

## NATIONAL QUESTIONNAIRE FOR FUELS AND VEHICLES: EECCA

**Objectives of the Assessment:** To assess the current state of vehicle fuel quality, vehicle emission standards and other related national-level information in order to develop comparative material, which will enable decision-makers and experts to discuss problems and necessities and define possible solutions at a meeting in 2007.

The questionnaire comprises of 4 main sections:

1. Personal Information
2. Air Quality
3. Fuel Quality
4. Vehicles & Emissions

### Please read the following instructions before filling in the questionnaire!

4. We propose that you use **2005 or 2006** as a reporting year, and where asked, please specify the reporting year.\* If data for 2006 is not yet publicized, and the available information is for a previous year, please insert this information and note the particular year in the heading of the table. If 2006 data and updates are available, please provide this data and note the year.
5. You may not find available all required data. Please, fill in the available data:
  - a) If there are data gaps, insert N/A in the respective table cell;
  - b) If such data is not measured, monitored or reported in your country, insert N/R in the respective table cell;
  - c) Please, use the text boxes to present any useful information, which is not covered by the tables or which needs additional description.

### 1. Personal Information

Reporting year*	2005
Country	Turkmenistan
Date report completed	24. 12. 2007
Institution responsible for report	Research and Production Center of Ecological Monitoring
Address of institution	Bitarap Turkmenistan, 15, Ashgabat, Turkmenistan
Position/Person responsible for report	Ecological Normative Elaboration and Ecological Expertise Department, head department Ahmedov Dovran
Telephone No	(99312) 35-72-97
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## 2. Air Quality

### 2.1 Institutional framework of air quality legislation

Institution name	Departments	Personnel*	Legal acts	Responsibility
Research and Production Center of Ecological Monitoring	Laboratory of control the air quality, Ecological Normative Elaboration and Ecological Expertise Department		The law «On air protection» (1996). The law «On Nature Conservation» (1991).	Ministry of nature protection of Turkmenistan

## 3. Fuel Quality

### 3.1 Contact Office(s)/Person(s)

Responsible Office(s) and Contact Person(s)	Institution	Responsibility	Contact Information	Email
	Division "Turkmennebitonumleri" ("Turkmenoilproducts") Ministry of the oil-and gas industry and mineral resources of Turkmenistan		-	-

### 3.2 Institutional framework for fuel quality management

Institution name	Institution type*	Responsibility	Frequency of fuel testing	Number of authorized testing labs
1	2	3	4	5
Division "Turkmennebitonumleri" ("Turkmenoilproducts")	State	Ministry of the oil-and-gas industry and mineral resources of Turkmenistan	-	-



Oxygenates:			On these substances analyses carried out						
- Methanol	%(v/v)								
- Ethanol	%(v/v)								
- Iso-propil alcohol	%(v/v)								
- Tert-butyl alcohol	%(v/v)								
- Iso-butyl alcohol	%(v/v)								
- Ethers with five or more carbon atoms per molecule	%(v/v)								
- Other oxygenates	%(v/v)								
Sulphur content	mg/kg			0,003	0,07			0,05	0,1
Lead content	g/l							0,01	0,01

**3.6 Are there any other additives in the fuel? If so, what are they and what quantity?  
Additional information.**

Color	From colorless up to yellow
Fractional structure:	
The temperature started distillations, 0C, is not above:	35
10 % - the summer period	80
10 % - the winter period	75
50 %	120
90 %	190
The end of boiling 0 <sup>C</sup> , not above	215
Share of the rest in a flask, % on volume no more	2
	4
Index of steam fuse (IPP), no more	
the summer period	950
the winter period	1250
Acidity, mgCON on 100 sm <sup>3</sup> , no more	3,0
Mass fraction merkaptanov sulfur, % no more	0,001

**3.7 Parameters for Market Fuels Used in Vehicles with Compression Ignition Engines (diesel) (2005 year)**

Parameter	Unit	Analytical and statistical results					Limiting value	
		No. of samples	Minimum	Maximum	Mean	Standard deviation	National specification	
Minimum	Maximum							
Cetane No			45	45	45			
Density at 15°C (20°C)	kg/m <sup>3</sup>		840	860	830,6			
Distillation – 95% Point	15°C		22,6	24	22,6			
Polycyclic aromatic hydrocarbons	%(m/m)	On these substances analyses carried out						
Sulphur content	(%)							

**Table 3.8 Number of samples in month (diesel) (2005 year)**

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	<b>Total</b>
10	10	10	10	10	10	10	10	10	10	10	10	<b>120</b>

**3.9 Fuel quality standards** (Please, shortly describe your domestic standards and any planned standards and the anticipated deadlines for their adoption, etc.)

