

Technical inspection and maintenance system in Vietnam

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1. Outline of road traffic in Vietnam

1.1. Road network

- Total length: 209.059 km;
- Road distribution in the territories is quite suitable;
- Average rate of total length and the whole country area:
0,67km/km² - a low rate.

1.2. Road classification (see Table 1)

- 7 road classes;
- Total length of the road classes

Table 1. Total length of the road classes

No.	Road classes	Total length of each road class (km)	Rate of length of each road/total length (%)
1	National highway	15121	7.23
2	Province road	17449	8.35
3	District road	36372	1.40
4	Urban road	3211	1.54
5	Special road	5451	2.61
6	Commune road	46910	22.43
7	Hamlet and village road	84455	40.40

1.3. There is no express way. The rate of high technical standard road (I, II classes) is low;

1.4. Motor vehicles:

- Registered motor vehicles:

Table 2 - Amount of registered motor vehicles (1996 - 2000)

N ^o m	Three and four wheeler ⁽¹⁾	Two wheel motorcycles, mopeds
1996	372,000	4,022,700
1997	417,700	4,827,200
1998	443,000	5,300,000
1999	465,000	5,585,000
2000	486,000	6,479,000

⁽¹⁾ *in fact, amount of real in - use vehicles is less than registered vehicles*

- The rates (%) of three and four wheeler categories/total amount of them:

- a) Car: 28%;
- b) Bus: 15%;
- c) Truck: 37,8%;
- d) Special vehicles: 9%;
- e) Others: 10,2%

- Ages of three and four wheelers (number of in - use years):

- (a) Less than 10 years: 36%
- (b) Between 10 and 20 years: 13%
- (c) Between 15 and 20 years: 7%
- (d) More than 20 years: 44%

So the average age of three and four wheelers equals about 16 years.

- The rate of motorcycles and mopeds with ages less than 5 years: about 40%.

- Distribution of motor vehicles: Large amount of motor vehicles is concentrated

in big cities, particularly Hanoi and Hochiminh:

The year 2000:

Hanoi: 43,035 three and four wheelers, 785,969 two wheelers;

Hochiminh: 190,000 three and four wheelers, 1,690,000 two wheelers;

2. Technical inspection system

2.1. Outline of organization and management

- Before the year 1995 in Vietnam, the periodical safety inspection of in - use three and four wheeled motor vehicles was the task of Ministry of Interior, now its name is Ministry of Public Security. However, there was no a technical inspection system with inspection stations at that time.

- Since 1995, technical inspection system for in - use motor vehicles has been established with inspection station system in the whole country. Ministry of Transport

replaces the Ministry of Public Security to organize and manage this system.

- Vietnam Register, a State management organization under Ministry of Transport, is only competent authority in Vietnam to manage directly profession - specialty aspect of all inspection stations.
- There are 78 inspection stations in 57 provinces and 4 cities directly under Central - Government (These cities are Hanoi, Haiphong in the North, Danang in the Centre, Hochiminh in the South).
 - Distribution of stations:
 - ◆ Hanoi: 8
 - ◆ Hochiminh: 7
 - ◆ Haiphong: 2
 - ◆ The others: 1 for each local
 - Administrative management:
 - ◆ Directly under Vietnam Register: 16
 - ◆ Directly under Departments of Transport of locals: 62
- The relation between Vietnam Register and Departments of Transport has co-ordinative feature.

