

Remarks of Robert C. Bonner¹
Former Commissioner of U.S. Customs and Border Protection
at the
World Customs Organization (WCO)'s
First Technology and Innovation Forum
Brussels, Belgium • November 5, 2009
Theme I: "Challenges of the 21st Century and the use of Technology"

Thank you, and good morning. I am delighted to be able to participate in this inaugural Forum on Technology and Innovation, and to discuss the role of technology in achieving the “twin goals” of security and facilitation. I want, particularly, to thank Secretary General Mikuriya for inviting me to participate in this forum. It is great to be back in Brussels and to see so many familiar faces and friends.

INTRODUCTION

This morning, I want to discuss concepts for securing borders that we pioneered in the United States following the terrorist attacks of 9/11, and the technologies and systems that proved to be indispensable to the priority U.S. strategic goal of preventing global terrorists from striking us at home, and to the traditional missions of Customs. I want to talk with you about these concepts in the context of modern, global customs priorities, including revenue collection, security, contraband interdiction, and trade facilitation.

The border security concepts that I will discuss with you this morning have consumed much of my energy and thinking for over eight years, first as Commissioner of the U.S. Customs Service, and, as it is now known, U.S. Customs and Border Protection, or “CBP”, and more recently with the Sentinel HS Group.

Sentinel is a strategic consulting firm consisting principally of senior policy staff from CBP who worked with me after September 11, 2001. While in public service, my

¹ Mr. Bonner reserves the right to extemporaneously modify his remarks when he delivers them. Accordingly, this text may not reflect his actual remarks, as given.

Sentinel partners and I developed and implemented many of the initiatives I'm going to discuss today.

With Sentinel, I am still very much engaged on a number of issues that were important to us at CBP, including the cross-border security and facilitation challenges that all our governments continue to face.

My partners and I work directly with the public sector, providing advice and counsel to governments grappling with various customs and border-related homeland security challenges. We have performed work for the U.S. Department of Homeland Security on a number of challenging policy issues that pertain to border and transportation security. We also have undertaken projects for the UK Home Office regarding the organizational design of the new UK Border Agency, and, more recently, for the government of Mexico helping evaluate potential border control improvements along its Southern border with Guatemala and Belize, as well as providing security assessments for several of its major seaports.

In much of my work, both with the U.S. Government and now in the private sector, I have been asked to evaluate the costs and benefits of a range of cargo security technologies, as well as their effectiveness after they have been deployed. There are a few lessons I've learned along the way, and I believe there are two fundamental questions that should be asked at the outset of this conference.

The first question is:

Will the use of existing and available detection technology make a customs organization more effective *and* more efficient?

And as I will demonstrate, the answer is a resounding "yes."

A second question is:

Does a modern customs authority need to scan or physically inspect all cargo shipments, be they oceangoing containers or cargo trucks?

The answer, based on our experience, is a resounding "no."

For one, non-intrusive imaging – NII – and other detection technology should not be used in isolation. In the U.S., it is one part – but only one part – of our *layered*, risk-managed approach. As I have said, this also means you don't need to inspect 100% of

every container. Another important lesson is that NII and other technology can be used to achieve multiple mission needs of customs and border agencies.

I cannot overstate this last point, particularly given the global economic climate and the pressure that you, as customs officials, face in upholding the traditional customs missions of revenue collection and protecting your nation's citizens against harm.

Finally, we are nowhere near using all of the technology available to us – but, even if that were case, you need to deploy it carefully so as to maximize the security and facilitation benefits. In other words, you need the policies and protocols that make the use of the technology optimal. You need to decide your policies and priorities before you can decide what technology you need, and how and where it is deployed and used.

A PERSONAL STORY

To understand how I came to approach the problem of what policies and technologies were needed, let me take you back – briefly – to what was, for me, the beginning; to the formative experiences that shaped my thinking and, at the risk of appearing a bit immodest, shaped U.S. policy.

I moved from my home in California and "reported for duty," so to speak, in Washington on September 10, 2001. I had not yet been confirmed by the U.S. Senate as Customs Commissioner – that came one week after – but on the morning of 9/11, I began running U.S. Customs in earnest.

