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Mr. Ralph Basham
Commissioner of United States Customs
and Border Protection
Department of Homeland Security
1300 Pennsylvania Avenue, N.W.
Washington, D.C. 20229

Dear Mr. Basham, dear Commissioner,

At the meeting of the EC-U.S.-Joint Customs Cooperation Committee on 6 March 2008 CBP indicated it would submit a comprehensive report on 100% scanning to Congress in mid April 2008.

As promised at the JCCC, I am providing you with the Commission's comments on this issue (enclosed).

I would be grateful if you could take these comments into account when presenting your report to Congress. I would appreciate it if you could send me a copy of the report.

Yours sincerely,

Robert Verrue
(signed)

Annex: Commission comments on 100 % scanning

Comments on 100% scanning

The purpose of this paper is to inform the United States Administration of the European Commission's strongest concerns about the prospect of imposing 100% scanning in foreign ports of containers bound to the USA¹. These concerns are about the effectiveness of this measure in improving security as well as its economic efficiency. They are widely shared by the EU Member States and economic stakeholders in Europe.

1. Overall assessment

Since 9/11 and other terrorist attacks in Europe and elsewhere, security has become a top priority for European Customs. Customs administrations throughout the European Union have taken action to overhaul control procedures, techniques, resources and the relevant legislative tools. Customs policy is a European Union competence: the Member States of the European Union follow a common approach. The "security amendment" to the European Community Customs Code entered into force in December 2006; the full range of security measures will effectively come into play in July 2009².

The European Union complies with the International Ship and Port Facility Security (ISPS) Code and enforces security standards for all ships flying the flag of a Member State, and all other vessels sailing in European waters. Member States are required to carry out systematic checks on port facilities, vessels and their cargoes, in ports throughout the Union. Since 2004 the European Union has been implementing one of the strictest legislations worldwide in maritime security³ and its successful implementation has been demonstrated by more than 100 inspections⁴.

The United States and the European Union have a long record of Customs cooperation and mutual assistance in customs matters: from our first agreement in 1997⁵, to EU early participation in the Container Security Initiative (CSI) under the specific agreement we concluded in 2004⁶. The objective of this cooperation has been to ensure our mutual security combined with facilitation of legitimate trade. Ten Member States are actively participating in the CSI, which implies the targeting and pre-screening of containers and the development of additional investigative leads related to the terrorist threat to cargo destined to the U.S.⁷

We have also worked together to develop a framework of security and control standards at international level. These efforts have resulted in the adoption of the internationally agreed recommendations of the World Customs Organisation (SAFE Framework of Standards)⁸ as well of the International Ship and Port facility Security Code (ISPS Code) of the International Maritime Organization, which, together with numerous other nations, we have agreed to apply.

In recent years we have extended our cooperation further. We have engaged a process of establishing equivalent levels and standards of controls for US and EU economic operators. The mutual recognition of our respective trade partnership programmes (US C-TPAT and EU Authorised Economic Operator) is the first step in this direction. In November 2007, in the Transatlantic Economic Council⁹, we confirmed our intention to achieve this within 2009. The roadmap to mutual recognition of C-TPAT and AEO programmes was formally approved by the US-EC Joint Customs Cooperation Committee on 6 March 2008.

It is, therefore, with great apprehension that we regard the recent US legislation on 100% scanning of maritime container cargo in foreign ports. The Security and Accountability for Every Port Act, in 2006, required the Department of Homeland Security to carry out pilot projects in foreign ports to test the feasibility of 100% scanning. It is to be regretted that the USA did not await the results of the pilot actions, including the European pilot in the port of Southampton, which are currently performed in connection with the US Secure Freight Initiative, before pressing ahead with this legislation.

There are two main reasons why we fundamentally disagree with the 100% scanning approach and we do not contemplate 100% scanning in Europe:

- Firstly, 100% scanning is unlikely to improve security; it might even create a false sense of security and undermine security by diverting scarce resources from other essential measures. Even on the hypothetical assumption that it was positive for US security, it would be extremely difficult to argue the case for European security.

- Secondly, 100% scanning has a high potential to disrupt trade and transport, within the EU and worldwide, unnecessarily, at high cost.

