

Velocity lecture
**“The pan-European Master Plan for Cycling
Promotion (PEMP) - A framework for
starter, climber and champion countries”**



The Role of UNECE Sustainable Transport Division

Mr. Konstantinos Alexopoulos
Secretary Sustainable Transport Division
United Nations ECE

TIR

Global Customs
facilitation tool

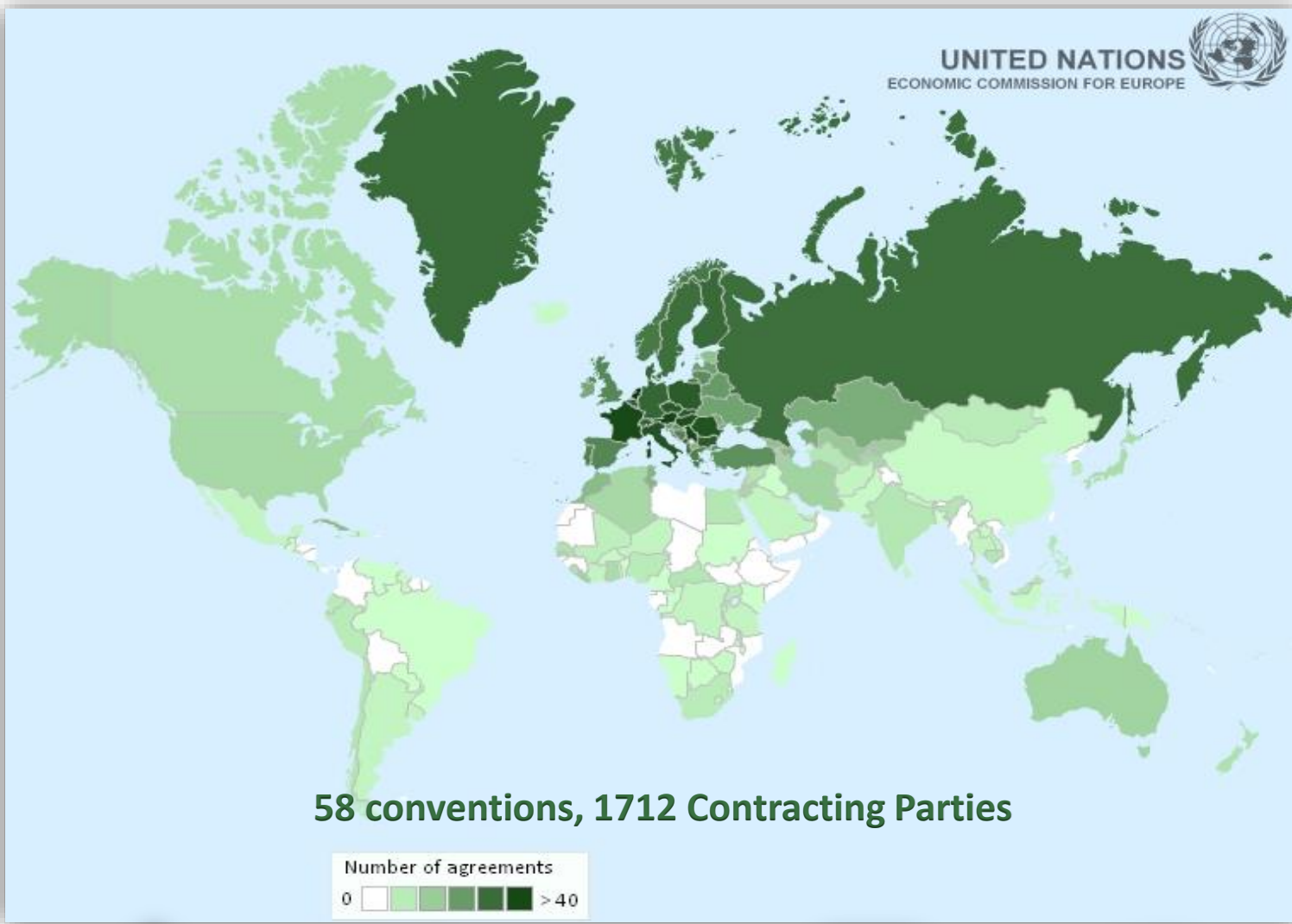


Contract for the
International Carriage
of Goods by Road



Convention on
Road Traffic

UNITED NATIONS
ECONOMIC COMMISSION FOR EUROPE



E₁

World Forum for
Harmonization of Vehicle
Regulations (WP 29)

ADN

International Carriage
of Dangerous Goods by
Inland Waterways

ATP

Carriage of
Perishable Foodstuffs

ADR

International
Carriage of
Dangerous Goods
by Road



European Code
for Inland
Waterways



Harmonization of
Frontier Controls of
Goods



Convention on Road
Signs and Signals



Infrastructure Agreements
for roads (AGR), Rail (AGC),
Inland Water Transport
(AGN), Intermodal
Transport (AGTC)



