SAFER ROADS AND NETWORK



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LEGAL BASE FOR ROAD SAFETY

The legal framework for ensuring road safety in Uzbekistan is regulated by the Law of the Republic of Uzbekistan No. 818-I of 08/19/1999.

The purpose of this Law is to regulate relations arising in the field of road safety and is aimed at ensuring the protection of life, health and property of citizens, protection of their rights and legitimate interests, as well as the natural environment.

The legislation on road safety consists of this Law and other legislative acts. If an international treaty of the Republic of Uzbekistan establishes rules other than those provided for in the legislation of the Republic of Uzbekistan on road safety, the rules of the international treaty shall apply.

LEGAL BASE FOR ROAD SAFETY

The articles of the Law consist of the following:

- State administration in the field of road safety
- ❖ Powers of the Cabinet of Ministers of the Republic of Uzbekistan in the field of road safety
- Powers of local public authorities in the field of road safety
- The powers of the Uzbek Agency of Road and River Transport in the field of road safety
- Obligations of vehicle owners to ensure road safety
- * Requirements for maintenance and repair of roads
- * Requirements for the manufacture of vehicle structures
- Requirements for the technical condition and equipment of vehicles
- * Requirements for maintenance and repair of vehicles
- Prohibition of the operation of vehicles
- ❖ Basic requirements for legal entities and individual entrepreneurs whose activities are related to the operation of vehicles
- Medical provision of road safety

ORGANIZATION OF ROAD SAFETY

The organization of road safety is carried out on the basis of the integrated use of technical means of regulation and their designs, the use of which is regulated by standards and provided for by projects and schemes of traffic management.

The uniform traffic order throughout the territory of the Republic of Uzbekistan is established by the Rules of the Road. Right-hand traffic of vehicles is established on the roads of the Republic of Uzbekistan.

RIGHTS AND OBLIGATIONS OF ROAD USERS

The rights of road users to safe driving conditions on the roads are guaranteed by the State.

The exercise by road users of their rights should not restrict or violate the rights of other road users.

Road users have the right to: move freely and unhindered on the roads in accordance with the Rules of the road; receive explanations from officials of specially authorized state bodies in the field of road safety about the reasons for violations or restrictions of their rights established by law; receive complete and reliable information about safe driving conditions, the quality of products and services related to road safety; for free medical care, rescue work and other emergency assistance in case of road accidents from organizations and officials who are legally obligated to provide such assistance; compensation for damage, in cases of death, bodily injury, damage to a vehicle and cargo, as a result of a traffic accident, as well as compensation for moral damage in accordance with the procedure established by law; appeal in accordance with the established procedure against illegal actions (decisions) of officials engaged in activities in the field of road safety.

ROAD NETWORK

The total length of the highway network in Uzbekistan below in the table

#	Name of Roads	Length, km	Percentage	
1	Public Highways	42 869	19,5%	
	including: International	3 981	1,8%	
	State	14 100	6,4%	
	Local	24 614	11,2%	
2	Inter farm, rural, urban and village roads	141 882	64,7%	
3	Departmental roads	24 745	11,3%	
4	City streets	9 900	4,5%	
	Total	219 396	119,5%	

As of March 1, 2021, there are 14,755 bridges in the country, of which 3,324 bridges are not assigned to departmental organizations, 1,009 bridges are in a state of emergency and 5,930 bridges are in a state of repair.

MAP OF ROAD NETWORK IN THE REPUBLIC OF UZBEKISTAN



DESIGN STAGES

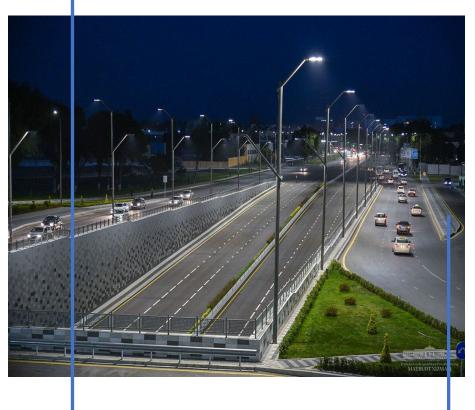
T/p	The name of the document development steps					
1.	PFS (Preliminary Feasibility Study) - as an independent stage					
2.	PTEA (Preliminary technical and economic accounting) - as an independent stage					
3.	FS (Feasibility Study) - as an independent stage					
4.	TEA (Technical and Economic Accounting) - as an independent stage					
5.	Two-stage working design, including:					
	a) project					
	b) Detailed Design					
6.	Two-stage working design, including:					
	a) FS (Feasibility Study) / TEA (Technical and Economic Accounting) - as an independent stage					
	b) Detailed Design					
7.	One-stage design during the Detailed Design period					
8.	Development of the technical part of the tender documents					
9.	Three-stage working design, including:					
	a) PFS (Preliminary Feasibility Study/Justification)					
	b) TEA (Technical and economic accounting)					
	c) Detailed Design					