My very first act as Commissioner came at about 10:05 that very morning. I approved and directed U.S. Customs to go to Alert Level 1, the highest level security alert at our border, short of actually shutting down our ports of entry.

As a result of going to Level One Alert, by September 12 our borders began to virtually shut down. This occurred because of our vastly increased inspections – and because we had no antiterrorist targeting system and almost no large-scale detection technology at our seaports or at our Northern border with Canada.

By 9/12, wait times, for example, at our border with Canada skyrocketed. Overnight they had gone from 10 minutes on average to over 12 hours! Trucks were queued up for 20-30 miles into Canada. By 9/14, major American manufacturers, dependent on just-in-time inventories, were beginning to shut down plants.

And that underscored our primary challenge. We definitely had to increase security in the post-9/11 era. Indeed, the priority mission of U.S. Customs – as one of our government's principal border agencies – needed to expand, from the interdiction of illegal drugs, collection of duties and the regulation of trade – to a national security mission – **preventing terrorists and terrorist weapons from getting into the United States.**

But we had to find a way to do that without choking off the flow of legitimate trade and travel, without shutting down our economy – and damaging the world economy – in the process. We had to find ways, strategies to achieve what I've referred to as the "Twin Goals":

(1) Achieving greater security, but also (2) facilitating the flow of legitimate cross-border trade and travel.

These two goals, I submit, are the responsibility of every modern customs administration. The key question, of course, was “How?”

It took a lot of hard work, but a clear strategy emerged to achieve both goals. This strategy led to some of the most innovative, revolutionary customs initiatives ever launched. In the U.S. it was Customs that developed and implemented these “visionary, relevant, and indispensable” policies, to borrow a phrase from Secretary General Mikuriya.

What were these initiatives? I won't recite them all, or go into much detail on any one, but want to highlight just a few of the cornerstones of our approach. Three of the key components were, and still are:

1. Advance Electronic Information
2. Risk Management; Targeting based on Risk, and
3. Using the best Detection Technology available.

The first two have been the focus of previous talks here at the WCO. But because they are all inter-related, it is difficult to mention one without linking them to the others, so I will touch on each of them briefly.

1. Advance Electronic Information.

One of the first things we did was implement the “24 hour” Rule requiring advance electronic information on maritime cargo shipments to the U.S. and, shortly thereafter, we promulgated Trade Act regulations to expand the advance information requirements to all other modes – including trucks arriving at our land borders as well as air cargo.

Before 9/11, there was no requirement that Customs be provided with data prior to arrival of a shipment. We had to change that, and we did. Today, CBP receives advance manifest data on every cargo shipment headed for the United States well before it arrives. Over here, the Member States of the European Community are implementing this advance data requirement as well.

2. Risk Analysis.

The second part of this strategy involved taking that information and analyzing it for risk. One of the few tools we did have in place before 9/11 was a risk assessment system previously used to target for illegal drug shipments, called the Automated Targeting System, or “ATS.” ATS underwent a big-time makeover after 9/11.

Automated risk analysis technology has been the subject of other forums here, but the fact remains that, in terms of technology, one of the most important developments for us was the build-out of ATS. We honed its capabilities to analyze the new information we were receiving on cargo to meet the new mission requirements, and we built the National Targeting Center to ensure that we had a consistent approach to risk analysis across the country and at every one of our ports of entry.

I cannot stress enough the desirability, even the necessity, for national level risk targeting that is applied the same way at all entry points. With regard to national security threats, there simply cannot be one set of rules for one port and another set for another port. For us in the U.S., those days are over.

Our philosophy was – and still is – straightforward:

- You can’t do risk targeting without the advance data.
- The better the advance data, the better the targeting.
- This results in fewer containers that need to be scanned or inspected.

We do not scan or inspect everything. We don't need to. There is, however, one exception that I will mention momentarily and that is for radiation detection screening. We do scan every cargo container, truck, and vehicle for radiation emissions at all of our ports of entry. But in the case of radiation reads, we can do this screening without unduly interfering or slowing down the shipping process.

