## Agenția Națională de Asigurare a Calității în Educație și Cercetare



## National Agency for Quality Assurance in Education and Research

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#### **DECIZIA**

Consiliului de conducere al Agenției Naționale de Asigurare a Calității în Educație și Cercetare nr. 11 din 19 decembrie 2023

cu privire la respingerea deciziei organizației din domeniile cercetării și inovării de a conferi titlul științific de doctor în științe economice

În conformitate cu pct. 59-61 ale Metodologiei de conferire și confirmare a titlurilor științifice (HG 497/2019), 179, 181 ale Regulamentului privind organizarea studiilor superioare de doctorat, ciclul III (HG 1007/2014) și în temeiul solicitării Universității de Stat din Moldova cu privire la confirmarea titlului științific de doctor în științe economice doamnei **OBOROCEANU Aliona**, conferit la 26 septembrie 2023 în urma susținerii tezei "Perfecționarea managementului infrastructurii drumurilor publice în Republica Moldova", specialitatea *521.03. Economie și management în domeniul de activitate* (demersul USM nr. 01/2915 din 05.10.2023; nr. de înregistrare ANACEC 352 Dr-ŞD din 09.10.2023), Agenția Națională de Asigurare a Calității în Educație și Cercetare (ANACEC) a inițiat procedura de confirmare a titlului științific de doctor în științe economice conferit dnei Oboroceanu Aliona.

În corespundere cu pct. 41-47 ale Metodologiei de conferire și confirmare a titlurilor științifice (HG 497/2019) (în continuare – Metodologie) a fost efectuată evaluarea primară a dosarului pentru confirmarea titlului științific (în continuare – dosar) de către ANACEC (Direcția de evaluare în cercetare și inovare) și, ulterior, dosarul a fost transmis experților evaluatori.

Comisia de experți în științe economice, sociologie, media și comunicare în ședința din 08 decembrie 2023 a examinat dosarul și teza în conformitate cu pct. 48-55 ale Metodologiei, cu prevederile Regulamentului comisiilor de experți în domeniul atestării ale ANACEC (aprobat prin Decizia Consiliului de conducere al ANACEC nr. 4 din 18.12.2018, cu modificările și completările ulterioare) și cu Regulamentul de atribuire a calificativelor tezelor de doctorat (aprobat prin Ordinul Ministerului Educației Culturii și Cercetării nr. 514 din 05.12.2017).

În rezultatul examinării tezei, s-a constatat că textul a 2 articole din reviste științifice, din cele 3 indicate în Lista de publicații, se repetă în mare parte (autoplagiat, vezi anexa). Astfel, nu este îndeplinită cerința de eligibilitate, stipulată în pct. 32 al Metodologiei de conferire și confirmare a titlurilor științifice (HG 497/2019), care prevede că teza de doctorat are la bază cel puțin 3 articole publicate în minimum 2 reviste științifice aprobate de ANACEC.

În conformitate cu pct. 4 lit. a) din Regulamentul comisiilor de experți în domeniul atestării ale ANACEC, Comisia de experți în științe economice, sociologie, media și comunicare a decis de a recomanda respingerea deciziei Senatului Universității de Stat din Moldova de a conferi titlul științific de doctor în științe economice dnei Oboroceanu Aliona. Pentru această decizie au votat unanim 15 experți, prezenți la ședință.

Comisia de profil în cercetare și inovare în ședința din 13 decembrie 2023, în conformitate cu pct. 56 și 57 ale Metodologiei, a validat rezultatele evaluării tezei și a susținut recomandarea Comisiei de experți în științe economice, sociologie, media și comunicare privind respingerea deciziei Senatului Universității de Stat din Moldova de a conferi titlul științific de doctor în științe economice dnei Oboroceanu Aliona.

