Informal document No.1 (2006)
27 March 2006
ENGLISH ONLY

ECONOMIC COMMISSION FOR EUROPE
WORLD HEALTH ORGANIZATION
Regional Office for Europe

HIGH-LEVEL MEETING ON TRANSPORT, ENVIRONMENT AND HEALTH
THE PEP Steering Committee
(Fourth session, 10-11 April 2006)

ECO-DRIVING PROJECT IN POLAND

Introductory note by the secretariat

1. The present document has been prepared by the Netherlands, in consultation with the Polish delegation, for information to THE PEP Steering Committee at its fourth session.

2. The document presents briefly the background, the main objectives, the outcomes and the follow-up activities related to the eco-driving programme that the Dutch Government carried out in Poland, following the successful outcome of a similar project in Latvia. It includes a short account of the seminar on eco-driving that was held in the context of the project in Warsaw, on 12 May 2005.

3. The outcomes of the project and the material produced will be made available on THE PEP Clearing House.

4. The Steering Committee may wish to take note of the information provided.

_____

Introduction: The importance of influencing driving behaviour for energy security, climate change and road safety

Today much attention is focussed on the reduction of fuel consumption of road transport, because of the reduced reserves of fossil fuels (the security of energy supplies) and the world's concern about the so-called greenhouse effect that causes gradual warming of the climate due to increasing carbon dioxide, CO_2 emissions.

Since the early seventies, great effort has been put into improving the fuel economy of cars. Besides the type of car, its fuel economy is influenced by the driver behaviour or the driving style. With the objective of reducing the negative impacts of traffic, the environmental and health considerations are increasingly being integrated into policies and decisions on transport. Several programmes that aim to achieve substantial reductions in CO_2-emissions in the longer term contribute also to environmentally sustainable transport in the short-term and bring about improvements in terms of traffic safety, maintenance of vehicles and noise reduction. Human behaviour, together with excessive vehicle speeds, is also a main factor in road accidents, being a contributory factor in around 95 percent of cases. Programmes for education, training and communication to change user behaviour must therefore play a large part in any strategy to reduce the number of accidents and casualties.

Developing and implementing road safety measures should concentrate on three basic areas [the 3 E's]:

- Engineering
- Enforcement
- Education (together with Examination)

Road safety is considered one of the priorities of the National Transport Development Programme 2000-2006 in CEE countries. This fact linked to the new European Directive 2003/59/EC *on the initial qualification and periodic training of drivers of certain road vehicles for the carriage of goods or passengers, amending Council Regulation (EEC) No 3820/85 and Council Directive 91/439/EEC and repealing Council Directive 76/914/EEC,* stimulated the interest for eco-driving programmes in Latvia and Poland. This European Directive prescribes obligatory training for professional drivers transporting goods or passengers by road. This directive aims to: improve the quality of the services offered by drivers; make the driver's work more respected and more attractive; increase road safety and to facilitate the free movement of workers. To date only a very limited number of drivers benefit from professional training, which would provide the necessary knowledge and skills to confront the challenges of working in the field of transport.

A lot of experience has been gained in influencing the consumption patterns and driving behaviour of vehicle users. Evaluations have shown that the involvement of intermediary organisations, like associations of employers, has facilitated the successful implementation of the programmes and also brought economic benefits.

Additionally, eco-driving, which can be qualified as a "defensive", less stressful and more comfortable way of driving, has a positive influence on peoples' psychological well-being and health.

As a follow-up to a successful eco-driving project in Latvia, a similar pilot project was carried out in Poland in the first half of 2005.

Purpose, goals and objectives of the eco-driving programme in Poland

The purpose of the eco-driving programme in Poland was to integrate environmental aspects and –awareness into the qualification and training of professional drivers in Poland in a sustainable way, with the aim to reduce negative environmental effects and to enhance road safety.

The programme was supported by several parties from both the Polish and Dutch sides. The project management and the actual execution of the activities was the responsibility of VTL, a training and consultancy institute for transport and logistics in the Netherlands. From the Dutch Government's side, the project was supported by the Ministry of Housing, Spatial Planning and Environment, the Netherlands Ministry of Transport, Public Works and Water Management, as well as SenterNovem, the agency for energy and environment. From the Polish side, the association for international road hauliers, the ZMPD, was the main partner. The Polish Ministry of Infrastructure and the Ministry of the Environment were also involved. Truck producers supported this project by providing trucks.

This project resulted in the following achievements or deliverables:

- Dissemination of information and exchange of knowledge on eco-driving within selected Polish stakeholders (public administration, road hauliers, driving teachers and trainers, vehicle producers);
- Training of trainers in the area of eco-driving;
- Development of a manual for trainers;
- Development of a brochure on eco-driving in the Polish language;
- Development of guidelines for effective implementation of eco-driving;
- First steps taken towards integration of environmental aspects into transport policies in Poland in a sustainable way;

Content

The project was divided in a cluster of so-called awareness raising activities and a cluster of activities focussed on the actual transfer of practical skills.