3. The use of More and Improved Detection Technology.

Non-Intrusive Inspection equipment gets to the heart of today's topic, and the U.S. has deployed it to help us detect a number of threats. NII includes X-ray or gamma ray imaging, radiation portal monitors, and various handheld devices. For CBP, we also use K-9s for detection of illegal drugs, explosives, and even cash and chemical weapons.

NII equipment can be used or positioned in pre-primary, primary, or secondary screening. We use it principally at the primary or secondary inspection, except for CSI where it can be viewed as pre-primary.

As I mentioned, in the U.S., CBP scans every inbound container for radiation emissions. This is done using Radiation Portal Monitors.

Radiation Portal Monitors – RPMs – detect the presence of radiation – which can come from naturally occurring radioactive materials, or “NORMs”, such as ceramics and other materials – but then there is different equipment to determine the source of radiation.

Today, if radiation is detected, alarms are resolved by the use of hand-held isotopic identification devices, which are capable of identifying a particular isotope. This system, however, usually requires a fairly time-consuming secondary scan.

Many containers that do not pose a real risk are referred to secondary, and those containers take too long to inspect and clear. For example, ceramic tiles and kitty litter often emit radiation.

It is my hope that the ongoing efforts to integrate enhanced radiation detection and isotope identification capabilities into one system called an Advanced Radiation Portal Monitor will be successful, and that CBP and other customs administrations around the globe will be able to use these systems at primary and reduce the number of unnecessary secondary inspections.

Radiation detection, of course, addresses only one risk. We use risk management and risk analysis to guide other inspection activity – and use technology to conduct those inspections.

Besides scanning for radiation, containers flagged by ATS as high-risk are scanned using large, whole container, Xray-type imaging machines. These can be fixed or mobile units, and they are used to identify the presence of contraband, detect false compartments, or to verify that the contents of the container match the description on the manifest – all without opening the container. These scanning systems are often very fast, thereby enabling a customs administration to save substantial time and effort when compared to a partial or full de-van of a container. The X-ray images do require trained Customs officers to determine when there is an anomaly, but only then is the container or truck trailer opened and subjected to a physical inspection.

The idea, as I've already stated, is to physically open as few containers as possible, and only if there is an anomaly, or an adequate X-ray image cannot be obtained. This, as you know, is a very, very small percentage of cargo containers or trucks.

So, what have we learned?

None of these initiatives, including ATS in its current form, existed prior to 9/11, but they have been up and running now for the better part of a decade. The emphasis of our discussion has shifted through the years from the expectations of their success to evaluating their effectiveness in support of our border security mission.

I have said many times before that I do not advocate that other countries merely replicate the U.S. approach. But I do strongly believe that there are lessons to be learned from our experience.

First, there is the challenge of whether to risk assess and then apply increased scrutiny to some shipments, or to try to scan everything. As I just described, we have applied both approaches in the U.S.

To mitigate the nuclear and radiological threat, we scan every shipment for radiation. For other priority risk areas, we rely on ATS to identify potentially risky shipments that then require the use of large-scale imaging equipment.

ATS can be used for all manner of threats. Not just potential threats of terrorism, but other threats, such as potential concealment of contraband,- weapons and illegal drugs, counterfeit and unsafe goods, and even whether declarations regarding the type and quantity of goods are accurate, which is key to identifying revenue fraud.

There are about 10 million containers offloaded at U.S. seaports every year. That is about 35,000, on average, every day of the year. It is virtually impossible, and quite unnecessary, to mandate that CBP – or ask foreign governments, for that matter – to inspect 100% of these containers, to inspect each and every cargo container arriving at our nation's seaports, as our Congress wants to require.

Using advance electronic information and ATS, we are smarter about what we inspect. CBP selects the cargo shipments that pose a potential threat, and 100% of those – of that subset – are inspected, either at, or as part of the Container Security Initiative, before arrival.

Second, you have to match the technology that you implement to the threats that you face. As I mentioned earlier, NII can be used in support of a variety of mission needs, including increased revenue collection.

In the U.S., for example, our automated risk analysis and NII systems often catch intentionally falsely identified or un-manifested goods – goods that are either improperly classified to obtain lower duty rates or that are not declared in order to avoid duties, for example.