Work of Crews of Vehicles
engaged in International
Road Transport / Digital
Tachograph



Sustainable urban mobility and public transport









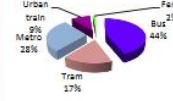








UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE
**SUSTAINABLE URBAN MOBILITY AND
 PUBLIC TRANSPORT IN UNECE CAPITALS**



UNITED NATIONS

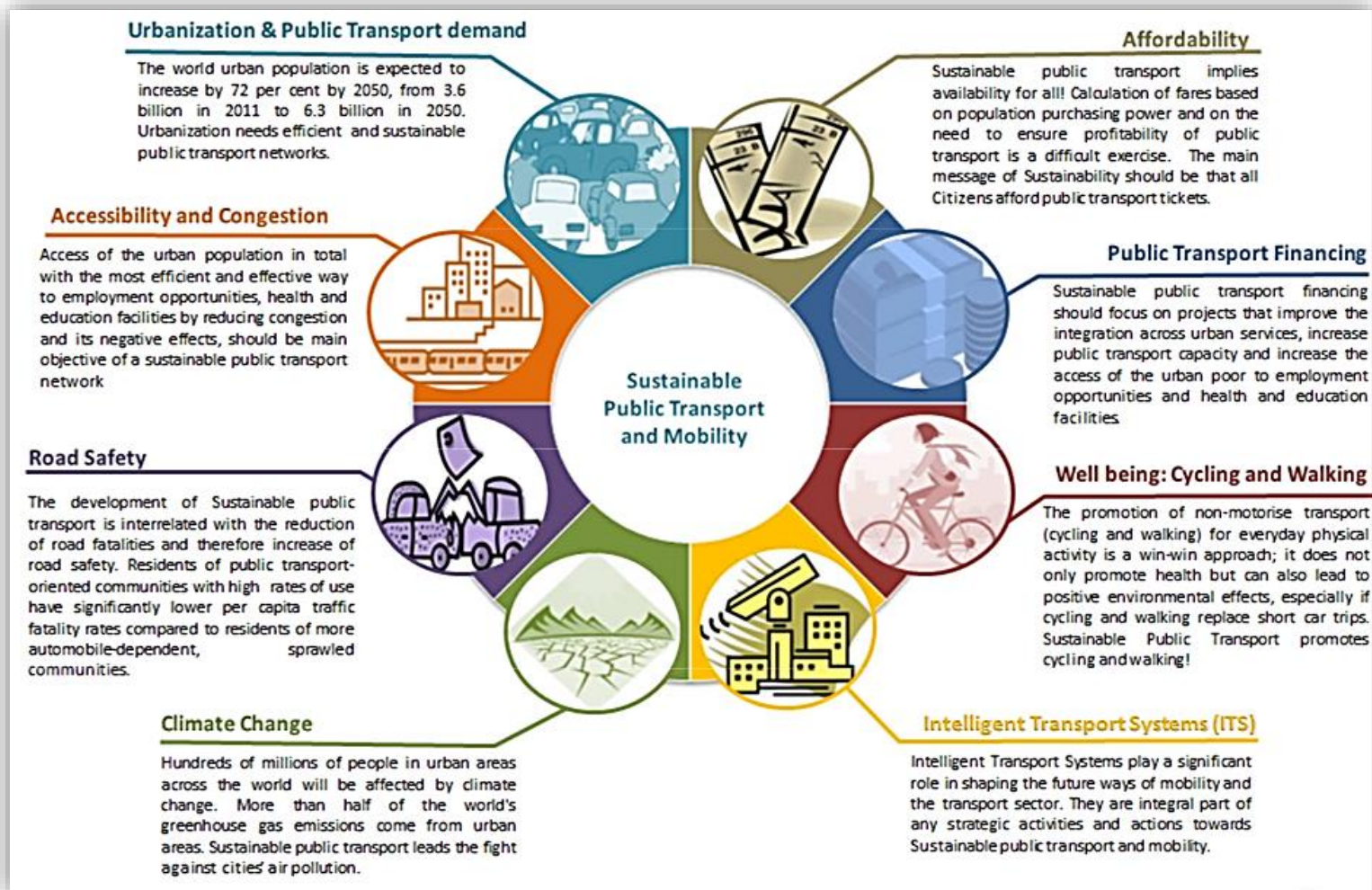
Norway Oslo



Size: 5,005km ²	Existing means of Public Transport in Oslo:						
Population: 1.145 million							
Density: 229 inhabitants/km ²	BUS	TRAM	METRO	TROLLEY	URBAN TRAIN	LIGHT TRAIN	FERRY BOAT
Tourist Season: May - August							
Number of Tourists: 3.5 million							
Number of Parking: 115			Lines in km	2,050	Number of stations		3,500
Distribution of passengers among modes of public transport: 			Lines in km	41	Number of stations		94
			Lines in km	80	Number of stations		94
			Lines in km		Number of stations		
			Lines in km	NR	Number of stations		NR
			Lines in km		Number of stations		
			Lines in km	2,125	Number of stations		15
			Lanes in km	2,125			
	Cost of single / one hour ticket						\$4,99
	Cost of monthly ticket						\$185,45
Actions taken to improve the quality of urban public transport and of non-motorized transport:							
<ul style="list-style-type: none"> - Launch of mobile application for public transport tickets with pay-as-you-go credit function (implemented) 							



Sustainable urban mobility and public transport pillars



Transport Infrastructure Master Plans

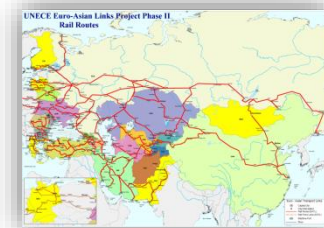
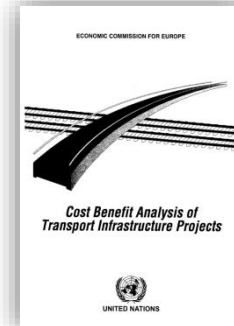
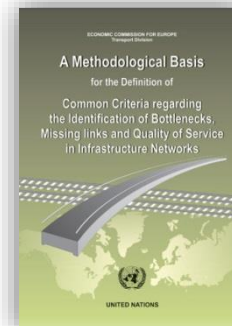
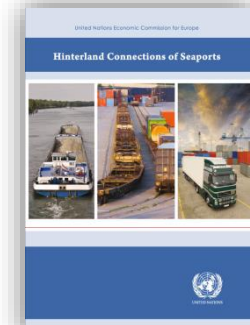
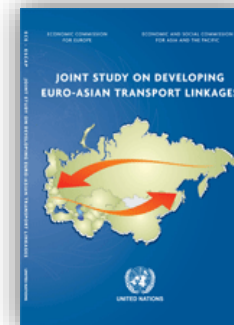
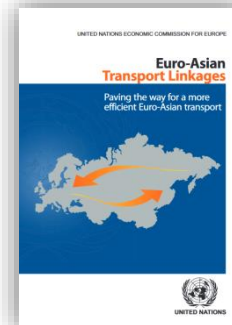
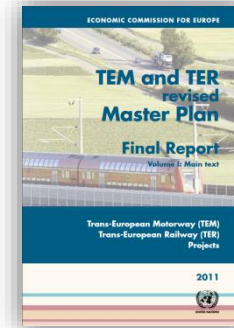


European Agreement on Main International Traffic Arteries (AGR), of 15 November 1975