PROJECT PLANNING

Creation of territorial commissions and sectoral working groups for the formation of preliminary lists of objects included in the IDP address lists Studying the technical condition of objects included in the IDP address lists Compilation of lists of objects proposed for inclusion in the IDP address lists and submission for approval to the interested ministries and departments Sending preliminary design and survey address lists indicating the need for 1st stage investments capital for the implementation of design work to the Ministry of Economy and the Ministry of Finance Consideration and generalization of the submitted materials, with subsequent submission for approval to the relevant Councils for the management of state trust funds Approval of address lists of design and survey projects implemented at the expense of the State budget of the Republic of Uzbekistan

	Preparation of initial permit documentation					
	Development of an APL, conducting a technical survey, performing engineering and technical surveys, preparing tender documentation					
	Competitive bidding, conclusion of contracts for R&D					
2nd stage	Entering and agreeing on the final address lists of IDP					
	Opening of financing for IDP, with subsequent payment of advance payments					
	Development, approval of design and estimate documentation and submission for state expertise					
	Carrying out state examination of design and estimate documentation					

Sending information on the need for capital 3rd stage investments to the Ministry of Economy and Finance



PROJECTS FINANCED FROM THE STATE BUDGET

- ➤ Every year, at the beginning of the year, a program for the construction, reconstruction and repair of highways is developed at the expense of the state budget in the territory of the Republic, and work is carried out according to this program.
- Also, the nationwide PROGRAM "Safe and Smooth Road" intended to be implemented in the territory of the republic during 2022-2026 was developed and implemented by the President's decision.
- For example, according to the received data, a total of 15 thousand 95 kilometers of highways and 104 bridges were repaired at the expense of 5.8 trillion funds in January-September 2022 in order to further develop road transport communications in the country.

PROJECTS FINANCED BY INTERNATIONAL FINANCIAL INSTITUTIONS

International financial institutions and projects	Road length, km	2017 year	2018 year	2019 year	2020 year	2021 year	2022 year	TOTAL amount, million US dollars
Total:	1302	86,2	60,6	29,7	94,5	146,4	102,6	519,9
including:								
Asian Development Bank	489	69,9	15,9	5,8	20,4	78,4	86,0	276,4
Reconstruction of 315-440 km of Highway A-380 "Guzor-Bukhara-Nukus-Beyneu"	85	29,5						29,5
Reconstruction of 116-190 km of the Tashkent-osh highway A-373 (Kamchik pass)	74	40,4	15,8	5,6				61,8
Reconstruction of 173-176 km of the Tashkent-osh highway A-373 (Kamchik pass)	3				8,8	3,5		12,2
Reconstruction of the 228-315 km section of the A-380 "Guzor-Bukhara-Nukus-Beyneu" Highway	87		0,1	0,2	11,7	40,3	33,2	85,4
Reconstruction of the 964-1204 km section of the A-380 "Guzor-Bukhara-Nukus-Beyneu" Highway	240					34,6	52,8	87,4
Islamic Development Bank	121	12,5	41,5	3,9	9,5	18,0	7,2	92,6
Reconstruction of 100 km of the M - 39 Tashkent-Termez Highway	100	12,5	41,5	3,9				57,9
Reconstruction of sections of the M-39 "Tashkent-Termez" Highway 1395-1400 km and 1410-1426 km	21				9,5	18,0	7,2	34,7
World Bank	579	0,0	0,5	13,0	48,5	35,0	3,4	100,4
Regional roads Development Project	579		0,5	13,0	48,5	35,0	3,4	100,4
Saudi Development Fund and Kuwait Arab Economic Development Fund	35	3,8	2,7	7,0	16,1	15,0	4,0	48,6
4R87 Reconstruction of 35 km of the highway " Guzor-Chim-Kukdala "	35	3,8	2,7	7,0	16,1	15,0	4,0	48,6
Asian Infrastructure Investment Bank	78	0,0	0,0	0,0	0,0	0,0	2,0	2,0
Reconstruction of 150-228 km of the A-380 Highway "Guzor-Bukhara-Nukus-Beyneu"	78						2,0	2,0

