโลยีการควบคุมทางศุลกากร สำนักงานสืบสวนและปราบปราม กรมศุลกากร กระทรวงการคลัง



CONCLUSION

1. The first objective of the X-Ray Container Inspection System is Facilitation.
2. The X-Ray Container Inspection System also can use for Customs Control.
3. The use of X-Ray Container Inspection System enhance the Thai Customs Service to international standard.
4. Integration of multiple technologies greatly enhance the capacity of Customs Control.

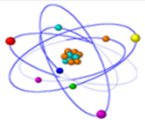




Thank you



Q & A



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The Royal Thai Customs Department, Ministry of Finance

