FACT SHEET NO.: 4 / 9 **PERFORMED BY: PRO**

A GENERAL INFORMATION

A 1	**Category**	Internal Markets
A 2	**Subcategory**	Transport security - "end-to-end"
A 3	**Transport policy measure (TPM)**	'End-to-end' security certificates
A 4	**Description of TPM**	The TPM is about the increase of cargo security for land transport in the European Union along the entire supply chain. The existing security checks are solely executed for single modes of transport (mostly at airports or ports) and not for entire supply chains. An 'End-to-end' security certificate provides an efficient and comprehensive solution for transport operators to secure their cargo throughout the entire supply chain. The 'End-to-end' certificate aims to deliver more security without limiting the free flow of goods. 'End-to-end' means that the cargo will be checked at or close to its point of department and remains secured (screening is only needing at boarding) for the entire supply chain. [1] Not all cargo transported has to be inserted in an 'End-to-end' security certificate system. The system has to be adjusted to the proportional risk and the value of cargo. [2] Typical supply chain security activities include the credentialing of supply chain participants, screening and validation of the cargo content, advanced notification of the content to the destination country, ensuring the security of cargo while in-transit (locks, tamper-proof seals), cargo inspection on entry. [10]
A 5	**Implementation examples**	
A 6	**Objectives of TPM**	- Increase security of cargo along the entire supply chain without restricting the free flow of trade. To avoid additional effort for transport enterprises and to reduce red tape it is desirable to integrate the 'End-to-end' certificates into existing schemes. [1] - Improve international cooperation to fight terrorism and other criminal activities like piracy and by ensuring the recognition of the EU concept of 'one stop security' system internationally. [1] [9] - Joint Security Assessment covering all modes of transport. [1] - Integrate potential effects of terrorist and criminal attacks in the preparation of mobility continuity plans. [1]
A 7	**Key changes concerning:**	
A 7.1	- Choice of transport mode / Multimodality:	Cargo transport will be ensured for all modes of transport which means that security issues will become less important while choosing between modes of transport and multimodality will become more attractive.
A 7.2	- Origin and/or destination of trip:	Unstable or unsafe regions may become more attractive due to comprehensive security certificates. [3]
A 7.3	- Trip frequency:	No changes
A 7.4	- Choice of route:	Unstable or unsafe regions may become more attractive due to comprehensive security certificates. [3]
A 7.5	- Timing (day, hour):	No changes
A 7.6	- Occupancy rate / Loading factor:	No changes
A 7.7	- Energy efficiency / Energy usage:	No changes
A 8	**Main source**	[1], [2], [3]

B IMPACTS

B 1 OVERVIEW ON IMPACTS

		AFFECTED SEGMENTS																Geographical level		Source	
		Passengers					Transport operators														
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport	**Employees in transport**	**Residents**	**Economy**	**Public bodies**	**Society**	1st level	2nd level	Source of assessment	Spatial level of source
B 1.1	**Summary**																	I	N	S	I

- No significant impacts for specific social groups.
- Mainly transport operators will benefit from one integrated and comprehensive 'End-to-end' security certificate. The crucial is about whether the introduction of an 'End-to-end' document leads to higher security costs and/or more regulations for transport operators. [1] [5] [6]

B 1.2	**Summary: Income groups**
B 1.3	**Summary: Age groups**
B 1.4	**Summary: Disabled people**
B 1.5	**Summary: Gender groups**
B 1.6	**Summary: Ethnic groups**

B 2 TRAFFIC IMPACTS

		AFFECTED SEGMENTS																Geographical level		Source	
		Passengers					Transport operators														
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport	**Employees in transport**	**Residents**	**Economy**	**Public bodies**	**Society**	1st level	2nd level	Source of assessment	Spatial level of source
B 2.1	Travel or transport time						↘	↘	↘	↘	↘							I	N	S	I
B 2.2	Risk of congestion																				
B 2.3	Vehicle mileage																				
B 2.4	Service and comfort						↗	↗	↗	↗	↗							I	N	S	I

B 2.I	**Overall impacts on social groups**
B 2.II	**Implementation phase**
B 2.III	**Operation phase**
B 2.IV	**Summary / comments concerning the main impacts**

- For cargo requiring security (valuable cargo like money, art, etc) it is desirable that it is performed at the point of department and that the integrity is maintained throughout the journey. This 'End-to-end security' will replace existing safety measures at airports and ports and will ease transport of cargo throughout the entire supply chain.[2]
- Service and comfort improves if the new certificate is integrated in existing systems for secure maritime and air transport. [1]

B 2.V	**Quantification of impacts**

B 3 ECONOMIC IMPACTS

		AFFECTED SEGMENTS																Geographical level		Source	
		Passengers					Transport operators														
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport	**Employees in transport**	**Residents**	**Economy**	**Public bodies**	**Society**	1st level	2nd level	Source of assessment	Spatial level of source
B 3.1	Transport costs						↘	↘	↘	↘	↘							I	N	S	I
B 3.2	Private income / commercial turn over																				
B 3.3	Revenues in the transport sector																				
B 3.4	Sectoral competitiveness						↘	↘	↘	↘	↘							I	N	S	I
B 3.5	Spatial competitiveness																				
B 3.6	Housing expenditures																				
B 3.7	Insurance costs						↘	↘	↘	↘	↘							I	N	S	I
B 3.8	Health service costs																				
B 3.9	Public authorities & adm. burdens on businesses															↗		I	N	S	I
B 3.10	Public income (e.g.: taxes, charges)																				
B 3.11	Third countries and international relations						↗	↗	↗	↗	↗					↗		I	N	S	N