Motor unleaded gasoline technical specifications (GOST 05766698-28-2003)  
 Diesel oil from sweet oil technical specifications (GOST 05766698-06-2005)

**3.10 Fuel production, import, export and consumption (2000 year)**

Fuel grade	Production (1000 t/year)	Import (1000t/year)	Export (1000 t/year)	Consumption** (1000 t/year)
1	2	3	4	5
<b>Total leaded petrol</b>	Leaded gasoline is not produced	-	-	-
RON:				

RON:				
RON:				
<b>Total unleaded petrol</b>	1012 thousand t*			
RON:				
RON:				
RON:				
<b>Total diesel</b>	1453 thousand t *	-		-
<b>Total LPG</b>				
<b>Other fuels (please specify)</b>				

### 3.11 Fuel production by producers (2005 year)

<b>Refinery</b>	<b>Production of crude oil distillation (1000 m<sup>3</sup>/year)</b>
As a whole over Turkmenistan (Turkmenbashi complex oil refining factory and Seidi oil refining factory)	12 million t (initial processing)

### 3.12 Fuel distribution

<b>Fuel distributors</b>	<b>Number of filling stations</b>
Division "Turkmennebitnumleri" ("Turkmenoilproducts")	216

### 3.13 Promotion of environment friendly fuels (incentives, programs for unleaded petrol, low-sulphur petrol and diesel, biodiesel, bioethanol, LPG, etc.)

<b>Measure</b>	<b>Details</b>
Ban on leaded petrol	As precautionary measures rigid state norms on the limiting maintenance(contents) of harmful substances in exhaust gases of automobiles here are entered. It is necessary to note, that in connection with transition of motor transport on unleaded gasoline, emission of highly toxic connections of lead in an atmosphere is excluded
Tax differentiation	
Use of subsidies	
Other (please add):	Creation of capacities for manufacture and transportations of the liquefied natural gas wider application of this non-

	polluting kind of fuel in motor transport is planned.
<b>Planned Measures</b>	
	Switching of motor transport to environmentally clean fuel (compressed and liquefied gas, unleaded gasoline, etc).
	Intensive using of various methods to neutralize the exhaust gas of motor transport.
	Improvement of the control system over emissions from mobile sources.
	Further renewal of railroad and motor transport fleets.
	Continuation of construction of flyover road junctions for transit transport in the cities.
	Switching of urban and suburban transport to the electric traction.

## 4. Vehicle Emissions

### 4.1 Contact Office(s)/Person(s)

Responsible Office(s) and Contact Person(s)	Institution	Responsibility	Contact Information	Email
Ministry of Internal Affairs of Turkmenistan	Traffic police	Ministry of Internal Affairs of Turkmenistan	-	-

### 4.2 National Fuel Quality Legislation (please list)

The law « On Hydrocarbon Resources » (1996)  
The law « On standardization and metrology » (1993)

### 4.3 Vehicle fleet structure for 2004

Year: (* please insert reporting year)	Total number of vehicles	Passenger Cars		LDV		HDV		Buses	
		Petrol	Diesel	Petrol	Diesel	Petrol	Diesel	Petrol	Diesel
Number (000s)									
% of the total vehicle fleet	336382	217629	1894			88102	4246	22256	2255

\*If data for 2005 is not available, insert older data and indicate the year

Table 4.4 Share with catalytic converters\*

<b>Year:</b> (* please insert reporting year)	<b>Vehicles with Catalytic Converters</b>	
	<b>Passenger cars</b>	<b>All vehicles</b>
Number (000s)	It is not made	It is not made
%	It is not made	It is not made