Customs administrations that deploy NII equipment should do so based on the threats they are combating, and determine policies and protocols for how it should be used and when physical inspections should be performed instead.

In addition, customs administrations should be more adept at identifying their key requirements and challenges and communicating those to the private sector to foster meaningful technical innovation. Today, I believe customs administrations do a relatively poor job of driving private sector research and development, particularly when compared to the approaches taken by military customers. Here, the WCO Secretariat can be helpful.

Let me give you an example. We have still not incorporated a “smart” container concept into the Customs-Trade Partnership Against Terrorism – C-TPAT, which is our “Authorized Economic Operator” program – and I am not entirely optimistic that this will happen anytime soon. After I moved to explore the possibility of this security enhancement years ago, the U.S. Government has still not settled on a set of concrete requirements for a Container Security Device. It does not seem to be a priority at this time, and I believe that without such requirements, no such device will be approved for increased C-TPAT facilitation benefits. In other words, there will be no “green lane” for the foreseeable future.

The mention of Container Security Devices leads to my third point, which is that detection technology in the future may not be limited to imaging or radiation detection equipment. There is a wide range of technology that is being worked on to detect, for example, chemical and biological agents, pests in agriculture, and drugs.

Finally, even if you could wave a wand and have all the detection technology that is available, you cannot simply just put the technology down anywhere in a port environment and expect it to work properly.

In our business, you often hear the phrase, “if you’ve seen one port – you’ve seen one port.” There are some commonalities, to be sure, but land ports of entry are different from maritime ports, and those are different than airports. As you are well aware, each mode – even each port – will have unique operating and physical infrastructure characteristics that will present challenges.

In a seaport, for instance, you may need to consider the advantages and disadvantages of mobile versus stationary, or dockside versus centralized imaging capabilities, and the challenges of screening intermodal cargo during regular transportation processes. The latest edition of *WCO News* dedicated a three-page article to maritime security technology that does a wonderful job of capturing some of these challenges, which I highly recommend reading.

The fact remains that in each mode, especially when we are talking about substantial pieces of equipment, you have to put the technology in the right place - - with the right protocols - - to derive all of the security and facilitation benefits and, dare I say it, to derive the anti-corruption benefits, as well.

In terms of those benefits, I can tell you that the U.S. is catching more illicit, contraband material while handling an ever increasing volume of trade at equal – or at sometimes better – processing rates. But another measure of their success is to look at the adoption of these programs and technologies internationally.

Many of these initiatives form the basis for similar border security programs around the world. When I was Commissioner of CBP, I signed the WCO SAFE Framework of Standards, in June of 2005, *right here in this very room*.

U.S. Customs worked extensively with the WCO and other Customs administrations to develop the SAFE Framework, and many of the programs I just mentioned helped inspire it, along with innovative efforts develop in Canada, Sweden, Jordan, the Netherlands, Australia, New Zealand, and other countries. Indeed, with the adoption of the WCO's SAFE Framework by more than 150 countries, I can say that this has become a truly *international* effort.

Of course, while these programs grew out of an emphasis on security, they are effective in supporting a number of different border security priorities. Each country is different, and variations of these programs around the world reflect the unique policy, operational, and commercial profiles of the countries that use them.

But this international momentum – speeded by the capacity building efforts being overseen by the WCO Secretariat – underscores the importance of economies of scale. As more countries adopt these measures, the more the international community is able to work together on a number of trans-national issues ranging from terrorism and illegal immigration to organized crime and intellectual property protection, among others.

Here, the links between sending, receiving and transshipping nations is one of the areas where the WCO has and continues to play an absolutely essential role. And this is a real tribute to the leadership of the Secretary General Mikuriya. Thank you, Kunio, for your leadership and vision.

Conclusion.

Let me wrap up my remarks by noting that the effects of 9/11 still reverberate in America. 9/11 changed the way we need to view national security.

Before 9/11, the United States had been lulled into a false sense of security, perhaps under the illusion that we were somehow protected by:

- vast oceans to our east and west, and
- by peaceful neighbors to our north and south.