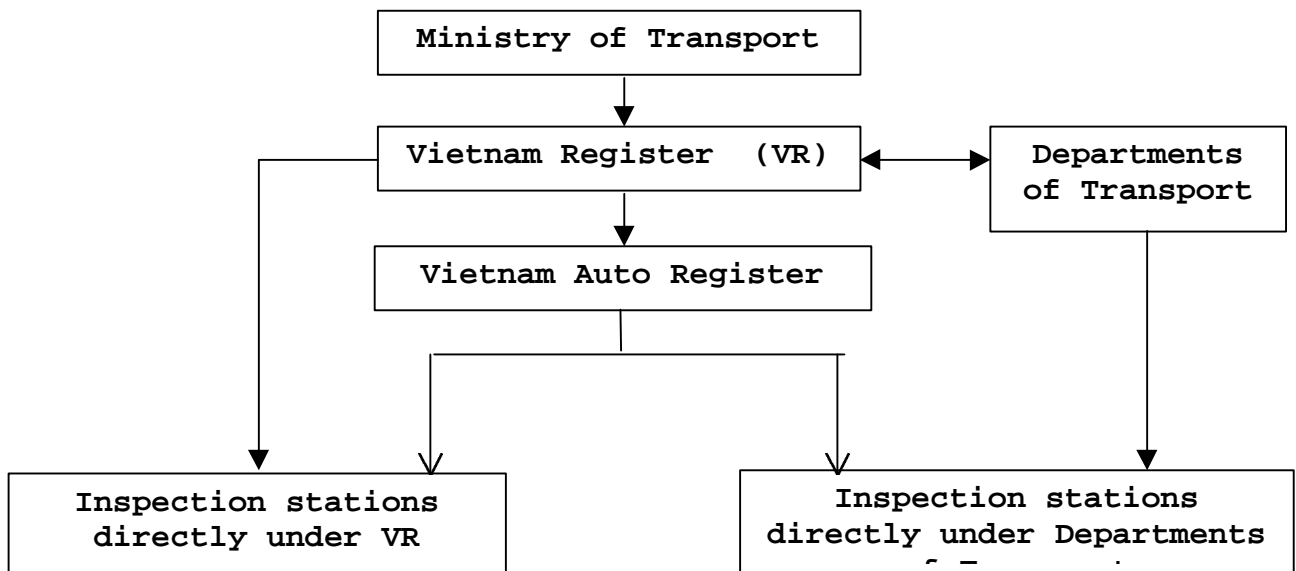


Figure 1. Organization diagram of the inspection system

- Total number of inspector: More than 500

2.2. Legal system

2.2.1 Before January 1, 2002

(a) Main frame regulations

- Government Decision No. 36/CP dated May 29, 1995 and now it has been replaced by Government Decision No. 36/2001/N§-CP dated July 10, 2001 on ensuring road traffic safety and urban traffic safety;
- Circular letter No. 135/PC-KHKT of MOT on technical periodical inspection and granting certificate for in - use motor vehicles;
- Decision No. 1855/ PC-KHKT of minister of MOT on periodical inspection stam;
- Decision No. 1643/1998/ Q§-BGTVT of minister of MOT on inspectors;
- Decision No. 1362/2000/Q§-BGTVT of minister of MOT on modification of in - use motor vehicles;

(b) Main technical regulations of MOT

- 22 TCN 224-95, now is 22 TCN 224-2000: branch standard of Technical safety and environmental protection;
- 22 TCN 226-99: branch standard of inspection stations;

2.2.1 Since January 1, 2002

(a) Main frame regulations

- Law on road traffic, dated June 29, 2001 of National Assembly, proclaimed by Vietnam President on July 12, 2001, enforcement on January 1, 2002;
- Regulations which will be under the Law on road traffic and replace the Circular letter No. 135/PC-KHKT, Decision No. 1855/ PC-KHKT, Decision No. 1362/2000/Q§-BGTVT.

(b) Main technical regulations of MOT

- 22 TCN 224-2002 which will replace 22 TCN 224-2000;
- 22 TCN 226-2002 which will replace 22 TCN 226-99.

2.3. Vietnam technical standards related to inspection

- TCVN 6435:1998 (ISO 5130 - 1982) on stationary road vehicle noise measurement methods;
- TCVN 6436:1998 on stationary road vehicle noise permitted levels (see appendix 1);
- TCVN 6438:1998 on exhaust emission for in - use vehicles (see appendix 1);

2.4. Scope and main items of inspection

2.4.1. Scope

- Under vehicle category:
All in - use motor vehicles not less than three wheels, including special tractors and machinery running on the road;
- Under safety inspection:
All vehicles of the whole country
- Under environmental protection inspection:
Vehicles registered at Hanoi, Hochiminh, Haiphong and Danang

2.4.2. Main items

- Identification
- General: Main sizes, body, cab, chassis, couple, seats, engine, transmission, wheels, suspension system...
- Safety
 - (a) Steering devices;
 - (b) Braking system;
 - (c) Lighting and light - signal devices;
 - (d) Electric Horns;
 - (e) Speedometer.
- Environmental protection
 - (a) Exhaust emission (TCVN 6438:1998):

