

Section 8

AVIATION SECURITY COMPARISON OF EUROPE AND THE UNITED STATES

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8 Comparison of Europe versus the United States

8.1 Summary

Aviation security - organisational structure

- At present (2004), 11 out of the 18 European States considered in this study apply a centralised approach towards aviation security (where the primary responsibility for key security related activities rests with the State). This centralised approach was adopted by the US on enactment of the Aviation and Transport Security Act (ATSA) in November 2001. As a result, responsibility for aviation security in the US was subsequently transferred from airports to a new Federal authority, the TSA.

Funding mechanisms of aviation security activities

- Security activities are paid for in Europe by a combination of stakeholders, including airports, air carriers, passengers and the States themselves. In the US, key security activities are paid for primarily by the TSA out of Federal funds.
- In 2002, income from European aviation security taxes and airport charges recorded an average of **€1.45** per passenger (**€2.90** per departing passenger).
- Although the ATSA allows the TSA to charge up to a maximum of **€4.72 (\$5.00)** per passenger per one-way trip basis (**€9.44** or **\$10.00** per round-trip), the charge has been set at 50% of the maximum level (i.e. **€2.36** or **\$2.50** per passenger per segment) since its introduction on 1 February 2002.
- However, recognising the issue of US carrier profitability, between 1 June 2002 and 30 September 2002, US Congress suspended both fees.
- European States generated around **€1.3bn** in security taxes, airport charges and State security related grants in 2002. In the US, some **€2.1bn (\$2.2bn)** was targeted to be recovered through security taxes in the fiscal year to 30 September 2003.

Security expenditure

- European States spent an estimated **€2.0bn** on aviation security related activities in 2002. In the US, the TSA spent a total of **€5.8bn** or **\$6.1bn** in the fiscal year to 30 September 2003.
- The average security operating expenditure for those European airports undertaking the key security responsibilities such as screening of passengers and baggage was estimated at **€2.23** per passenger in 2002. A similar estimate for TSA, which provides screening across all the US airports, was circa **€4.42** per passenger in FY2003.

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8.2 Introduction

This section provides a comparison of how aviation security is organised in Europe versus the US, which includes comparing the entities responsible for the provision and supervision of aviation activities. It also outlines how aviation security is funded in the two geographic areas and the relative level of aviation security taxes and charges levied on end users (predominantly passengers).

A comparison of the level of security related income generated and the operating expenditure in 2002 for the European States and FY 2003 (ending 30 September 2003) for the US is also included.

8.3 The size of the EU and US aviation markets

The total size of the US market in 2002 was 1,313 million passengers¹. The total European market was around 990 million, with the 18 States within this report accounting for 938 million (95%).

8.4 Organisational structure

As outlined in section 3, two main models are adopted in Europe for the organisation of aviation security.

- **Centralised Model** – the main security activities are primarily the responsibility of the State via a government body (CAA, Ministry of Transport, police force, etc). This is broadly the situation in 11 States (Austria, Finland, Germany, Iceland, Italy, Luxembourg, Norway², Portugal, Spain, Sweden and Switzerland³).
- **Decentralised model** – the main security activities are provided by the airport authorities under the supervision of the relevant authority (normally the CAA). These activities could either be provided by the airport directly or outsourced to a third party. This is broadly the current situation in 7 States (Belgium, Denmark, France, Greece, Ireland, Netherlands⁴ and the UK).

2003 saw changes in the way in which aviation security is provided and monitored within Europe. For example, up to 1 April 2003, the Netherlands adopted a centralised approach to aviation security. The Dutch Border Police (overseen by the Ministry of Justice) were responsible for providing passenger and baggage screening (the centralised model). However, after 1 April 2003, responsibility for these activities was transferred to the airports (the decentralised model). Greece is also considering transferring provision of security to private security firms under the responsibility of the airport. Athens International Airport has already adopted this approach and the major regional airports are expected to follow shortly.

The situation is contrary to what recently occurred in the US. After 11 September 2001, the US moved from a decentralised to a centralised approach. Prior to November 2001 (and the

¹ Source: ACI Monthly Worldwide Airport Traffic Report, December 2002.

