

## **Problems of certification for town streets and roads**

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*The aim and objectives of the certification for automobile roads and town streets are determined. The analysis of the modern nominative base for carrying out the inventory of town streets and roads is performed. The unsettled aspects of certification in town conditions are brought to light. The conception of issuing certificates with the allowance for the possibility of the accumulation of information and monitoring of the street and road conditions is suggested*

**Key-words:** *the certification, the inventory, the public right of way, monitoring, engineering, facilities*

The aim of the certification for automobile roads and town streets is to get the objective information about roads and road facilities, their length and technical conditions for the rational planning of road construction, reconstruction, maintenance and repair.

All town streets and roads must be registered and recorded in registration certificates annually.

The certification of state automobile roads is organized according to the instructions for the certification of automobile roads (with the use of the Electronic automobile road certificate) which have been developed in accordance with the instructions for the technical record keeping and the certification of thoroughfares

in the Ukrainian Soviet Socialist Republic (Instruction 218 012-83) and the modern State construction standards.

The certification of town streets and roads has no direct normative grounds. In January 2011 the Central Management of Town Planning, Architecture in Ukraine initiated the creation of 100 certificates for Kyiv streets and squares as the basis for the town building cadastre formation.

Taking into account the experience in the certification for town streets and roads in Ukrainian and Russia it is necessary to determine unsettled aspects of the certification in town conditions under the modern normative base for the state roads certification.

To achieve this aim it is necessary to reveal commonly encountered unsettled aspects for their further elimination and the concept design for the certification in town conditions with the possibility to accumulate the information and to exercise monitoring of the street and road conditions.

For the effective work of housing and communal services it is desirable to indicate the original costs of some streets elements, through it is not stipulated by the process of certification for town streets and roads.

The certification must be carried out together with the inventory of communal facilities and the formation of two different documents, and the additional payment of the executed services.

General management of the technical record keeping and the certification must be exercised by Road Departments, which maintain these facilities.

Different scientific-research institutes and other specialized organizations, which have licences or other documents allowing to carry out such kind of work and the list of completed inspection works and certification for the last year, can be enlisted to the technical record keeping.

Annual inspections are held to expose changes, which appear in the streets during a year, in order to bring these changes into the street certificate on the 1<sup>st</sup> of January of next year.

However, partial financing of the enterprises, which maintain streets and roads, doesn't allow to issue certificates systematically. Moreover, a lot of roads have not any certificate.

The optimization of the budget costs must make a great impact on the creation of the single certification system for streets and roads in each center of population. It is meant for performing the constant monitoring of their conditions, for developing perspective and current plans on carrying out certain kinds of repair work.

Note should be taken on the set disputable situations in the process of certification.

Firstly, under the demands [3] the other classification for town streets is provided and it is not comparable with the state road classification.

Secondly, the rich side situation is typical for town streets. They have different service lines and advertisement hoardings. In bounds of the public right of way (the site of public needs) advertisement hoardings of different designs are not to be registered in the street certificate as their technical conditions are not determined. They are not the property of an enterprise which maintains the street. Their costs are not put on the book values of street elements. However, the joint maintenance of different engineering facilities, service lines and advertisement hoardings on the same site often leads to conflict situations. For this reason by agreement with the owner the places of service line and advertisement hoardings sometimes are indicated in the street certificate without the analysis of technical conditions and balance costs.

Thirdly, during issuing certificates (for a short period of time) it is impossible to collect the information about the intensity, the staff and the speed of the traffic stream, about the distribution of vehicles along the highway in different periods of a year, a week, a day. All these data about road traffic can be collected under the special road inspection.

Fourthly, the route traffic represented with different kinds of transport (for instance, trolleybuses and buses) is typical for town streets. The organization of elongated boarding platforms is provided on the stops for the route traffic of different kinds of vehicles. But in most cases such platforms are absent or replaced by the pavement. The stops, which must serve only one kind of transport (a bus), are used simultaneously by buses of different routes, and they are in the worst conditions. Such situation leads to breaking the traffic safety for both passengers and buses. But it is not regulated by any normative acts. That's why it is impossible to indicate it in the street certificate. The pavilion stops combined with the shops are not the property of the Road Departments and that's why they are not to be registered in the street certificate. But they perform the passengers' protection function. Hence, it is desirable to mark their places on the line graph of the street.

Fifthly, the new street elements appeared on the roadway, such as "the lying policeman" and "the noise stripes". The absence of any normative record keeping demands creates the ambiguous situation with their inclusion in the street certificate.

Finally, the organization of the single certification for streets and roads, even if there are the mobile laboratories and the archival accounting data, needs the greater time costs for making measurements on the location in town conditions in the presence of intensive traffic. The use of manual labor can lead to the errors, which are the results of changes in the group staff or simply fatigue of workers.

Activities for issuing certificates for town streets demand the collection of the great amount of information. The set of information and the ways of its presentation on the paper medium can be criticized but nevertheless, these issues must be discussed with the client in advance and be listed in the technical plan as one of the applications to the agreement.

The absence of specialized normative documents for the procedure of issuing certificates for town streets and roads and the order of systematization,

storing and updating data intensify the role of the technical task, but they don't solve most revealed problems.

Using the mobile road videolaboratories during the certification, the client can get not only the document in the form of the text report and the plan on a scale of 1 to 500, but the video filming data on the location. It allows to check the completed works. Besides, even the well thought-out form of the certificate can not take into account the whole variety of real situations on the location and all variants of information which can be required for making management decisions. In such cases the use of video data can replace the departure on the facility.

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