The US 100% scanning initiative is unilateral and implies extraterritoriality. If it were pressed on with, it would tend to undermine the process of mutual recognition of US-EU security standards and controls which we consider to be at the heart of our current cooperation to raise transatlantic security standards and promote legitimate trade. It would also tend to undermine the development and implementation of an international consensus on higher standards worldwide.

To our knowledge, the US 100% scanning legislation is not based on a proper assessment of its impact, and, currently, there is not enough evidence to measure it. The European Commission, in close cooperation with the EU Member States will continue to investigate the issue and further analyse its potential impact on security, transport and trade.

2. A false sense of security at high cost

The experience with the Southampton pilot project and preliminary contributions from EU Member States and other European stakeholders show that 100% scanning does not appear to be cost-effective compared to alternative approaches that would produce benefits to security.

In Southampton, three Radiation Portal Monitors, one Advanced Spectrographic Portal and one X-ray scanner (NII) were used. Data on US bound containers gathered by the scanner were transmitted to the US for risk analysis and targeting: if a container raised concerns, it was signaled by US CBP officers to the UK customs authorities for further inspection. The total cost is estimated at \$18 million¹⁰ for scanning around 5,500 US bound containers over a period of six months¹¹.

Results show that:

- For relatively small ports, the introduction of 100% scanning would require very high initial investments and important human resources devoted to it. In the case of

Southampton a simple calculation¹² of total cost relative to the number of scanned US bound containers gives an average cost/container that exceeds \$500.

- In Southampton, there is quasi absence of multimodal incoming traffic: truck-borne containers are much simpler and cheaper to scan than those arriving by rail, barge or feeder vessel¹³. The presence of multimodal incoming container traffic needing increased handling (unloading, transporting, and reloading) and transshipment would pose tough challenges for 100% scanning in many ports.

- In Southampton, only limited infrastructural adaptations were required to allow for the scanning, and no bottlenecks or delays were created. In European ports shipping 10 or 15 times that amount of containers, congestion would be a much more likely outcome, unless major changes and investments in infrastructures were introduced. Such changes would often require expansion into nearby land side areas that would be very expensive or unavailable.

In seeking 100% coverage much less favourable situations than that of Southampton would have to be tackled: "diseconomies of scale" would come into play in trying to approach the 100% target.

At present, a majority of EU ports have scanning devices on their premises, mainly used to scan imported containers (and in some cases exported ones), under the current risk-based targeting approach, sometimes also within the CSI agreement. The share of containers scanned ranges from 0.1% in bigger ports to 3% in smaller ones. Scaling up Southampton's pilot action to 100% of European ports shipping containers to the US and to 100% of container shipments within these ports would be a huge challenge, which cannot be met at current levels of resources or with limited increases thereof.

A relevant share of the EU container traffic comes in on other vectors than trucks – trains, barges and increasingly feeder vessels – and require specific procedures to handle the containers before, during and after the scan. These vectors have a batch-flow nature, as opposed to the smoother inflow of trucks: when feeder vessels arrive and are transhipped onto oceanic vessels, either resources would have to be readily available to perform the scan near

the vessels, or the US bound containers would have to be stacked in extra storage area, and wait for the scan, raising costs significantly.

In the case of transhipped containers – the fastest growing segment of container trade – there would be additional operations involving in-port long-distance movement of containers or of customs officers and scanners. Aside from the issues of lower efficiency (of "mobile" personnel and equipment), and of data storage and transmission, scanning transhipped containers is likely to lengthen the average waiting time significantly. The need to secure the scanned containers until they are loaded on the final carrier vessel adds extra costs¹⁴. Preliminary feedback from large EU ports offers cost indications in excess of \$300/container for moving stacked containers to scanning stations, as well as insights on the complex organisation of large ports having numerous terminals shipping to the US, operated by different companies, and dealing with all transport modes¹⁵. Unit costs would rise as the more difficult and costly types of traffic (rail, barge, feeder vessel) in the less favourable ports (those with tighter physical constraints) would have to be targeted to reach 100% coverage¹⁶.