² With the enacting of Regulation EC No. 2320/2002 in May 2004, provision of primary security activities at Norwegian airports is now the responsibility of the airport operator or outsourced to third parties; effectively adopting a more decentralised approach.

³ In Switzerland, key security responsibilities such as passenger and baggage screening are undertaken by regional police forces.

⁴ Note that prior to 1st April 2003, the Netherlands adopted a centralised approach to aviation security.

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enactment of ATSA)⁵ provision of passenger and baggage screening in the US was the responsibility of each airport authority. Although the responsibility of the airport, the screening activity was normally outsourced to third party providers. ATSA resulted in the establishment of the TSA⁶, a federal agency responsible for the organisation and provision of security activities across all US airports. This effectively centralised aviation security responsibilities under a single, federal authority.

8.5 Provision and supervision

In this section, the provision of aviation security measures in European States is compared with those in the US. The bodies responsible for the provision and supervision of the key security activities are also examined.

8.5.1 Airport security

In Europe, airport related security measures such as staff access control and checking of vehicle access to controlled areas are carried out by a combination of entities: airports, police services and private security companies (outsourced). In the US, these activities remain a core responsibility of the airport.⁷

In Europe the supervision of airport security activities is the responsibility of the respective CAAs. In the US, the responsibility rests with the TSA.

8.5.2 Aircraft security

In the US and Europe, the protection, checking and searching of aircraft is more often the responsibility of the air carrier. The respective State CAA is usually responsible for ensuring compliance with security standards in Europe. In the US, this is carried out by the TSA.

8.5.3 Passenger and baggage

Across the European airports, the screening of passengers, their cabin and hold baggage is a shared between airports, police forces and private security companies. However, in the US this is almost exclusively carried out by the TSA. Currently in the US, a Private Security Screening Pilot Program is running at 5 US airports (2002 - 2005). This programme will be instrumental in determining the future organisational structure for aviation security in the US.

In Europe and the US, reconciliation of hold baggage with the passengers on board the aircraft, as well as protection of baggage, are primarily activities carried out by the airlines.

The overall supervision of all passenger and baggage activities is carried held by the respective CAAs in Europe and by the TSA in the US.

⁵ ATSA: Aviation and Transportation Security Act, 19 November 2002. This law established a new Transportation Security Administration (TSA) within the Department of Transportation (subsequently moved to the Department of Homeland Security). This Act established a series of challenging but critically important milestones toward achieving a secure air travel system.

⁶ TSA: Transportation Security Agency: A department within the US Department of Homeland Security, the TSA has overall responsibility for all modes of transportation security within the US. The TSA's objective is to protect all of the US' transportation systems (including aviation) "to ensure freedom of movement for people and commerce"⁶.

⁷ TSA Response, 2003.

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8.5.4 Cargo and mail

In Europe, the screening of cargo (including courier, express mail and their trans-shipment) is primarily carried out by the carrier. In the US, the carrier, shipper or freight forwarder as well as the TSA can undertake the screening of cargo.

In the majority of European States, the carrier or the postal services undertake the screening of mail and its trans-shipment. In the US, it is the responsibility of the carrier, the shipper and the TSA.

The supervisory tasks concerning cargo, mail, courier and express mail are the responsibility of the respective CAAs in Europe and the TSA in the US.

8.5.5 Carrier mail and materials

In Europe, the carriers screen their own mail and materials. In the US, this can be undertaken by either the carrier or the TSA. In Europe, the respective CAA usually carries out the supervision of this activity; in the US the responsibility rests with the TSA's.

8.5.6 Carrier catering, cleaning, stores and supplies

In Europe, the inspection of vehicles involved in catering, cleaning, stores and supplies is carried out by the airport or private security companies. In the US, this is the responsibility of the carrier. In Europe, the staff screening is carried out by the airport, private security companies or by the police.

The supervision of these activities is normally the responsibility of the CAA's and the TSA in Europe and the US respectively.