Consiliul de conducere al ANACEC, în temeiul pct. 59 al Metodologiei, a atribuțiilor legale pe care le deține și a propunerii Comisiei de experţi, validate prin decizia Comisiei de profil în cercetare și inovare, **DECIDE:** 

- 1. Se respinge decizia Senatului Universității de Stat din Moldova din 26 septembrie 2023 de a conferi titlul științific de doctor în științe economice dnei OBOROCEANU Aliona în urma susținerii tezei "Perfecționarea managementului infrastructurii drumurilor publice în Republica Moldova", specialitatea 521.03. Economie și management în domeniul de activitate, la 08 septembrie 2023.
- 2. Se atenționează conducătorul științific **PERCIUN Rodica**, doctor habilitat în științe economice, conferențiar cercetător, pentru coordonarea tezei care nu corespunde cerințelor regulamentare.
- **3.** Se atenționează președintele Comisiei de susținere publică a tezei **ULIAN Galina**, doctor habilitat în științe economice, profesor universitar, pentru acceptarea tezei care nu corespunde cerințelor regulamentare.
- 4. Direcția evaluare în cercetare și inovare va transmite instituției o Notă de argumentare a respingerii demersului, conform anexei, care este parte integrantă a acestei decizii.

Prezenta decizie poate fi contestată în termen de 30 zile de la data comunicării.

Preşedinte	Andrei CHICIUC
Secretar general	Sergiu BACIU

#### Notă de argumentare

a respingerii demersului Universității de Stat din Moldova cu privire la confirmarea titlului științific de doctor în științe economice doamnei Oboroceanu Aliona, conferit la 26 septembrie 2023 în urma susținerii tezei "Perfecționarea managementului infrastructurii drumurilor publice în Republica Moldova"

Respingerea demersului este determinată de faptul că în lucrările științifice care stau la baza tezei de doctorat a fost identificat autoplagiat și plagiat, după cum se observă în informația de mai jos:

# PERFORMANCE OF NATIONAL ROADS IN THE REPUBLIC OF MOLDOVA

(articolul 2 din Lista publicaţiilor)

Aliona OBOROCEANU

The Journal Contemporary Economy, ISSN 2537 – 4222, Vol.7, nr.4, pp.70-75

#### Autoplagiat: abstractul și concluziile – 100%, text – aprox.60%

p.70

Abstract: The article represents a research on the significant importance in the economic activity of road quality management, based on performance. In this regard, the author made a concrete estimate of some indicators that influence the development and economic growth by ensuring the implementation of quality road management, which was made by identifying the elements of progress in order to review the efficient use of resources......

Investments in transport networks increase the capital invested compared to that realized in other fields of activity, based on direct and indirect effects, which result from <u>saving costs</u> and time by attracting the necessary resources to build modern road infrastructure. Progressive <u>road management</u> is based on the performance of both the programming and the implementation of maintenance and operational activities, as determined by the defined performance indicators. The scientific methods used are: analysis and synthesis, induction and deduction, critical analysis of materials, etc. The main results obtained from the investigations refer to the assessment of the indicators regarding the efficient anagement of the road quality by applying the progress performances in view of the users' access to qualitative public roads.

ROAD INFRASTRUCTURE MANAGEMENT SYSTEM IN THE REPUBLIC OF MOLDOVA: THE CORRELATION BETWEEN ALLOCATED FINANCIAL RESOURCES AND ROAD QUALITY (articolul 3 din Lista publicațiilor)
Rodica PERCIUN, Aliona OBOROCEANU

Journal of Research on Trade, Management and Economic Development, ISSN 2345-1424, Category B, VOLUME 9, ISSUE 2(18)/2022, pp. 26-41

p.26

**Abstract** The scientific work represents a research regarding the significant importance of performance-based road management in economic activity. In this sense, the authors have carried out a concrete estimation of some indicators that influence development and economic growth by ensuring the implementation of road management, carried out with the identification of elements of progress in order to review the way of efficient use of resources.

Investments in transport networks ensure the increase of invested capital compared to that achieved in other fields of activity, based on direct and indirect effects, resulting from cost savings by attracting the necessary resources for the creation of modern road infrastructures. The progressive management of road is based on performance, both programming and the implementation of their maintenance and operational activities, determined in accordance with the defined performance indicators. The scientific methods used are: analysis and synthesis, induction and deduction, critical analysis of materials, etc. The main results obtained from the investigations refer to the assessment of the indicators regarding the effective management of road by applying the performance of progress in view of user access to qualitative public roads.

**Keywords:** management, transport networks, public roads, quality, modern infrastructure, performance.

Abstractul nu corespunde conținutului articolului și a fost preluat integral cu schimbarea/modificarea cuvintelor.