While attempts have been made to estimate some of the direct costs of upgrading security equipment, procedures and resources¹⁷ and of additional time spent by containers waiting at and before port, no quantification of indirect costs stemming from the impact of 100% scanning on the reorganisation of port infrastructures, on congestion and diversion of transport routes and on slowing down commercial exchanges¹⁸ between Europe and the United States is available at this stage (points 3 and 4 below). Such costs could amount to billions of dollars annually. Clearly, any estimate limited to some cost components cannot be representative of the cost of 100% scanning in Europe.

The US legislation does not contain any financial clause or spending authorization for equipping foreign ports. Costs for the installation of the necessary equipment and adaptation of infrastructures, as well as operational costs would have to be borne by the respective ports, shipping companies and/or foreign administrations which would have to implement and enforce the unilateral extraterritorial requirements.

It might be argued that cost should not be a decisive issue when it comes to improving security. Such a line of thinking would assume that 100% scanning was superior to alternative measures for improving security. No such demonstration exists.

The 100% scanning legislation goes against the currently practiced multi-layered risk-based approach agreed by the US Administration and the European Union. Compared to existing risk-based assessment and targeting of containers to be scanned, 100% scanning would come out as less effective overall (let alone cost-effective). For one, to be credible, 100% scanning would need to apply 100%. Container traffic is only one quarter of cargo shipped worldwide¹⁹. The 100% requirement leaves aside – out of sight of customs and security officials busy with scanning containers – many other maritime transport vectors (bulk cargo ships, ro-ro ships, passenger ferries, cruise ships and yachts) which may carry weapons of mass destruction or their components. Scanning is also of little use in detecting other security risks such as chemical and biological weapons. The possibility of tampering with cargo after the scan was performed would not be eliminated.

The relevant staff increases demanded by 100% scanning could not be met by many EU Customs administrations. Staff would probably have to be reallocated from other tasks. The direct cost of this reallocation, including training, re-location, and organisational changes, may be limited but new questions, such as health and safety concerns would arise. The impact on other customs operations (e.g. fight against fraud, smuggling, and counterfeit) would be very significant, not only in terms of cost (missed customs revenue), but also in terms of negative effects for other security measures. Having highly skilled officials trying to make a meaningful interpretation of the millions of images of innocent cargo does not seem to be an effective use of taxpayers' money.

Overall, 100% scanning could actually instil a false sense of security in the concerned authorities and in the public, based on an excessive reliance on technology and potentially leading to complacency. Compared to the current risk-based approach, 100% scanning might reduce the security of international trade.

From a European perspective, it would be difficult for Customs administrations to set sovereignty issues aside in order to implement the US legislation, to invest massively in a

measure designed to protect the US, and to divert resources away from measures designed to strengthen security in the EU as well as that of international trade. It would also be difficult to imagine a situation where the 100% scanning requirement would be applied in one direction, to US bound containers only. Finally, 100% scanning would imply systematic transfer of sensitive information which could only take place in the context of a new international agreement between the USA and the EU.

The EU priority is to work together with the USA and other nations in an effort to further develop and implement the WCO SAFE Framework of Standards. Particular attention should be given to strengthening risk analysis including through a review of data requirements for advance declarations. Greater emphasis on selective scanning may be one of many ways to improve the current multilayered system for targeting and inspecting dangerous cargo.

In addition, it is important to redouble joint efforts in the direction of transatlantic 'secure trade', notably through mutual recognition between the USA and the EU of security standards and controls. This would effectively increase the resources jointly mobilised to combat terrorism and criminality in transatlantic trade as well as help to strengthen implementation of security standards worldwide.

3. A diversion of transport flows

The 100% scanning initiative would have serious repercussions for EU-US maritime transport and trade without any clear benefits in terms of enhanced security.

Worldwide more than 700 ports with direct exports to the US will be concerned, of which many are European ports with both direct traffic to the US and feeder traffic. Investments into scanning equipment will be costly and the supply chain will be slowed down due to the time needed for scanning operations. Moreover, 100% scanning has the potential to induce an important reorientation of transport flows worldwide and in the EU and would risk undermining the European Union's port policy.