European Agreement on Main International Railway Lines (AGC), of 31 May 1985

European Agreement on Important International Combined Transport Lines and Related Installations (AGTC), of 1 February 1991

European Agreement on Main Inland Waterways of International Importance (AGN), of 19 January 1996



Methodology on the infrastructure module of the Cycling Master Plan

Review of related Work

- Task 1.1 Introduction to cycling (International/City level) – characteristics, benefits and challenges
- Task 1.2 International and City level Cycling technical specifications/standards, respective decisions and guidelines for their implementation
- Task 1.3 Summary of the existing International and City level Cycling lanes technical, operational and maintenance parameters
- Task 1.4 Collection and review of existing relevant studies, assessments and works
- Task 1.5 Introduction of the existing and future Cycling Lanes networks and plans in International and City levels
- Task 1.6 European Union cycling funded projects and initiatives and its impact in the ECE region

Cycling Lanes status and needs in the UNECE member Countries / Cities

- Task 3.1 Collection of necessary information and data
- Task 3.2 Analysis and control of information obtained
- Task 3.3 Approved or proposed national legislation and standards
- Task 3.4 Cycling Lanes links in operation, under construction, planned (accompanied by maps)
- Task 3.5 Pre-feasibility, feasibility and alignment studies (under elaboration, approved)
- Task 3.6 Technical parameters (speed, gradient, stations, safety measures etc.)
- Task 3.7 Existing and future traffic flows
- Task 3.8 Information and communication systems at present, in the future
- Task 3.9 Agreements on Cycling Lanes with neighboring countries
- Task 3.10 Construction costs and timing, maintenance and operation costs
- Task 3.11 Financial sources – available and proposed