BASIC DESIGN PRINCIPLES

The main technical decisions taken in the design of roads depend on the category of the road, design speed, service level and traffic load, design loads and should include:



ostructures of artificial structures (culverts, bridges, overpasses, overpasses, retaining and retaining structures)

main indicators of longitudinal and cross section profiles

drainage structures (cuvettes, upland ditches, fast currents)

subgrade and pavement structures

engineering communications rebuilt and newly designed

types of interchanges, junctions and intersections with existing roads and railways

08 power supply and lighting

ROAD STANDARDS

ShNK 2.05.02-07



ShNK 3.06.03-08



UZDST 3283-2017



ROAD STANDARDS

ShNK 2.05.02-07 These norms and rules apply to the design of public roads in the Republic of Uzbekistan, which are being newly built, reconstructed and overhauled, etc.

ShNK 3.06.03-08, These rules apply to the construction, reconstruction and overhaul of public roads and departmental roads,

UZDST 3283-2017 (Road signs. Technical specifications), (New Uzbek standard fully applies to road signs designed to inform road users about the conditions and modes of traffic on roads and streets.)

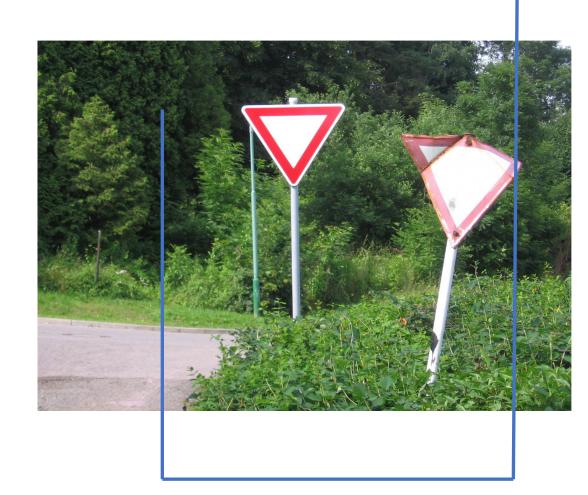
The current technical regulatory documents on design, construction, reconstruction of public roads and on road signs in Uzbekistan were developed during the USSR, and most of them are technically and meaningfully outdated. The main part of the regulatory documents were recently developed by the council formed between the CIS countries, and it is observed that some of their requirements do not correspond to the conditions and mentality of Uzbekistan.

Most of national standards and guidelines in the field of roads are outdated and require systemic update and adjustment with best international practice and Uzbekistan specificities.

Document which defines functional classification of roads and streets does not exist. In that sense design parameters of roads and streets are not clearly determined – which may lead to big problems e.g. excessive speed, presence of vulnerable road users on high level network, etc.

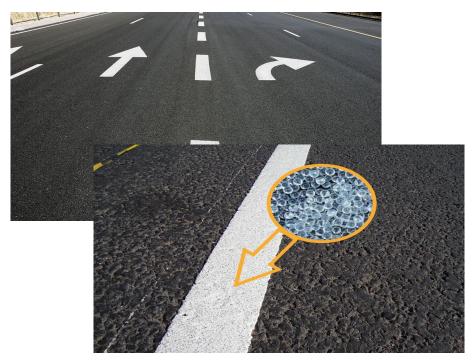
ROAD SIGNS

Newly installed road signs are mostly with retroreflective coating, but old plain coated road signs are still available.



ROAD MARKINGS





Most roads do not have road markings and are applied every year, but the materials used are not of high quality, so road markings wear off quickly.

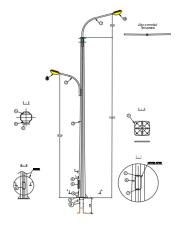
In recent years, thermoplastic road markings have been applied, which are serviced for a longer time. I would also like to emphasize that more attention should be paid to reflective marking materials.