Scanning cost would be a sizeable additional burden on direct freight costs as 100% scanning would increase freight costs significantly, hitting a sector characterised by tight margins and fierce worldwide competition.

Moreover, 100% container scanning would slow down container transport and increase inventory requirements and land-use. It would considerably increase port and hinterland congestion. European transportation and environmental protection policies aim to promote multimodality in transport, and a better use of maritime capacities, in order to reduce the growth of road transport. Road transport is a major source of health and environment problems, with its congestion, high carbon footprint, pollution and accidents problems. Increased congestion induced by an obligation of 100% scanning would not only affect the port and its immediate hinterland but would also have wider effects on traffic flows for which road transport remains an attractive option even at today's fuel prices.

In addition, 100% scanning would tend to divert transport flows towards those ports –mostly the larger ones- with the necessary financial leverage and container traffic volume to amortise the additional 100% scanning costs. This in turn would further increase congestion problems in and outside ports: to reach the ports capable of increasing their traffic, US bound containers would be shipped by feeder vessels or transported inland by truck on already nearly congested roads.

The tendency to reallocate EU exports to the US to a limited number of larger ports or newly developing hubs would be to the detriment of smaller ports and their hinterland. The consequence could be a competitive disadvantage for certain regions and further road and port congestion with negative environmental and regional development consequences within the EU.

With the aim of reducing barriers to trade, the EU has promoted uniform regulations across economic operators, such as the port security regulations. The uneven impact that 100% scanning would have on the European maritime transport operators would tend to create a distortion of competition in this sector. Distortions would not only occur between small and large ports, but also between port facilities in the same port.

Transport-diversion effects may also arise between Europe and the other US trade partners and could give a competitive advantage to alternative suppliers of US imported goods.

4. A potential new trade barrier

The potential share-out of the additional cost of 100% scanning between EU ports business and governments, EU and US business, and US taxpayers and consumers is a complicated issue that has not yet been examined. In any case, traders, logistics operators (shippers, consolidators, terminal operators), and the whole up- and down-stream supply chain involved in exporting goods to the US via maritime containers would bear at least part of the cost.

Many factors would influence the direction and intensity of the effects on trade flows and prices. An additional "transaction cost" to international trade would raise transport prices and depress growth (via reductions of imports/exports) without offering any real security benefit.

Developing countries (including emerging economies and less developed countries) handle about two thirds of the world port container throughput. 100% scanning can be expected to hit some harder than others. In many less developed countries 100% scanning would hinder the development of freight container operations in domestic ports and of the related shipping, logistics and trading sectors.

Finally, the US 100% scanning initiative assumes compatibility with WTO rules which is not established.

5. Conclusion

The unilateral US initiative imposing 100% scanning in European ports of US bound containers is a high cost option compared to alternative approaches that would produce benefits to security. It would tend to divert scarce resources from other essential measures and might create a false sense of security and complacency. It would call for a shift of European resources away from European security requirements. It could have serious repercussions for EU-US maritime transport and trade, and on transport organisation within the EU and worldwide, without any clear benefits in terms of enhanced security.

Priority should be given to strengthening the current multilayered system and risk analysis for targeting and inspecting dangerous cargo. This may require a widening of information systems and greater emphasis on selective scanning. US-EU cooperation is critical in achieving transatlantic 'secure trade' and strengthening security conditions for world trade.

Annex – Container transport statistics

US bound container shipping is highly concentrated in a relatively small number of EU ports. According to available EU statistics for 2006, a total of 2.6 million TEU were shipped to the US from 64 different ports. Only 23 ports ship more than 10,000 containers to the US.

When the total container traffic is considered, EU ports ship around 36.5 million TEU worldwide, including within the EU. The share of US bound traffic varies considerably from port to port (see last column in the table below). "Feeder ports" that do not ship containers to the US directly but use a "hub port" instead, are not represented in the table below. These are typically small to medium sized ports, often located at seas further away from the US, like the Baltic Sea or the Black Sea.

