IMPLEMENTATION OF MEGAPORTS INITIATIVE
(MALAYSIA'S EXPERIENCE)
A component of the US DOE’s 2nd Line of Defense Programme

To detect, deter and interdict trafficking in nuclear and other radioactive WMD.

Selected sea ports will be equipped with radiation detection equipment supplied by DOE USA.

The goal is to screen as many cargo containers passing through the port as possible.
<table>
<thead>
<tr>
<th>Operational Megaports (30)</th>
<th>Implementation Phase (15)</th>
<th>Pending Signatures (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahamas (Freeport)</td>
<td>Bangladesh (Chittagong)</td>
<td>Argentina (Buenos Aires)</td>
</tr>
<tr>
<td>Belgium (Antwerp, Zeebrugge)</td>
<td>Cambodia (Sihanoukville)</td>
<td>Vietnam (Cai Mep)</td>
</tr>
<tr>
<td>Colombia (Cartagena)</td>
<td>China (Shanghai)</td>
<td>Vietnam (Haiphong)</td>
</tr>
<tr>
<td>Dominican Rep (Caucedo)</td>
<td>Djibouti (Djibouti)</td>
<td></td>
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<tr>
<td>Greece (Piraeus)</td>
<td>Egypt (Alexandria)</td>
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<tr>
<td>Honduras (Cortes)</td>
<td>Japan (Yokohama)</td>
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<td>Israel (Haifa, Ashdod)</td>
<td>Jordan (Aqaba)</td>
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<tr>
<td>Jamaica (Kingston)</td>
<td>Kenya (Mombasa)</td>
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<tr>
<td>Malaysia (Port Klang, Tanjung Pelepas)</td>
<td>Lebanon (Beirut)</td>
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<tr>
<td>Mexico (Veracruz, Manzanillo, Lazaro Cardenas)</td>
<td>Mexico (Altamira)</td>
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<tr>
<td>Netherland (Rotterdam)</td>
<td>Spain (Valencia &amp; Barcelona)</td>
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<tr>
<td></td>
<td>UAE (Dubai, Shanjah, Abu Dhabi)</td>
<td></td>
</tr>
</tbody>
</table>

**GOAL:** Over 100 Megaports, scanning over 50% of global shipping traffic by 2015

Source: PNNL US
EQUIPMENTS INSTALLED

Radiation Portal Monitor

Advance Spectroscopic Portal

CONCEPT OF OPERATIONS

• Primary Inspection
• Primary Response
• Secondary Inspection
• Investigation

Hand-held Equipment
LOCATION OF RPM

WEST PORT

- Quay Bridge (Import & Transhipment)
- Entry Gate (Export)
- Rail Entry (Export)
Commitment and support from top management

Strong legal frameworks
- Transhipment cargo

Technical expertise and knowledge on radiation

Quality cargo and shipping information
- Necessary to verify NORM or innocent alarm

Quick decision making by RMC
- Delay in Customs clearance
- To avoid shut-out in case of export/transhipment cargo

Cooperation and coordination among agencies/business partners
Training

• Initial training conducted by DOE US
• Subsequent trainings conducted jointly by AELB/RMC
• Trainings involve personnel from other agencies and business partners, such as PKA, Polis, Terminal Operators.
## COOPERATION & COORDINATION

| Shipping & Cargo Information | • Shipping information : Shipping Agent & Freight Forwarder via Manifest  
|                             | • Cargo information : Customs Declaration submitted by Customs Broker  
|                             | • Information on transhipment cargo : Free Zones Declaration from PKA  
|                             | • Loading/discharge list from Terminal Operators  
|                             | • Terminal Operator’s system installed at MPI Control Room  
|                             | • Contact points established |
## COOPERATION & COORDINATION

| Overall Implementation | • Joint SOP with relevant parties  
|                        | • Technical assistance and support from AELB/Malaysia Nuclear Agency  
|                        | • Mirror images of radiation profile routed to AELB for their monitoring  
|                        | • Terminal Operators to expedite the movement of containers  
|                        | • Regular meetings with relevant parties  
|                        | • Shipping agents/Customs brokers to assist RMC in case of investigation |
PROBLEMS & ISSUES

- Cargo information not available or insufficient
- Agents cannot be contacted during non-office hours and weekend.
- To ensure vehicle drivers adhere to the speed limit of 8 km/hr.
- Equipment damaged by accidents
- Cost of maintenance and sustainability
# MPI STATISTICS (PORT KLANG)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total TEU</th>
<th>Total Containers</th>
<th>Portal Occupancy</th>
<th>Alarm Triggered</th>
<th>Alarm Process</th>
<th>Secondary Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>8,871,745</td>
<td>5,914,496</td>
<td>4,405,588</td>
<td>67,523</td>
<td>43,063</td>
<td>44</td>
</tr>
<tr>
<td>2011</td>
<td>9,603,926</td>
<td>6,402,617</td>
<td>4,567,444</td>
<td>51,311</td>
<td>24,587</td>
<td>58</td>
</tr>
<tr>
<td>% 2010</td>
<td>-</td>
<td>-</td>
<td>74%</td>
<td>1.5%</td>
<td>63%</td>
<td>-</td>
</tr>
<tr>
<td>% 2011</td>
<td>-</td>
<td>-</td>
<td>71%</td>
<td>1.1%</td>
<td>48%</td>
<td>-</td>
</tr>
</tbody>
</table>
THANK YOU FOR YOUR ATTENTION