8.5.7 General aviation

Checks on general aviation users are conducted by the airport and private security companies in Europe. In the US, these activities are a federal responsibility and undertaken by the TSA.

In Europe, ensuring compliance of security measures with standards is mainly the responsibility of the respective State CAA, whilst in the US it is the responsibility of the TSA.

Figure 8-1: Airport and aircraft security provision in the European States compared with the US

Category	Activity	EUROPEAN STATES		USA		
		Party responsible for performing activity	Party responsible for ensuring compliance with activity	Party responsible for performing activity	Party responsible for ensuring compliance with activity	
1. Airport security	1.1. Access control	Airport ID cards issue	Airport	CAA	Airport	TSA
		Check on applicants for obtaining ID cards	Airport+Police	CAA	Airport	TSA
		Vehicles access ID passes issuing	Airport	CAA	Airport	TSA
		Vehicles inspection	Airport	CAA	Airport	TSA
		Materials and goods inspection	Airport	CAA	Air Carrier	TSA
	1.2. Security restricted areas	Staff access checkpoints	Airport	CAA	Airport	TSA
		Vehicle access checkpoints	Airport	CAA	Airport	TSA
	1.3. Terminal areas	Terminal surveillance	Airport	CAA	Airport	TSA
	1.4. Other public areas	Public car parks	Airport+Police+Private	CAA	Airport	TSA
		Taxi and ground transport staging areas	Airport+Police+Private	CAA	Airport	TSA
		Public access roadways	Airport+Police	CAA	Airport	TSA
		Others (e.g. spectator terraces)	Airport+Police	CAA	Airport	TSA
	1.5. Staff & vehicle screening	Staff access checkpoints	Airport+Private	CAA	Airport	TSA
		Vehicle access checkpoints	Airport+Private	CAA	Airport	TSA
	1.7. Physical security and patrols	Terminal patrol	Airport+Police+Private	CAA	Airport	TSA
Airside patrol		Airport+Police+Private	CAA	Airport	TSA	
Airport perimeter surveillance and patrol		Airport+Police+Private	CAA	Airport	TSA	
1.5. Other	Law Enforcement Officers			Local	TSA/Local	
2. Aircraft security	Searching and checking aircraft	Airline	CAA	Air Carrier	TSA	
	Protection of aircraft	Airline+Police	CAA	Air Carrier	TSA	
	Other: Dogs			Law enforcement	TSA	

Source: Security questionnaires and TSA

Figure 8-2: Passenger, baggage, cargo and mail security provision in the European States compare to the US

Category	Activity	EUROPEAN STATES		USA	
		Party responsible for performing activity	Party responsible for ensuring compliance with activity	Party responsible for performing activity	Party responsible for ensuring compliance with activity
3. Passengers & cabin baggage	Screening of passengers & hand baggage	Airport+Police+Private	CAA	TSA (some privatized)	TSA
	Other:				
4. Hold baggage	Baggage reconciliation	Airline	CAA	Air Carrier	TSA
	Baggage screening	Airport+Police+Private	CAA	TSA/private	TSA
	Baggage protection	Airline	CAA	Air Carrier	TSA
	Other: Dogs			Law enforcement	TSA
5. Cargo, courier & express mail	Cargo screening	Carrier	CAA	TSA/carriers/ shippers	TSA
	Courier and express mail screening	Carrier	CAA	TSA/carriers/ shippers	TSA
	Cargo trans-shipment	Carrier	CAA	TSA/carriers/ shippers	TSA
	Other: Dogs			Law enforcement	TSA
6. Mail	Mail screening	Carrier+Private	CAA	TSA/carriers/ shippers	TSA
	Mail trans-shipment	Carrier	CAA	TSA/carriers/ shippers	TSA
	Other: Dogs			Law enforcement	TSA
7. Air carrier mail & material	Company mail screening	Airline	CAA	TSA/carriers	TSA
	Company materials screening	Airline	CAA	TSA/carriers	
	Other: n/a				
8. Air carrier catering stores & supplies	Staff screening	Airport+Private	CAA	Air Carrier	TSA
	Vehicle inspection	Airport+Private	CAA	Air Carrier	TSA
	Other: n/a				
9. Air carrier cleaning, stores & supplies	Staff screening	Airport+Private	CAA	Air Carrier	TSA
	Vehicle inspection	Airport+Private	CAA	Air Carrier	TSA
	Other: n/a				
10. General Aviation	GA users checking	Airport+Private	CAA	TSA	TSA
	Other: n/a				