Beside the size element²⁰, EU ports can be distinguished according to other factors, such as whether containers mainly come from inland road transport, or use different modes, from rail to barge, to transshipment from feeder vessels. All three major ports handle multimodal incoming transport, while lower sized ones differ in this respect. Some are located on navigable rivers (e.g. Le Havre, Hamburg) while others deal essentially with truck traffic (e.g. Southampton, Genoa). Some ports mainly act as transshipment hubs (Valencia, Gioia Tauro, Cagliari).

Table 1 - Main EU ports for container traffic with US
(> 10,000 TEU shipped to the US, 2006. Source: EUROSTAT)

Rank	Port	Country	U.S.-bound		Total TEU	% U.S. / Tot
			TEU	%		
1	Bremerhaven	Germany	573.105	21,9%	2.343.650	24,5%
2	Antwerpen	Belgium	447.667	17,1%	3.405.005	13,1%
3	Rotterdam	Netherlands	400.343	15,3%	4.643.734	8,6%
4	La Spezia	Italy	143.551	5,5%	535.570	26,8%
5	Le Havre	France	114.698	4,4%	1.056.545	10,9%
6	Valencia	Spain	114.469	4,4%	1.285.869	8,9%
7	Hamburg	Germany	109.973	4,2%	4.261.958	2,6%
8	Barcelona	Spain	80.131	3,1%	1.150.696	7,0%
9	Liverpool	United Kingdom	80.019	3,1%	316.194	25,3%
10	Felixstowe	United Kingdom	75.083	2,9%	1.476.789	5,1%
11	Algeciras	Spain	73.660	2,8%	1.632.074	4,5%
12	Gioia Tauro	Italy	64.541	2,5%	1.383.745	4,7%
13	Livorno	Italy	44.424	1,7%	242.932	18,3%
14	Genova	Italy	43.142	1,7%	532.833	8,1%
15	Bilbao	Spain	36.917	1,4%	455.450	8,1%
16	Marseille	France	32.897	1,3%	463.434	7,1%
17	Southampton	United Kingdom	32.258	1,2%	725.561	4,4%
18	Medway	United Kingdom	20.052	0,8%	295.459	6,8%
19	Goteborg	Sweden	18.367	0,7%	404.094	4,5%
20	Lisboa	Portugal	17.568	0,7%	256.558	6,8%
21	Napoli	Italy	16.889	0,6%	90.713	18,6%
22	Piraeus	Greece	13.140	0,5%	691.878	1,9%
23	Cagliari	Italy	12.418	0,5%	229.597	5,4%
	<i>Subtotal</i>		<i>2.565.312</i>	<i>98,1%</i>	<i>27.880.338</i>	<i>9,2%</i>
	TOTAL EU		2.614.316	100,0%	36.510.876	7,2%

¹ In August 2007, the Homeland Security Bill came into force. It stipulates that all cargo which is loaded in a foreign port on a ship bound for the United States must be scanned before leaving for the USA. The devices to be used include X- or gamma-ray imaging systems providing an internal “picture” of the container’s contents, and radiation-detection systems that provide a passive, non-intrusive means of spotting nuclear devices. All foreign ports shipping containers to the United States will have to install and use both types of equipment by 2012 at the latest.

² The implementing provisions of the security amendment (EC Regulation 1875/2006) entered into force in December 2006 and apply within the following timeframe: since early 2007 a common risk management framework has been used to support improved risk based controls by customs authorities. The risk management system will be fully computerised by 2009. The provisions for the Authorised Economic Operator programme (AEO) entered into force on 1 January 2008. The AEO programme aims to increase security requirements and facilitate compliant traders. In July 2009 it will become mandatory for traders to provide customs authorities with advance information on goods brought into, or taken out of the customs territory of the European Community.

³ Regulation (EC) 725/2004 of the European Parliament and of the Council on enhancing ship and port facility security and Directive 2005/65/EC of the European Parliament and of the Council on enhancing port security.

⁴ Since the adoption of the relevant legislation in 2004, the European Commission has carried out over 100 inspections of port facilities, ships, companies, recognised security organisations and national authorities in charge of maritime security, to complement Member States’ own inspections and ensure correct application of the rules throughout the EU. Container terminals and ships have high levels of physical protection against unauthorised entry.

⁵ Agreement between the European Community and the United States of America on customs cooperation and mutual assistance in customs matters, Official Journal L 222, 12/08/1997.