\* No data due to institutional re-organization

**Table 4.5 Newly-registered passenger cars**

<b>Year</b>	<b>Total number</b>	<b>Passenger cars</b>			
		<b>New</b>		<b>Second hand</b>	
	000s	000s	%	000s	%
1995	It is not made	It is not made		It is not made	It is not made
2005	It is not made	It is not made		It is not made	It is not made

**\*If data for 2003 is not available, insert older data and indicate the year**

**Table 4.6 Vehicle aging**

Only cars registered in year 2005, in total, not in categories

<b>Year: 2005*</b>	<b>0-5 years</b>	<b>6-10 years</b>	<b>11-15 years</b>	<b>16-20 years</b>	<b>&gt;20 years</b>
Total:					
Passenger cars (%)	It is not made	It is not made	It is not made	It is not made	It is not made
LDV (%)	It is not made	It is not made	It is not made	It is not made	It is not made
HDV (%)	It is not made	It is not made	It is not made	It is not made	It is not made
Buses (%)	It is not made	It is not made	It is not made	It is not made	It is not made
Total (%)	It is not made	It is not made	It is not made	It is not made	It is not made

**\*If data for 2005 is not available, insert older data and indicate the year**

**Table 4.7 Domestic vehicle production (if any)**

<b>Type</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Passenger cars (%)			
LDV (%)			

HDV (%)	In Turkmenistan the motor (vehicle) industry is not present
Buses (%)	
Total (%)	

\* 2002 is included in order to see the trend. If data is available, any previous year can be included too.

**Table 4.8 Quantity of imported vehicles\*\***

Type	2003	2004	2005
Passenger cars (%)	It is not made	It is not made	It is not made
LDV (%)	It is not made	It is not made	It is not made
HDV (%)	It is not made	It is not made	It is not made
Buses (%)	It is not made	It is not made	It is not made
Total (%)	It is not made	It is not made	It is not made

\* 2003 is included in order to see the trend. If data is available, any previous year can be included too.

\*\* If there is data by country of import, please include it.

#### 4.9 Restrictions placed on imported vehicles (age limits, requirements for catalytic converters, installation of emission technology for the HDV, etc.)

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#### 4.10 Information on retrofitting imported fleets (e.g. bus fleets) with emissions control technologies or cleaner engines

Purchase of buses of mark Euro - 2 are being carry out
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#### 4.11 Institutional framework for vehicle emission testing

Institution name	Institution type	Personnel	Responsibility	Number of vehicles tested (vehicles/year)	Number of testing sites
1	2	3	4	5	6
Traffic police	state		Ministry of Internal Affairs		

#### 4.12 Legal and institutional framework of vehicle inspection and maintenance

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**4.13 Technical Assistance Received for Capacity Building in Vehicle Inspection and Maintenance**

N/A

Source: ... The state support ..... (institution).....(department)

**4.14 National Vehicle exhaust emission requirements (ONLY light duty vehicles/passenger cars)**

<b>g/km</b>	<b>Petrol</b>	<b>Diesel</b>
<b>CO</b>	The data are absent	The data are absent
<b>HC</b>		
<b>NO<sub>x</sub></b>		
<b>HC+NO<sub>x</sub></b>		
<b>PM</b>		
<b>Opacity</b>		

**4.15 Recent Developments/Planned Vehicle exhaust emission requirements, inspection and maintenance**

Source: ..... (institution).....(department)

**4.16 Incentives for alternative fuels and vehicles (e.g. Flexi-fuel/CNG/LPG powered vehicles)**

<b>Incentive</b>	<b>Description</b>
The liquefied gas	

**4.17 Promotion of environment friendly vehicles (such as import of only new vehicles, catalytic converters, fuel cells, etc.)**

<b>Measures</b>	<b>Details</b>
1. Ban on the sale of new vehicle not equipped with catalytic converters	It is not made
2. Tax differentiation	It is not made
3. Use of subsidies	It is not made

4. Inspection and maintenance program	It is not made
5. Retrofit program	It is not made
6. Accelerated retirement program	It is not made
7. Scrappage programs	It is not made
8. Vehicle age caps	It is not made
9. Other (please add):	A plenty of buses of mark Euro - 2 are baying