Source: Security questionnaires and TSA

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8.6 Funding

As with the provision and supervision of security related activities, there are key differences in the way in which the various activities are funded on both sides of the Atlantic. These activities are described under the following headings:

- Airport security.
- Aircraft security
- Passenger and baggage screening
- Cargo and mail screening, carrier mail and company materials screening.
- Carrier catering, cleaning, stores and supplies checking.

8.6.1 Airport security

In both Europe and the US, the carriers and the airports generally finance airport security measures. However, the TSA pay for specific tasks such as background staff checks and issuing of ID cards. The cost of the airport ID cards for non-TSA employees or contractors is funded through an 'application fee'. This fee is paid to the TSA by the employee / employer when the new identification card is requested. The TSA forwards the fee on to the organisation performing the checks required to issue the identification card.

8.6.2 Aircraft security

In both Europe and the US, the carriers pay for the protection and searching of aircraft. However, in some European States aircraft protection may be provided by local or national police (e.g. Portugal and Switzerland) and therefore these activities are funded by the respective State.

8.6.3 Passenger and baggage screening

In Europe, the screening of passengers, their cabin and hold baggage is generally paid for, in whole or in part, by passengers (i.e. through levying of security taxes and charges). In the US, baggage and passenger screening is directly funded by the TSA.

In February 2002, the TSA introduced two fees – the September 11 Security Fee (passenger fee) and the Aviation Security Infrastructure Fee (Air Carrier Fee). Both fees are collected by the carrier (domestic or foreign), having been paid by the passenger on the ticket price. These charges are passed on to the TSA on a monthly basis.⁸

Generally, in both the US and Europe, baggage protection and reconciliation activities are paid for by the carriers.

⁸ Source, TSA, 31 December 01 / DoT Interim Rule, Aviation security Infrastructure Fees

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8.6.4 Cargo and mail security and screening

In Europe, the screening of cargo, express cargo, courier and mail is paid for by the carriers. For a small number of European States this activity is paid for by the postal authority. In the US these costs are shared between the TSA and the carrier.⁹

8.6.5 Carrier mail and company materials screening

The carriers on both side of the Atlantic pay for the security checks of their mail and company materials.

8.6.6 Carrier catering, cleaning, stores and supplies checking

The carriers pay for security costs associated with ground services, catering and aircraft cleaning. This is the same for both Europe and the US.

8.6.7 General aviation

In Europe and the US, general aviation security measures are generally paid for by the airports.

⁹ TSA Response

Figure 8-3: Airport and aircraft security remuneration in the European States compared with the US

		EUROPE	USA	
Category	Activity	Cost of activity is remunerated by	Cost of activity is remunerated by	
1. Airport security	1.1. Access control	Airport ID cards issue	Airline	Airport+TSA
		Check on applicants for obtaining ID cards	Airline+Airports	Airport+TSA
		Vehicles access ID passes issuing	Airline+Airports	Airport
		Vehicles inspection	Airport	Airport
		Materials and goods inspection	Airport	Air Carrier
	1.2. Security restricted areas	Staff access checkpoints	Airline+Airports	Airport
		Vehicle access checkpoints	Airline+Airports	Airport
	1.3. Terminal areas	Terminal surveillance	Airport+Police	Airport
	1.5. Other public areas	Public car parks	Airport	Airport
		Taxi and ground transport staging areas	Airport+Police	Airport
Public access roadways		Police	Airport	
Others (e.g. spectator terraces)		Airport	Airport	
1.6. Staff & vehicle screening	Staff access checkpoints	Airport	Airport	
	Vehicle access checkpoints	Airport	Airport	
1.7. Physical security and patrols	Terminal patrol	Police	Airport	
	Airside patrol	Airport+Police	Airport	
	Airport perimeter surveillance and patrol	Police	Airport	
1.5. Other	Law Enforcement Officers		Local	
2. Aircraft security	Searching and checking aircraft	Airline	Air Carrier	
	Protection of aircraft	Airline	Air Carrier	
	Other: Dogs		Law enforcement+TSA	