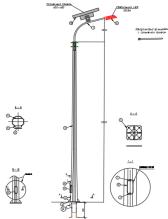
ROAD LIGHTING

In Uzbekistan, electric lighting is used on most roads. Currently, the use of autonomous lighting using solar panels is being introduced. Much attention is paid to road lighting mainly on city streets and roads in the centers of districts. In the meantime, public road lighting systems will need to be installed to ensure safety.









ROAD BARRIERS

Currently, mainly metal barriers and "New Jersey" type barriers are being installed in Uzbekistan. These barriers are well operated in an emergency situation to protect road users. Recently, there has been a tendency to install metal fences on the dividing strip and in the marginal part of the road where it is necessary in accordance with the standards. It should be noted that it is necessary to install panels on the fences on the dividing strip that protect against blinding the eyes.







BRIDGES

ShNK 2.05.03-12 "Bridges and pipelines" and in the design of city streets and roads

These standards apply to the design of new and reconstruction of existing permanent bridge structures and pipes

The current condition of bridges in Uzbekistan is critical, the service life has expired, since most of them were built in the period 1970-1980.

A number of measures have been taken by State bodies on these issues, which are being implemented as far as possible.







INTELLIGENT TRANSPORT SYSTEMS (ITS)

On International Highways, with the help of Intelligent transport systems (ITS) many parameters are tracked, such as:

- speed and intensity of traffic flows;
- movement of public transport;
- > traffic accidents by degree of significance;
- location of social facilities:
- > road closures.

In addition, using ITS, it is possible to monitor the operation of mobile photo and video recording systems, etc.

ITS uses data from GLONASS sensors, cameras, and traffic detectors. ITS is responsible for managing traffic lights, analyzing hotbeds of accidents, etc.



PROJECT APPROVAL

Developed project estimate documents relevant official organizations (Highway committee, regional road administrations, regional administration, regional architecture department, road user organizations, communication owners, representatives of the ecology committee, as well as the road control department of the Republican road safety and organization of safe movement of vehicles on highways and agreed with the monitoring center and approved by the Customer.

The design and estimate documentation is subject to state examination in accordance with the established procedure for compliance with the requirements of building codes and rules for strength, durability, compliance with approved fire safety standards and rules, labor and environmental protection requirements, the volume and cost of construction.

ROAD SAFETY AUDIT

In the Republic of Uzbekistan, independent road safety audit and road safety inspection is not carried out

A road safety audit (RSA) is defined as "a formal review of the safety performance of an existing or future road or intersection by an independent multidisciplinary team. It qualitatively assesses and reports on potential road safety issues and identifies opportunities to improve safety for all road users".

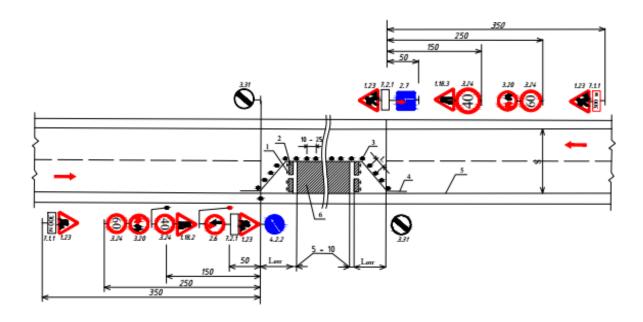
To introduce in the national legislation RSA and RSI procedures with necessary guidelines, and procedures for training and certifying auditors and inspectors



ROAD WORKS

The scheme organization the movement and fencing places roadworks

In Uzbekistan traffic management plan prepared according to the Instruction MKN 37-2007 Instructions for the organization of traffic and fencing of places of production of road works



Legend:

- 1 The guide cones and reflective elements
- 2 The barriers
- 3 The guide cones
- 4 Marking of road movement
- 5 The edge of the road
- 6 Area roadwork
- 7 S width of road movement stripe
- 8 L-The distance between the cones

Notes:

- This scheme is designed in accordance with MKN 37-2007 "Instructions for the organization of movement and fencing production work places" and is recommendatory character.
- 2. The road organization before the start of road works should make schemes organization movement vehicle, geocoded. The scheme movement organization and fencing places of production work must be approved by the head of traffic organization and previously agreed with bodies Public service road safety (Sec. 1.3 MKN 37-2007).
 3.At the boundaries of the site roadworks should be set information boards indicating the name of the construction company, surname responsible person etc. (Sec. 1.6 MKN 37-2007).
- 4. All dimensions are in meters.

THANK YOU



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