Methodology and main assumptions for the work

- Task 2.1 Review and identification of the necessary parameters and assumptions for the work:
 - a) Social, environmental and safety aspects;
 - b) Interoperability / Intermodality between Cycling and Public transport modes;
 - c) International connections, interrelations and dynamism towards neighbouring regions;
- Task 2.2 Transport demand and traffic forecasting, development scenarios;
- Task 2.3 Elaboration and distribution of the questionnaires to the UNECE countries / Capitals (or major cities);
- Task 2.4 Analysis and processing of the returned questionnaires;

Elaboration of Environmental – Health benefits analysis by using existing tools (HEAT - FoFITS) from Cycling development

- Task 4.1 Review of existing tools requirements and preparation of appropriate questionnaires in order to facilitate data collection;
- Task 4.2 Identification of the main parameters that these tools should include and analyse
- Task 4.3 Use of the tools based on data received for International and Cities level;
- Task 4.4 Analysis of case studies the results of which will be included at the final report



Methodology on the infrastructure module of the Cycling Master Plan

Elaboration of pan-European master plan for cycling at International level –

- Task 5.1 Economic and social characteristics as well as economic growth analysis in ECE region;
- Task 5.2 Design speeds, upgrading of existing lanes/building of new lanes, types of operation (types of bikes);
- Task 5.3 Construction, maintenance and operation average unit costs (new links, rehabilitation);
- Task 5.4 Information, communication and signaling systems as well as other safety features/technical parameters;
- Task 5.5 Maintenance, operation and management;
- Task 5.6 Costs and benefits/revenues, economic and risk analyses, social and environmental impacts;
- Task 5.7 International Network of Cycling Lanes including its connections to neighboring countries and its position vis-à-vis the EU transport core network and the ECE AGR agreement;
- Task 5.8 Alignment of individual corridors/links;
- Task 5.9 Construction schedule, priorities, phasing, Master Plan time limits (2030 and 2050);
- Task 5.10 Construction, maintenance and operation costs;
- Task 5.11 GIS maps of International Network of Cycling Lanes in the individual member Countries and in the whole ECE region;
- Task 5.12 Identification of interconnections with other transport components (railways, sea ports-inland ports-airports);
- Task 5.13 Identification of possible connections and extensions to other regions (East Asia etc.)
- Task 5.14 Identification of possible missing links, border crossings bottlenecks and of other inefficiencies along the ECE region.

Elaboration of pan-European master plan for cycling at Cities level –

- Task 6.1 Economic and social characteristics as well as economic/population growth analysis for each city;
- Task 6.2 Basic design principles – size of cities/agglomerations, bikes parking spaces, distances from train stations/ buses-trams stops, their design, equipment and services;
- Task 6.3 Design speeds, upgrading of existing City lanes/building of new lanes, types of operation (types of bikes);
- Task 6.4 Construction, maintenance and operation average unit costs (new links, rehabilitation);
- Task 6.5 Information, communication and signaling systems as well as other safety features/technical parameters;
- Task 6.6 Maintenance, operation and management;
- Task 6.7 Costs and benefits/revenues, economic and risk analyses, social and environmental impacts;
- Task 6.8 Cities' Networks of Cycling Lanes including its connections to Cities public transport networks ;
- Task 6.9 Alignment of individual lanes/links;
- Task 6.10 Construction schedule, priorities, phasing, Master Plan time limits (2030 and 2050);
- Task 6.11 Construction, maintenance and operation costs;
- Task 6.12 GIS maps of Cities' Networks of Cycling Lanes for each City;
- Task 6.13 Identification of interconnections with public transport components (buses, trams, light trains, underground);
- Task 6.14 Identification of connections with the International Network of Cycling Lanes;
- Task 6.15 Identification of possible missing links along Cities Cycling networks or with public transport networks.



Methodology on the infrastructure module of the Cycling Master Plan

Addressing funding questions

- Task 7.1 Estimate of budget for the implementation of both Cycling Lanes networks;
- Task 7.2 Possibilities of stage construction;
- Task 7.3 Definition on a macro-scale of the necessary technical and institutional actions for assisting the implementation of the proposed Cycling Lanes networks ;
- Task 7.4 Estimate of financial resources available and of potential revenues;
- Task 7.5 Possibilities and potential sources of funding the proposed Cycling Lanes networks including the EU grants and project bonds, PPP and BOT schemes
- Task 7.6 Remarks on the perspectives to construct the Cycling Lanes networks;

Conclusions/Recommendations – Public awareness actions and dissemination of results – Follow-up preparations

- Task 8.1 Presentation of final report with conclusions and recommendations;
- Task 8.2 Presentation of the pan-European Cycling Master Plan in International and Cities level;
- Task 8.3 Publication of a project newsletter, brochures and a summary report, findings and conclusions;
- Task 8.4 Organization of workshops to present the progress of the project and the final results;



Thank you...!