Source: Security questionnaires and TSA

Figure 8-4: Passenger, baggage, cargo and mail security remuneration in the European States compare with the US¹⁰

Category	Activity	EUROPE	USA
		Cost of activity is remunerated by	Cost of activity is remunerated by
3. Passengers & cabin baggage	Screening of passengers & hand baggage	Airport+Airline+Passenger	TSA
	Other: n/a		
4. Hold baggage	Baggage reconciliation	Airline	Air Carrier
	Baggage screening	Airline+Passenger	TSA
	Baggage protection	Airline	Air Carrier
	Other: Dogs		Law enforcement+ TSA
5. Cargo, courier & express mail	Cargo screening	Airline	TSA+carriers+shippers
	Courier and express mail screening	Airline	TSA+carriers+shippers
	Cargo trans-shipment	Airline	TSA+carriers+shippers
	Other: Dogs		Law enforcement+TSA
6. Mail	Mail screening	Airline	TSA+carriers+shippers
	Mail trans-shipment	Airline	TSA+carriers+shippers
	Other: Dogs		Law enforcement+TSA
7. Air carrier mail & material	Company mail screening	Airline	TSA+carriers
	Company materials screening		
	Other: n/a		
8. Air carrier catering stores & supplies	Staff screening	Airline	Air Carrier
	Vehicle inspection	Airline	Air Carrier
	Other: n/a		
9. Air carrier cleaning, stores & supplies	Staff screening	Airline	Air Carrier
	Vehicle inspection	Airline	Air Carrier
	Other: n/a		
10. General Aviation	GA users checking	Airport	
	Other: n/a		Employer of regulated party

Source: Security questionnaires and TSA

¹⁰ TSA / Other organisational responses, 2003

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8.7 Funding mechanisms

8.7.1 Security taxes

As outlined in section 5, the levying of security related taxes on passengers was a common practice across a number of European States prior to 11 September 2001. A number of these taxes were introduced in the 1990s (Germany 1990, Austria 1993 and Portugal 1994).

In Europe, these taxes were reviewed as result of rising security measures and associated expenditure in the aftermath of the terrorist attacks in the US. Sections 4, 6 and 7 provide greater detail on this expenditure for both Europe and the US respectively.

After 11 September 2001, a number of other European States introduced security taxes (e.g. in 2003 both the Netherlands and Finland introduced a security tax).

In the US, during February 2002, security taxes were first introduced by the TSA as a mechanism for financing part of the cost of rising security standards across US airports. Although the TSA is allowed to charge up to a maximum of \$5.00 per passenger per one-way trip basis and \$10 per round-trip, the charge has been set at 50% (i.e. \$2.50 per passenger per segment) since its inception on 1 February 2002.

The average security tax for those European States levying security taxes was €1.08 (weighted average) for 2002. The average security tax in Europe is lower than the security tax imposed by the TSA on passengers of €2.36 per passenger (\$2.50 per passenger segment).

8.7.2 Airport security related charges

Many of the European airports levy a security related charge on passengers. In 2002, the weighted average airport security charge for all European airports was **€0.75** per passenger. For the responding airports, the figures are as follows:

- **Centralised** model, (the State is responsible for providing key security related activities such as screening of passengers and hand and baggage) the figure was **€0.64** per passenger. The US currently adopts this model.
- **Decentralised** model, the figure was **€0.90** per passenger.

In their response, the TSA did not advise that any US airport currently imposes a security related charge.

8.7.3 Security income

Total aviation security income from taxes and charges within Europe was estimated to reach €1.3bn for 2002. This included €585m raised through security taxation, €605m in airport related security charges and the remaining €132m in State grants.