B 3.I	**Overall impacts on social groups**
B 3.II	**Implementation phase**

Increasing costs: strengthening of international relations and training of port authorities (and other participants) will lead to more administrative burdens. [2]

B 3.III	**Operation phase**
B 3.IV	**Summary / comments concerning the main impacts**

- The sectoral competitiveness between different transport modes decreases if security levels are equal for all modes of transport along the entire supply chain and not differentiated between modes or routes. [10]
- Insurance costs will decrease due to a higher level of security for the entire supply chain. [2]
- International relations must be strengthened and cooperation between trading partners needs to be intensified. This counts for all transport operators and for public bodies (governments). [2] [3]
- Increasing international cooperation between public bodies will lead to more administrative burdens. [2] [3]
- An 'End-to-end' certificate generates overall positive economic effects for all parties involved in multimodal transport, as it will simplify and reduce the costs and delays of administrative procedures and the modal shift. [7]

B 3.V	**Quantification of impacts**

B 4	SOCIAL IMPACTS	AFFECTED SEGMENTS																Geographical level		Source	
		Passengers					Transport operators														
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport	**Employees in transport**	**Residents**	**Economy**	**Public bodies**	**Society**	1st level	2nd level	Source of assessment	Spatial level of source
B 4.1	Health (incl. well-being)																				
B 4.2	Safety																↗				
B 4.3	Crime, terrorism and security						↗	↗	↗	↗	↗		↗				↗	I	N	S	I
B 4.4	Accessibility of transport systems																				
B 4.5	Social inclusion, equality & opportunities																				
B 4.6	Standards and rights (related to job quality)												↗					I		E	
B 4.7	Employment and labour markets												→			→		N	I	S	N
B 4.8	Cultural heritage / culture																				

B 4.I	**Overall impacts on social groups**	
B 4.II	**Implementation phase**	
B 4.III	**Operation phase**	
B 4.IV	**Summary / comments concerning the main impacts**	- One of the main targets of this TPM is to protect European freight transport against possible terrorist attacks. International cooperation must be further strengthened to achieve this higher level of protection. A higher level of security will not only be favourable for transport operators, but also for society in general. [1][3] - In order to strengthen international cooperation and introduce 'End-to-end' security certificates there will be more employment in the security sector and within public bodies. But, when workers (for instance at security authorities) are trained these extra jobs will disappear. The effect on enployment is uncertain, as the decreasing administrative burdens will reduce the need for employment. [4] - Improved safety level for the driver / captain [10] and reduction of accidents [10]. **3 level impact:** - The introduction of "End-to-end" security certificates could encourage international cooperation which could lead to more equal standards and rights for employees in transport.
B 4.V	**Quantification of impacts**	

B 5	ENVIRONMENTAL IMPACTS	AFFECTED SEGMENTS																Geographical level		Source	
		Passengers					Transport operators														
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport	**Employees in transport**	**Residents**	**Economy**	**Public bodies**	**Society**	1st level	2nd level	Source of assessment	Spatial level of source
B 5.1	Air pollutants																↘	I		S	I
B 5.2	Noise emissions																				
B 5.3	Visual quality of the landscape																				
B 5.4	Land use																				
B 5.5	Climate																↘	I		S	I
B 5.6	Renewable or non-renewable resources																				

B 5.I	**Overall impacts on social groups**	
B 5.II	**Implementation phase**	
B 5.III	**Operation phase**	
B 5.IV	**Summary / comments concerning the main impacts**	- Early warning of dangerous goods. [10] - A main pre-requisite for low-carbon services (within freight transport) is the availability for standards for the environmental impact of freight transport. Security certificates can initiate such standards, which will lead to a reduction of greenhouse gas emissions and the negative effects on climate change. However, this is not a direct impact. [10].
B 5.V	**Quantification of impacts**	

C REFERENCES

C 1	**Other TPMs of this subcategory**	
C 2	**References**	**International** [1] European Commission (2011): Commission Staff Working document . Roadmap to a single European transport area. SEC(2011)391. Brussels [2] European Commission (2012): Commission Staff Working Document on Transport Security. SWD(2012)143. Brussels [7] European Commission (2009): Details and added value of establishing a (optional) single transport (electronic) document for all carriage of goods, irrespective of mode, as well as a standard liability clause (voluntary liability regime), with regard to their ability to facilitate multimodal freight transport and enhance the framework offered by multimodal waybills and or multimodal manifests. Brussels: Directorate-General Energy and Transport [9] ERRAC (2011): WP03 - Ensuring Sustainable (Sub)urban Transport,Seventh Framework Programme, FP 7 Cooperation Work Programme: Transport [10] Logistics for LIFE Coordination Action (2011): Roadmap on ICT for sustainable freight transport and logistics. 7thFramework programme Theme 3: Information and Communication technologies, Challenge 6: ICT for safety and energy efficiency in mobility (p.30-32). **National** [3] United States Department of Homeland Security (2007): Strategy to Enhance International Supply Chain Security, Washington D.C.: U.S. Department of Homeland Security [4] United States Department of Homeland Security (2012): National Strategy for Global Supply Chain Security, Washington D.C.: U.S. Department of Homeland Security [5] Federal Ministry of Transport, Building and Urban Development (2010): Aktionsplan Güterverkehr und Logistikinitiative für Deutschland, Berlin: Bundesministerium für Verkehr, Bau und Stadtentwicklung [6] Federal Ministry of Transport, Building and Urban Development (2008): Masterplan Güterverkehr und Logistik, Berlin: Bundesministerium für Verkehr, Bau und Stadtentwicklung [8] Sweden National Board of Trade (2008): Supply Chain Security Initiatives - A Trade Facilitation Perspective, Stockholm: Kommerskollegium