9/11 utterly shattered that illusion!

At the same time, even without this very real and ongoing threat of terrorism, customs officers – not just in the U.S., but everywhere – have had to contend with the pace of globalization, cross-border organized criminal activity, and the march of progress brought on by the information age. Goods move more rapidly and more often. The speed and sheer volume of cargo has made it difficult for the old way of doing business to keep up.

Customs officials are faced with increasing responsibilities: They are processing greater volumes of goods, trying to collect revenue, and balancing these traditional duties with greater security and the facilitation of commerce; and all of this under tight budgetary constraints.

It is no surprise, then, that there is increasing interest in automated data capture, using risk assessment principles to address priority control areas, and Non-Intrusive Inspection equipment to help make Customs authorities worldwide more effective and, quite frankly, more relevant within their respective governments. I have never doubted the importance of the role of Customs agencies, as one of the principal border agencies within our governments, but it is gratifying to see the growing recognition by the political leadership of each of our nations for the absolutely vital and indispensable role that Customs administrations play in the security, economies and revenue generation for each nation.

Making these changes in my country was not easy; believe me.

We had to enact new legislation and re-think some longstanding policies and ways of doing things. In order to implement these initiatives we had to overcome pushback from the trade community, deal with bureaucratic resistance and interagency squabbles, and contend with data sharing and systems integration issues.

As we rolled out new screening technology, we worked with IT providers on support functions, such as policies and procedures for recording and storing inspection results to demonstrate value and to improve performance.

The United States has learned many of these lessons through great time and expense. We have learned the hard way. But we made the investment and, ultimately, our border security and facilitation measures have worked very well for us. They are working in other countries as well, and still many other countries, I believe, can benefit from our collective experience.

Thank you.

###

Border Management: Challenges of the 21st Century and the use of Technology



**WCO Inaugural
Technology &
Innovation Forum**



**Robert C. Bonner
Former Commissioner
U.S. Customs and Border Protection**



**Brussels, Belgium
November 2009**

The Sentinel HS Group, LLC



Waiting to Cross into the United States



Achieving the “Twin Goals”

Strategy for Securing Global Trade

| | |
|--|---|
| Advance Electronic Data Capture (EDC) | <ul style="list-style-type: none">• “24-Hour” Rule for Maritime containers• Trade Act Regulations covering Air and Land |
| Automated Risk Analysis (ARA) | <ul style="list-style-type: none">• Automated Targeting System (ATS)<ul style="list-style-type: none">• ATS-Cargo• ATS- Land• Container Security Initiative (CSI) – uses elements from multiple areas (e.g., EDC, ARA) abroad |
| Non-Intrusive Imaging (NII) | <ul style="list-style-type: none">• Handheld devices, X-Ray, Scanners, etc. to accelerate primary and secondary inspection |
| Authorized Economic Operator (AEO) | <ul style="list-style-type: none">• Customs-Trade Partnership Against Terrorism (C-TPAT)• Free And Secure Trade (FAST) |

Non-Intrusive Inspection (NII)

- ▶ The technology that supports CBP's cargo security initiatives includes:
 - ▶ Radiation Portal Monitors (RPMs)
 - ▶ Portable and Handheld Detection Devices
 - ▶ X-Ray and Gamma Ray Imaging
 - ▶ Optical Character Recognition (OCR)