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Quality assurance management is a major component of the quality system in the construction of public roads and represents a significant aspect within the management system of economic operators in construction. Quality management establishes and in fact implements the quality policy through pre-established and systematic activities, thus still preventing non-quality, ensuring the achievement of the required quality and providing confidence in the capacity of the unit.

Within the new European approaches to the construction / rehabilitation of public roads, economic operators in construction must adopt, implement and maintain an efficient Quality Management System, as a component part of the general management system of the unit, which guides and coordinates the activity of the unit in terms of quality.

Quality is a widely used notion, which makes it extremely difficult to give a definition from a scientific point of view. An older definition states: the set of properties of a product or service that gives it the ability to meet expressed or implied needs. Other informal definitions mention: - prevention is cheaper than repair; - or it is cheaper to do everything right from the start; - quality is the minimum cost that a product imposes on society.

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Quality within roads' construction is defined and regulated by law no. 721 of 02.02.1996 entitled "Law on quality in construction". The provisions of this law apply to constructions of any category and their related installations, regardless of the type of property or destination, including rehabilitation, major repairs of public roads, hereinafter referred to as constructions, as well as modernization, modification, transformation and consolidation works.

Construction quality means a set of properties that must be possessed by an object to be put into operation, which meets the modern requirements for its construction, operation and economy.

Construction quality of the installation, of the infrastructure network, depends on the quality of the project, the quality of the construction materials, constructions, semifinished products, parts and the quality of the

p.29

Quality assurance management is a main component of the quality system in the construction of public roads and represents a significant side of the management system of economic operators in construction. Quality management establishes and in fact transposes the quality policy through pre-established and systematic activities, thus still preventing non-quality, ensuring the achievement of the required quality and providing confidence in the capacity of the unit.

Within the new European approaches to construction / rehabilitation of public roads, economic operators in construction must adopt, implement and maintain an efficient Quality Management System, as a component part of the overall management system of the unit, which guides and coordinates the activity of the unit in terms of quality.

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p.29

The construction quality of roads is defined and regulated by law no. 721 of 02.02.1996 entitled "Law on quality in constructions". The provisions of this law apply to constructions of any category and their related installations, regardless of the type of property or destination, including rehabilitation, capital repair of public roads, hereinafter referred to as constructions, as well as their modernization, modification, transformation and consolidation works.

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The quality of the construction of the installation, of the infrastructure network, depends on the quality of the project, the quality of the construction materials, constructions, semifinished products, parts and the quality of the

construction and installation works.

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Outcome-based or performance-based resource management was actually recommended by the Hoover Commission of the United States in 1949. In the 1950s and 1960s, many countries, including the United States, began evaluating institutions using some performance indicators not on how much they spent, but on what they actually produced. Ultimately, these systems did not deliver the expected results because they were too rigid to account for uncertainty and unpredictability and because they failed to identify the limits of formal systems that influence people's behavior.

As a result, performance measurement declined in popularity in the late 1970s and mid-1980s, but has seen a renaissance during the last 30 years as a result of changing economic environments as well as the everincreasing demands of citizens for quality infrastructure. Thus, the strongest trend for performance improvement is to use resources through performance-based management and reporting. Australia and New Zealand were the first countries to implement performance indicator performance management in the late 1980s, followed by Canada, Denmark, Finland, France, Sweden, the United Kingdom and the United States in the early 1990s. In the late 1990s - In the early 2000's we find Austria, Germany and Switzerland.

Governments have introduced performance-based management due to four main reasons:

- □ to improve efficiency;
- ☐ to improve decision-making;
- □ to transparently improve accountability;
- $\Box$  to make savings.

Some countries have focused on only one or two of these goals, while others have embraced all four, with the aim to introduce performance-based financial resource management and the responsibility of the legislature and citizens. Australia, Denmark, the Netherlands, New Zealand, the United Kingdom and the United States are pursuing this approach.

In countries such as the United States, ministries have developed strategic plans that include performance targets. Others have adopted performance contracts, for example, between a ministry and a subordinate construction and installation works.