One of the most important awareness raising activities consisted of a seminar on eco-driving that was organized in Warsaw, on 12 May 2005 and attended by policy makers, civil servants and transport company owners. The seminar mapped out the concept of eco-driving. It also paid attention to eco-driving of private cars, involving a fundamentally different target group, the general public. The seminar provided the opportunity to the participants to test their Eco-driving skills by taking a short trip in a private car with one of the instructors. In addition, in the context of the seminar, a plan for the practical implementation of Eco-driving and a strategy for the dissemination of information to inform the stakeholders were developed.

The workshop programme was as follows:

10.00 – 10.30h.	Welcome + introduction
10.30 – 12.30h.	First trip (zero measuring)

12.30 – 13.00h.	Lunch break
13.00 – 15.00h.	Theory
15.00 - 16.30h.	Second trip (after having had theory)
16.30 – 17.00h.	Conclusion + finalisation

The outcomes of the workshop were collected by the trainers and analyzed to present the fuel savings as a result of the eco-driving training (see Annexes I and II).

Next steps

At the concluding meeting, held at the Polish Ministry of Infrastructure, it was planned to organise a roundtable conference about eco-driving, after having defined a list of stakeholders. The participants to this conference will be asked to exchange what they can do, and what they need from one and another. The objective is to establish a "knowledge and experience exchanging platform/centre" or a clearing house on eco-driving.

In designing the various project activities and in achieving the main project outcomes, the essential aspect of sustainability was always taken into account. As a result, many of the project results contain some elements of sustainability, while they also tend to strengthen one another.

Starting with the *awareness,* the main tool is keeping the Polish stakeholders involved in national and international networks concerning the eco-driving. The organization of the roundtable, for instance, reflects the positive attitude of the Polish Ministry of Infrastructure towards the implementation of eco-driving aspects.

ZMPD is member of *EuroTra,* the European Transport Training Association. Within this network of leading transport-training centres a so-called Action Plan is drafted, in which the implementation of the Directive 2003/59 has been given special attention. The concept of Eco-driving is a permanent point of discussion within the framework of this directive.

With respect to the second cluster of activities, further results will be ensured by the Polish version of the trainers' manual that was developed as part of the project implementation. Secondly, some of the truck producers and distributors in Poland have committed themselves to including eco-driving style elements into the introduction programme for clients who have bought a new truck.

In conclusion, the Polish evaluated that the pilot project had been extremely interesting and useful for them. They also felt that the project could be easily implemented elsewhere for the benefit of the other interested countries.

Overview results private cars workshops in Warsaw and Krakow

Warsaw

name	distance	zero measuring					after training					fuel saved l/100 km	time saved minutes
		fuel used	consumption l/100 km	average speed	number stops	duration	fuel used	consumption l/100 km	average speed	number stops	duration		
1	27	1,62	6,00	67,50	4	24,00	1,26	4,67	60,00	5	27,00	1,33	-3,00
2	27	1,62	6,00	67,50	5	24,00	1,32	4,89	62,31	4	26,00	1,11	-2,00
3	27	1,46	5,41	57,86	5	28,00	1,54	5,70	73,64	3	22,00	-0,30	6,00
4	27	2,59	9,59	64,80	5	25,00	1,57	5,81	64,80	5	25,00	3,78	0,00
5	27	2,05	7,59	64,80	5	25,00	1,62	6,00	67,50	5	24,00	1,59	1,00
6	27	1,75	6,48	70,43	3	23,00	1,29	4,78	60,00	3	27,00	1,70	-4,00
7	27	1,76	6,52	69,23	5	23,40	1,60	5,93	62,31	4	26,00	0,59	-2,60
8	27	1,84	6,81	64,80	5	25,00	1,65	6,11	62,31	5	26,00	0,70	-1,00
9	54	2,86	5,30	60,00	5	54,00	2,76	5,11	54,00	5	60,00	0,19	-6,00

Krakow

name	distance	zero measuring					after training					fuel saved l/100 km	time saved minutes
		fuel used	consumption l/100 km	average speed	number stops	duration	fuel used	consumption l/100 km	average speed	number stops	duration		
1	35,60	3,06	8,60	46,43	19	46,00	2,56	7,19	42,72	20	50,00	1,40	-4,00
2	35,60	3,70	10,39	45,45	18	47,00	2,56	7,19	43,59	21	49,00	3,20	-2,00
3	35,60	2,18	6,12	50,86	20	42,00	1,13	3,17	44,50	26	48,00	2,95	-6,00
4	35,60	2,29	6,43	45,45	23	47,00	2,74	7,70	43,59	19	49,00	-1,26	-2,00
5	36,00	2,43	6,75	43,20	13	50,00	2,07	5,75	45,00	16	48,00	1,00	2,00
6	35,50	2,41	6,79	40,96	26	52,00	2,52	7,10	47,33	16	45,00	-0,31	7,00
7	35,50	2,62	7,38	43,47	19	49,00	2,48	6,99	44,38	20	48,00	0,39	1,00
8	35,60	2,54	7,13	41,88	26	51,00	n.a.	---	---	n.a.	n.a.	---	---
9	35,60	2,81	7,89	45,45	22	47,00	1,65	4,63	44,50	20	48,00	3,26	-1,00
10	35,00	2,52	7,20	48,84	17	43,00	1,96	5,60	42,86	21	49,00	1,60	-6,00
11	39,00	2,81	7,21	42,55	16	55,00	2,27	5,82	42,55	16	55,00	1,38	0,00

