

A GENERAL INFORMATION		
A 1	<b>Category</b>	Infrastructure
A 2	<b>Subcategory</b>	Intelligent Transport Systems
A 3	<b>Transport policy measure (TPM)</b>	Promotion of intermodality via provision of dedicated information and guidance to hubs
A 4	<b>Description of TPM</b>	The policy measure aims to improve traffic management and the interconnection of transport modes, in order to optimise the use of the existing infrastructure and to better balance traffic demand over the networks. Dynamic information and personalised routing support will result in enhanced interaction between individual and collective transport modes, including public transport for passengers, while connections to rail and inland waterways for freight and city logistics are optimised. Road users will benefit from predictable journey times, less congestion and smoother traffic conditions. Dedicated measures include: support for wider deployment of (roadside-based) ITS infrastructure for information services, provision of warnings and dynamic speed harmonisation; the development and roll-out of interoperable road pricing and city access control mechanisms and the promotion of intermodality via provision of dedicated information and guidance to hubs. [1],[2]
A 5	<b>Implementation examples</b>	WAYflow project, Frankfurt, Rhein-Main Region, Germany and a couple of national or regional ITS services, which has not the same objective or aim, but operates with very similar function (eg. MAESTRO, Hungary)
A 6	<b>Objectives of TPM</b>	Main objectives are: - Optimisation of use of infrastructure (more efficient use) - Higher proportion for intermodality in freight and passenger transport [1]
A 7	<b>Key changes concerning:</b>	
A 7.1	- Choice of transport mode / Multimodality:	Improvement in multimodal transport
A 7.2	- Origin and/or destination of trip:	No impact
A 7.3	- Trip frequency:	No impact
A 7.4	- Choice of route:	Influences route choice through using intrermodal hubs
A 7.5	- Timing (day, hour):	No impact
A 7.6	- Occupancy rate / Loading factor:	No impact
A 7.7	- Energy efficiency / Energy usage:	No impact
A 8	<b>Main source</b>	[1], [2]

**B IMPACTS**

B 1 OVERVIEW ON IMPACTS	AFFECTED SEGMENTS														Geographical level		Source											
	Passengers					Transport operators							Employees in transport	Residents	Economy	Public bodies	Society	1st level	2nd level	Source of assessment	Spatial level of source							
	Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport																	
B 1.1	Overall tendency																											
		The most significant impacts are in the field of traffic impacts: the use of intermodal hubs makes transport chain more effective, giving higher proportion for rail and iww, calling intermodality to life. Economic impacts include mainly sectoral competitiveness transport costs and private income for employees in transport sector, however means additional costs in regard of administrative burdens. Social impacts are limited, affects mainly safety and employment. Environmentally, decrease of noise, air pollution, and climate change are mentioned, regarding the sources available.																										
B 1.2	Overall tendency: Income groups																											
B 1.3	Overall tendency: Age groups																											
B 1.4	Overall tendency: Disabled people																											
B 1.5	Overall tendency: Gender groups																											
B 1.6	Overall tendency: Ethnic groups																											

B 2 TRAFFIC IMPACTS	AFFECTED SEGMENTS														Geographical level		Source					
	Passengers					Transport operators							Employees in transport	Residents	Economy	Public bodies	Society	1st level	2nd level	Source of assessment	Spatial level of source	
	Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport											
B 2.1	Travel or transport time	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	I	N	S	I	
B 2.2	Risk of congestion	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	I	N	S	I	
B 2.3	Vehicle mileage	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	↘	I	N	S	I	
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 traffic impacts																		Dedicated information inspires transport companies to use intermodal hubs, therefore making the transport chain more effective, and higher proportion of rail and iww, therefore strengthening intermodality [1]. Passenger transport is also affected by the measura as seen above, but the primary aim is to regulate fows of goods.			
B 2.V	Quantification of impacts																					

B 3 ECONOMIC IMPACTS	AFFECTED SEGMENTS														Geographical level		Source					
	Passengers					Transport operators							Employees in transport	Residents	Economy	Public bodies	Society	1st level	2nd level	Source of assessment	Spatial level of source	
	Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport											
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																					
B 3.8	Health service costs																					
B 3.9	Public authorities & adm. burdens on businesses																					
B 3.10	Public income (e.g.: taxes, charges)																					
B 3.11	Third countries and international relations																					
B 3.I	Overall impacts on social groups																					
B 3.II	Implementation phase																					
B 3.III	Operation phase																					
B 3.IV	Summary / comments concerning the main traffic impacts																		Promoting intermodality helps to make optimal distribution of performance between different transport modes, therefore improve cost efficiency. All affected transport modes can benefit from co-, inter-, and multimodality. [1,3]			
B 3.V	Quantification of impacts																					

B 4	SOCIAL IMPACTS	AFFECTED SEGMENTS														Geographical level		Source		
		Passengers					Transport operators					Employees in transport	Residents	Economy	Public bodies	Society	1st level	2nd level	Source of assessment	Spatial level of source
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime									
B 4.1	Health (incl. well-being)																			
B 4.2	Safety	↗					↗							↗						
B 4.3	Crime, terrorism and security																			
B 4.4	Accessibility of transport systems																			
B 4.5	Social inclusion, equality & opportunities																			
B 4.6	Standards and rights (related to job quality)																			
B 4.7	Employment and labour markets				↗			↗	↗											
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 traffic impacts	Several studies, consultations and workshops prove that reduced use of passenger vehicles, because of increase attractiveness of intermodal transport, will decrease accidents, therefore improve safety for passengers, workers in the transport sector and residents. [1,2,4]																		
B 4.V	Quantification of impacts																			

B 5	ENVIRONMENTAL IMPACTS	AFFECTED SEGMENTS														Geographical level		Source		
		Passengers					Transport operators					Employees in transport	Residents	Economy	Public bodies	Society	1st level	2nd level	Source of assessment	Spatial level of source
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime									
B 5.1	Air pollutants														↘				↘	
B 5.2	Noise emissions														↘				↘	
B 5.3	Visual quality of the landscape																			
B 5.4	Land use																			
B 5.5	Climate																			
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 traffic impacts	Less road vehicle mileade and increased use of more energy efficient modes (rail, iww) results in positive environmental impacts like decrease of air pollution, noise and climate change. [1,4]																		
B 5.V	Quantification of impacts																			

C REFERENCES		
C 1	Other TPMs of this subcategory	One common functional open in-vehicle platform Deployment of roadside-based ITS infrastructure for information services (provision of warnings and dynamic speed harmonisation)
C 2	References	<b>International</b> [1] European Commission (2008): Impact Assesment: Action Plan for the Deployment of Intelligent Transport Systems in Europe, EC, 2008, [2] Action Plan for the Deployment of Intelligent Transport Systems in Europe, ILS NRW, 2004 [3] Freight intermodality: Results from the transport research programme, EXTRA project for DG Research, 2001  <b>National</b>  <b>Regional / Local</b> [4] Boltze, Manfred: Intermodality and ITS in Frankfurt Rehin-Main, 2004