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Results-based or performance-based resource management was actually recommended by the Hoover Commission of the United States in 1949. In the 1950s and 1960s, many countries, including the United States, began evaluating institutions with the help of performance indicators not on how much they spent, but on what they actually produced. In the end, these systems did not deliver the expected results because they were too rigid to account for uncertainty and unpredictability and because they failed to identify the limits of formal systems that influence people's behaviour. p.30

As a result, performance measurement declined in popularity in the late 1970s and mid-1980s, but has seen a renaissance in the last 30 years as a result of changing economic environments as well as citizens' everincreasing demands for quality infrastructure. Thus, the strongest trend to improve performance is to use resources through performance-based management and reporting. Australia and New Zealand were the first countries to implement performance management based on performance indicators in the late 1980s, followed by Canada Denmark, Finland, France, Sweden, the United Kingdom and the United States in the early 1990s. In the late 1990s - in the early 2000s we find Austria, Germany and Switzerland.

Governments have introduced performance-based management for four main reasons:

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In countries such as the United States, ministries have developed strategic plans that include performance targets. Others have adopted performance contracts, for example, between a ministry and a subordinate

institution. The purpose of these contracts or agreements is to facilitate greater understanding and strengthen bargaining power within the public sector.

This approach has the advantage that it tends to clarify the responsibility of each party to the contract or agreement, informally specific on the performance in the allocation of resources as well as the specification of sanctions and rewards.

There have existed different approaches to implementing performance management. Some countries - for example Australia, the Netherlands, New Zealand, and the United Kingdom - have implemented the top-down approach, others, such as Finland, have adopted a bottom-up and ad hoc approach in which institutions are free to develop their own methods based on performance and less mixing of the top management bodies.

The main goal is to move from an input-based system to a results-based system. This can be achieved by clearly defining the objectives and methods to be followed.

Therefore, there are higher demands for results but at the same time more freedom is given to the methods used to obtain them. But the central point is the responsibility, who and how is responsible for the results.

A stronger emphasis on responsibility allows for the limitation, even exclusion, of day-to-day inspections of the higher management bodies. It is therefore important to develop appropriate means of measurement that fully ensure accountability, with the aim of both promoting greater operational freedom and effective strategic control.

In the Republic of Moldova, the management of resources in the field of road management focuses on the results to be obtained from the activities planned / carried out by the authorities / institutions, by establishing performance indicators in program budgeting.

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Program performance is a method of presenting and substantiating budgets, based on programs with goals, objectives and indicators to evaluate their performance at all stages of management. High-performance program management is also an effective road management tool, which ensures that priorities are set and decisions are made on the allocation of resources needed for road rehabilitation and modernization. It is also based on the allocation of resources in programs according to planning and

institution. The purpose of these contracts or agreements is to facilitate a greater understanding and strengthen bargaining power within the public sector.

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There have been different approaches to implementing performance management. Some countries - for example Australia, the Netherlands, New Zealand, and the United Kingdom have implemented the top-down approach, others, such as Finland, have adopted a bottom-up and ad hoc approach in which institutions are free to develop their own methods based on performance and with little interventions on behalf of top bodies.

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Therefore, there are higher demands for results but at the same time a greater freedom is granted regarding the methods used to obtain them. But the central point is responsibility, who and how is responsible for the results.

A stronger emphasis on accountability allows the limitation, even the exclusion, of the daily controls of the superior organs. It is therefore important to develop appropriate means of measurement that fully ensure the obligation to be accountable, with the aim of both promoting greater operational freedom and effective strategic control.

In the Republic of Moldova, the management of resources in the field of road management focuses on the results to be obtained from the activities planned / carried out by the authorities / institutions, by establishing performance indicators in program budgeting.

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Program performance is a method of presenting and substantiating budgets, based on programs with goals, objectives and indicators to evaluate their performance at all stages of management. Also, efficient program management is an efficient road management tool, which ensures the setting of priorities and decision-making on the allocation of resources necessary for the rehabilitation and modernization of roads. It is also based on the allocation of resources in programs according to the planning and

prioritization, highlighting the connections between the allocated budgetary resources and the results to be achieved, through the activities funded by these resources. It is a tool to strengthen the increased responsibility of public authorities / institutions in the process of spending the resources allocated to the maintenance and rehabilitation of road infrastructure and the achievement of progressive performance.

For the field of roads, financial means were used for the implementation of the Program "Development of transport and road management", Subprogram "Development of roads". The sub-program included maintenance, repair and rehabilitation of national and local public roads, road condition monitoring, and actions to increase road safety. The objectives of the sub-program were implemented by the State Enterprise "State Road Administration", the total length of national roads being 3336 km, and local roads – 5475 km.