⁶ Agreement between the European Community and the United States of America on intensifying and broadening the Agreement on customs cooperation and mutual assistance in customs matters to include cooperation on container security and related matters, Official Journal L 304/34, 30/09/2004.

⁷ After the terrorist attacks on September 11, 2001, U.S. Customs Service began developing antiterrorism programmes to help secure the United States. Within months of these attacks, U.S. Customs Service had created the Container Security Initiative (CSI). CSI addresses the threat to border security and global trade posed by the potential for terrorist use of a maritime container to deliver a weapon. CSI proposes a security regime to ensure all containers that pose a potential risk for terrorism are identified and inspected at foreign ports before they are placed on vessels destined for the United States. CBP has stationed multidisciplinary teams of U.S. officers from both CBP and Immigration and Customs Enforcement (ICE) to work together with foreign government counterparts.

⁸ In June 2006 WCO Council adopted the SAFE Framework of Standards to secure and facilitate global trade.

⁹ In November 2007, a progress report on the state of play on mutual recognition, including on the establishment of the joint roadmap, was presented to the Transatlantic Economic Council (TEC), thereby emphasising the high political importance of this issue. As a conclusion, a joint road map was agreed, setting out the key performance-based stages required to reach mutual recognition of US and EU Customs-Trade partnership programmes in 2009 or to report fully if there are serious difficulties preventing this.

¹⁰ Total cost to the US for buying and sending the equipment to Southampton, for building the infrastructure, and for paying for the US personnel to run the six months trial – the UK Customs and Port personnel costs are not included in this amount.

¹¹ Over the 6-month pilot action, 90,000 containers were checked for radiation at the port gates and 5,500 US bound containers were X-rayed for non-intrusive imaging of the container contents.

¹² Assuming a 5-year constant depreciation of the \$18m initial investment, and projecting on an annual basis the human resources expenditure needed to scan the 5,500 containers for the duration of the pilot action.

¹³ The scanning of transhipped containers required a dedicated area in the terminal, the double handling of containers, and the use of mobile scanners at a remote site.

¹⁴ The more the scanning operation is centralised in the port (terminal), the higher the need to move containers to and from the scanner, and to store them in secure areas and comply with the ISPS code.

¹⁵ In Rotterdam, for instance, 47% of US bound containers arrive on feeder vessels or barges and are transhipped.

¹⁶ The most difficult targets have higher fixed costs; hence, the average cost of scanning one container grows more than proportionally towards the 100% target: in relative terms, the additional effort needed to reach the last small percentage points of coverage will likely cost more than the first 90-or-so percent.

¹⁷ A hypothetical single stationary scan installation operating at full capacity reportedly costs \$18m and has a maximum nominal annual capacity of 80,000 containers. Assuming a 5-year constant depreciation, an \$18m fixed investment spread over 80,000 US bound containers per year, represents \$45 per container; this is the bottom figure for the fixed cost. Adding variable costs for a 30-person staff devoted to service the equipment would raise the cost to roughly \$75 per container scanned and sent forward to the loading area (between \$2.25-3.5 million annually). This would increase to about \$85 once the cost of false inspections was taken into account under ideal conditions (2% as in the Southampton trial. The direct cost of \$85 to scan a container in the ideal conditions so far examined would increase steeply in

smaller ports with lower-than-optimal traffic volumes. (Ports shipping less than 80,000 containers annually).

¹⁸ According to a study made by Professor D. Hummel of Purdue University in the USA (2001) the cost of any additional day of transport is on average worth 0.8% of the value of the good.

¹⁹ Although growing at a fast pace, containerised cargo is not yet predominant in world shipping. The share of containerised cargo in the world's total dry cargo (in tonnage) is estimated by Clarkson Research Services at 24%. Overall, dry cargo (76% of which –bulk and break bulk cargo– currently escape scanning) represents two thirds of total cargo, the rest being oil and related products (see UNCTAD Review of Maritime Transport 2007).

²⁰ Only US bound container traffic is considered here: this entails an underestimate of problems for ports like Hamburg that handle several million containers per year, only few of which US bound.