In comparison, the TSA's actual expenditure for FY2003 (ending 30 September) was €5.8bn (\$6.1bn) of which €2.1bn (\$2.2bn) was forecast to be raised from passenger and carrier fees. The funding gap is financed from Federal government funds.

However, it is unclear whether the full €2.1bn (\$2.2bn) was actually raised. Due to economic pressures, the US government suspended these taxes between June and September 2002. It is not

known whether taxes were also suspended during 2003. In addition, the US carriers were reimbursed €4.4bn (\$4.6bn) up to 10 October 2003, in proportion to the amount of security related fees they had paid the TSA since February 2002. This in effect represents almost 2 years forecast security income for the TSA.

Figure 8-5: Security taxes levied in Europe and the US 2001 – 2002



* TSA budget estimate includes €2.1bn (\$2.2bn) recovered from airport charges income
Source: TSA Budget 2003 / Estimation: IAA/AviaSolutions

8.8 Security expenditure

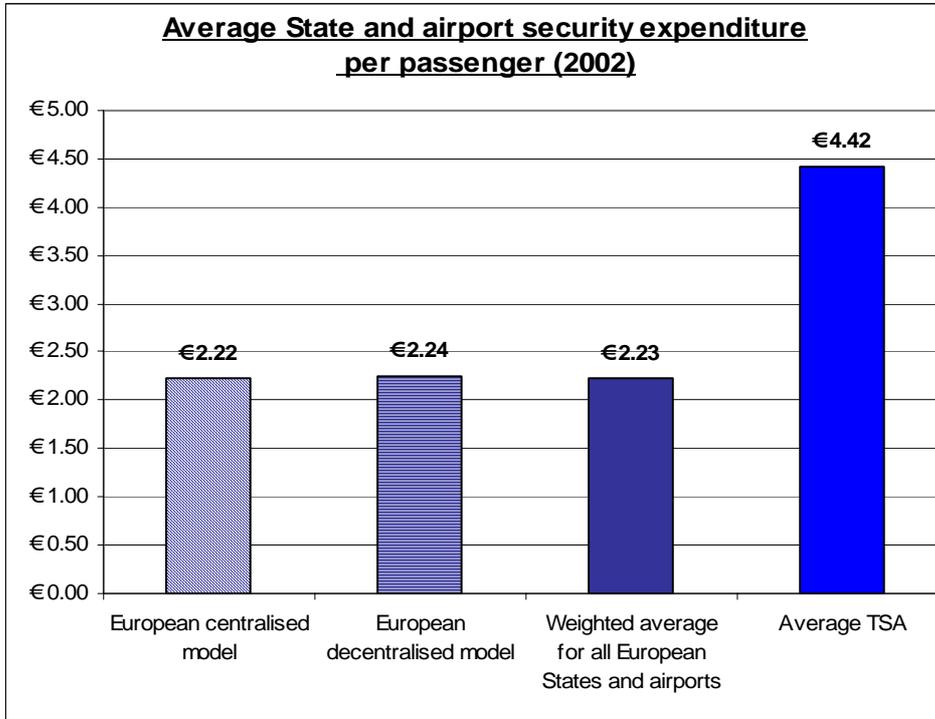
In 2002, the estimated security related expenditure for all European States and airports was circa €2.0bn, leading to a weighted average of €2.23 per passenger.

Two different per passenger average costs were estimated; one for those airports where these activities are primarily performed by the State authority (centralised) and the other for those airports providing the key security activities such as passenger and baggage screening (decentralised). These are as follows:

- Centralised model weighted average of €2.22 per passenger
- Decentralised model weighted average of €2.24 per passenger

The TSA's total aviation related expenditure in FY2003 was €5.8bn (\$6.1bn), an average of approximately €4.42 per passenger across the US. This is significantly higher than the average of €2.22 per passenger for those airports within Europe where screening activities are provided by the State.

Figure 8-6: Airport average security cost per passenger (State and airport combined) 2002



Source: TSA
 Estimation: IAA/AviaSolutions