ANNEX II

Overview results trucks workshops in Krakow, Warsaw and Gdansk

Krakow

name	distance	zero measuring					after training					fuel saved l/100 km	time saved minutes
		fuel used	consumption l/100 km	average speed	number stops	duration	fuel used	consumption l/100 km	average speed	number stops	duration		
1	22,5	9,00	40,00	50,75	6	26,60	8,31	36,93	55,74	3	24,22	3,07	2,38
2	17,6	9,40	53,41	39,92	8	26,45	8,40	47,73	40,52	3	26,06	5,68	0,39
3	22,4	9,50	42,41	53,76	4	25,00	8,50	37,95	51,69	2	26,00	4,46	-1,00
4	24,1	12,80	53,11	38,77	22	37,30	12,80	53,11	26,29	12	55,00	0,00	-17,70
5	7,4	3,50	47,30	24,14	10	18,39	4,00	54,05	20,69	13	21,46	-6,76	-3,07
6	24,1	12,80	53,11	32,86	15	44,00	12,30	51,04	33,63	21	43,00	2,07	1,00
7	7,3	3,60	49,32	23,05	10	19,00	3,80	52,05	16,85	25	26,00	-2,74	-7,00
8	17	8,30	48,82	44,35	3	23,00	8,30	48,82	40,80	8	25,00	0,00	-2,00
9	22,4	8,51	37,99	53,76	5	25,00	8,00	35,71	49,78	7	27,00	2,28	-2,00
10	22,4	8,50	37,95	53,76	4	25,00	8,00	35,71	48,00	3	28,00	2,23	-3,00

Warsaw

name	distance	zero measuring					after training					fuel saved l/100 km	time saved minutes
		fuel used	consumption l/100 km	average speed	number stops	duration	fuel used	consumption l/100 km	average speed	number stops	duration		
1	28,00	10,40	37,14	42,86	4	31,50	9,90	35,36	58,95	1	28,50	1,79	3,00
2	27,50	10,40	37,82	52,38	7	31,50	10,40	37,82	52,38	1	31,50	0,00	0,00
3	28,10	10,20	36,30	57,64	3	29,25	10,30	36,65	51,25	5	32,90	-0,36	-3,65
4	27,80	9,00	32,37	50,39	6	33,10	8,90	32,01	51,34	3	32,49	0,36	0,61
5	27,80	9,80	35,25	52,13	10	32,00	9,20	33,09	50,55	6	33,00	2,16	-1,00
6	27,70	7,68	27,73	42,62	8	39,00	6,75	24,37	44,92	6	37,00	3,36	2,00
7	28,10	9,90	35,23	51,09	8	33,00	9,50	33,81	54,39	6	31,00	1,42	2,00
8	27,70	9,50	34,30	52,76	6	31,50	9,90	35,74	55,40	7	30,00	-1,44	1,50
9	28,00	10,40	37,14	48,70	4	34,50	9,90	35,36	53,33	3	31,50	1,79	3,00
10	28,00	8,15	29,11	48,00	4	35,00	7,10	25,36	48,00	4	35,00	3,75	0,00
11	27,70	7,60	27,44	44,92	8	37,00	7,40	26,71	48,88	3	34,00	0,72	3,00
12	28,10	10,30	36,65	58,14	5	29,00	8,00	28,47	51,09	3	33,00	8,19	-4,00

Gdansk

name	distance	zero measuring					after training					fuel saved l/100 km	time saved minutes
		fuel used	consumption l/100 km	average speed	number stops	duration	fuel used	consumption l/100 km	average speed	number stops	duration		
1	23,5	7,48	31,83	43,55	4	31,00	7,15	30,43	43,55	3	31,00	1,40	0,00
2	21,3	6,85	32,16	45,64	3	28,00	6,78	31,83	51,12	4	25,00	0,33	3,00
3	46,7	18,00	38,54	48,31	7	58,00	16,60	35,55	50,95	6	55,00	3,00	3,00
4	23,8	8,50	35,71	54,92	1	26,00	8,00	33,61	54,92	2	26,00	2,10	0,00
5	21,2	8,50	40,09	57,82	3	22,00	8,00	37,74	57,82	4	22,00	2,36	0,00
6	21,3	7,40	34,74	58,09	2	22,00	6,48	30,42	53,25	4	24,00	4,32	-2,00
7	23,6	7,36	31,19	50,57	2	28,00	7,04	29,83	47,20	2	30,00	1,36	-2,00