Regulation No.	Emission limits
TCVN 6438-1998	Vehicles firstly registered in Vietnam before Aug. 1, 1999: <ul style="list-style-type: none"> - Opacity \leq 85 HSU (Level 1) - CO \leq 6,5 % (Level 1)

	<p>Vehicles firstly registered in Vietnam since Aug. 1, 1999:</p> <ul style="list-style-type: none"> - Opacity \leq 72 HSU (Level 1) - CO \leq 4,5 % - HC (ppm): <ul style="list-style-type: none"> 4-stroke engine: \leq 1200 2-stroke engine: \leq 7800 Special engine: \leq 3300
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(b) Noise (TCVN 6436:1998)

2.5. Inspection cost

Under Decision No. 138/1999/Q§/BVGCP:

- Trucks, combination of vehicle with load more than 20 tons: 300,000 VND;
- Trucks, combination of vehicle with load more than 7 tons: to 20 tons; special vehicles; Buses more than 40 seats (including driver seat): 200,000 VND;
- Trucks with load more than 2 tons to 7 tons; Buses between 25 to 40 seats (including driver seat): 180,000 VND
- Trucks with load to 2 tons; Buses between 10 to 24 seats (including driver seat): 150,000 VND
- Small truck - similar vehicles; Trailers, semi - trailers: 100,000 VND
- Passenger cars: 120,000 VND
- Three - wheeled vehicles: 50,000 VND

2.6. Inspection intervals

Categories of motor vehicles	Intervals (months)	
	The first interval	From second interval

Trucks:		
- New (imported, produced)	24	12
- Modified	12	06
Passenger cars:		
- New:		
+ Business	24	12
+ Non - Business	30	18
- Modified:		
+ Business	18	06
+ Non - Business	24	12
Buses:		
- New:		
+ Business	18	06
+ Non - Business	24	12
- Modified:		
+ Business	12	06
+ Non - Business	18	12
Three - wheeled vehicles:		
- New:		
+ Business	24	12
+ Non - Business	30	24
- Modified:		
+ Business	18	06
+ Non - Business	24	12
Vehicles with number of production years more than 7		06

3. Maintenance system

- Before about 1990

+ An old maintenance system was applied for automobiles in conditions of economy which was system of budget subsidies and concentrated by State.

+ This system applied for all the State companies, organizations etc. which used automobiles.

+ Maintenance related closely to repair of automobiles

+ Regulation:

Rule on maintenance and repair of automobiles and trailers.

No. 22TCN 99-79

- Since 1990

- + The Rule No. 22TCN 99-79 has still been applying for Governmental transportation companies.
- + For other private companies: in fact, there has been no maintenance system.
- + There is no regulation on maintenance between two continuous periodical inspection times or regulation on periodical maintenance for the whole country.

- In the future

Under Law on road traffic (dated June 29, 2001 of National Assembly, proclaimed by Vietnam President on July 12, 2001, enforcement on January 1, 2002), quality of vehicles will be maintained during period between consecutive inspection times. So Vietnam Register plans to develop a research project to evaluate the bility of periodical maintenance for vehicles in Vietnam in 2004. If successful, the maintenance will be possible starting from 2006./.

Appendix 1

1. Noise permitted level (TCVN 6436:1998)

Unit : dB (A)

Categories of vehicles	Maximum permitted noise levels
1. Motorcycles, mopeds to 125cm ³	95
2. Motorcycles exceeding 125cm ³	99
3. Passenger Cars	103

CO (% in volume)	6.5	6.0	4.5	-	-	4.5	-	-
HC (ppm in volume)								
- 4 stroke engine	-	1,500	1,200	-	-	1,200	-	-
- 2 stroke engine	-	7,800	7,800	-	-	7,800	-	-
- special engine	-	3,300	3,300	-	-	3,300	-	-
Smoke (HSU)	-	-	-	85	72	-	72	50

Note:

(1) At the present, under Decision No. 1397/1999/Q§-BGTVT of minister of MOT on application TCVN 6438:1998 in periodical inspection for in - use vehicles, these vehicles were registered firstly in Vietnam before August 1, 1999;

(2) At the present, under Decision No. 1397/1999/Q§-BGTVT of minister of MOT on application TCVN 6438:1998 in periodical inspection for in - use vehicles, these vehicles have been registered firstly in Vietnam since August 1, 1999;