Mobile Imaging Equipment



Handheld Radiation Detection

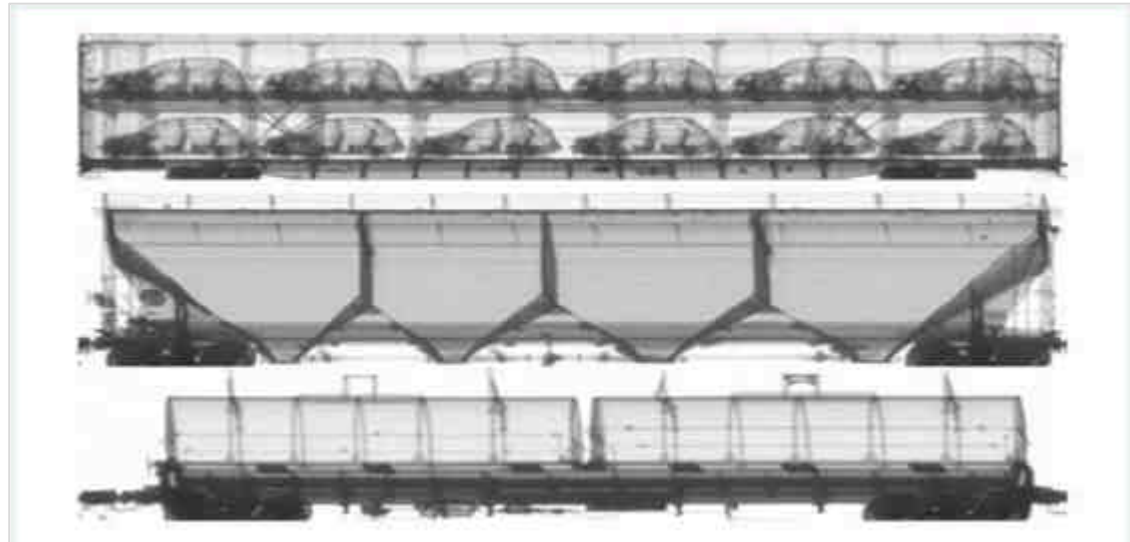
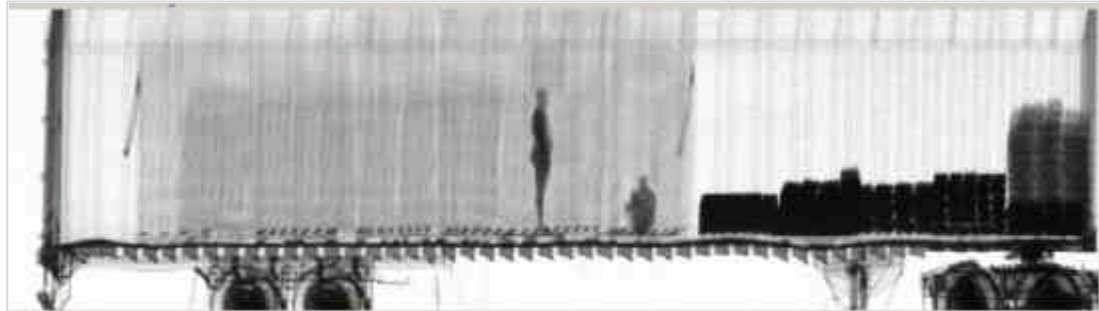
Radiation Detection Equipment

- ▶ Radiation Portal Monitors (RPMs) are a passive, non-intrusive means to screen trucks and other conveyances for the presence of nuclear and radiological materials.
- ▶ Radiation detection equipment generally takes two forms: one can detect the *presence* of radiation while the other can detect the *type* of radiation.



X-Ray and Gamma Ray Imaging

Truck Gamma-Ray Image shows two stowaways, and Railroad X-ray images (below)



WCO SAFE Framework of Standards

- ▶ International initiative, signed by 154 countries, designed to promote security and trade facilitation
 - ▶ Electronic data capture
 - ▶ Data standardized for shippers and easily shared with/across customs administrations
 - ▶ Risk management
 - ▶ Analyzing shipping data prior to arrival and targeting the high-risk cargo based on its characteristics (e.g., geography, watch list match)
 - ▶ Inspection
 - ▶ Rates of inspection are lower, but the inspections are more effective
 - ▶ Facilitation benefits
 - ▶ Reduction in hold times for lower-risk cargo
 - ▶ Additional benefits possible with an Authorized Economic Operator (AEO) program



Traditional Customs Priorities

- ▶ Revenue collection and controlled imports
- ▶ Narcotics and contraband interdiction
 - ▶ Organized Crime
 - ▶ Drug and weapons precursors
- ▶ Security and terrorism
- ▶ Efficiency
 - ▶ Facilitation, release times, inspection rates
- ▶ Intellectual property and counterfeiting
- ▶ Integrity building