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### Conclusions (preluate integral)

It is concluded that in the Republic of Moldova the challenge is to review the performance of requirements and indicators set by developed countries around the world. In addition, performance-based road maintenance and rehabilitation management is closely linked to the selection of appropriate performance indicators with successful progress, as it is the most modern approach to obtaining sustainable financing for the maintenance and operation of road infrastructure.

In order to ensure the quality of the road infrastructure, the level of performance of the management of their administration must be high enough. Road degradation causes discomfort, additional costs and waste of time. The correlation of the efficiency criteria with the criteria of capitalization of the economic resources requires a differentiated treatment of the roads and an efficient distribution of the resources.

The road quality management system of the roadway is the most important part of the road maintenance and modernization management. The fundamental goal of a road management system is to obtain the best possible solution for the available funds and to provide quality roads to users with a high degree of comfortable and economical satisfaction. This can be achieved by comparing investment alternatives, coordinating design, construction, maintenance and evaluation activities, and making effective

setting of priorities, emphasizing the connections between the allocated budgetary resources and the results to be achieved, through the activities financed by these resources. It is a tool to strengthen the increased responsibility of public authorities / institutions in the process of spending the resources allocated to the maintenance and rehabilitation of road infrastructure and achieving progressive performance.

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p.39-40

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The quality management system of the pavement of the roadway is the most important part of the management of road maintenance and modernization. The fundamental goal of a road management system is to obtain the best possible solution for the available funds and to provide quality roads to users with a high degree of comfortable and economical satisfaction. This can be achieved by comparing investment alternatives, coordinating design, construction, maintenance and evaluation activities,

and the efficient use of existing field practices and knowledge. use of existing field practices and knowledge. The quality management system of the road infrastructure must carry The road infrastructure quality management system must carry out out comparative cost estimates and economic evaluations for different comparative cost estimates and economic evaluations for different options options regarding maintenance, rehabilitation works, for a certain project, a for maintenance, rehabilitation, for a specific project, a group of road sectors group of road sectors or for the whole network. Improving the road or for the whole network. Improving the road infrastructure management infrastructure management system and safety conditions by efficiently amplifying the implementation of complex reform programs and large-scale system and safety conditions by efficiently amplifying the implementation of complex reform programs and large-scale investment promotion campaigns investment promotion campaigns intensifies the development of transport intensifies the development of transport networks by providing users with networks by providing users with quality roads. quality roads. Perceperea consumatorului final privind managementul infrastructurii Sursa 1. Moldova: Note de politici pentru Guvern. drumurilor în Republica Moldova (articolul 9 din Lista publicatiilor) Mai 2009, 107 pag. Aliona OBOROCEANU, Rodica PERCIUN Conferinta "Dezvoltare economică si cercetare", Chişinău, 21-23 iunie 2023, pp.90-102 - Plagiat în Concluzii și recomandări (schimbarea cuvintelor, date eronate) Concluzii și recomandări p.99 sp.71 R. Moldova nu poate mobiliza investitiile masive suficiente pentru Moldova nu poate mobiliza investitiile masive necesare pentru reabilitarea reabilitarea drumurilor numai din surse interne, dar sunt necesare și surse drumurilor numai din surse interne. Sunt necesare surse externe de externe de finantare. ..............Institutiile Financiare Internationale rămân finantare....... Institutiile Financiare Internationale (IFI) rămân unele surse surse disponibile pentru finantarea investițiilor de scară largă, utile pentru disponibile pentru finantarea investițiilor de scară largă necesare pentru sectorul drumurilor. sectorul drumurilor. Concluzii și recomandări Sursa 2. PROIECT STRATEGIA PENTRU REPUBLICA MOLDOVA Aprobată de Consiliul Directorilor la sedinta din 30 aprilie 2014 În acest sens menționăm că, încă din anul 1992, R. Moldova este membru Republica Moldova este membru al Grupului Băncii Mondiale din 1992 și al Asociatiei Internationale pentru Dezvoltare din 1994...... Banca al Grupului Băncii Mondiale, iar din anul 1994 – al Asociatiei Internationale pentru Dezvoltare. Banca Mondială sprijină investitiile în modernizarea Mondială sprijină, de asemenea, investitiile în modernizarea infrastructurii si îmbunătătirea accesului la servicii publice, precum și proiecte cu beneficii infrastructurii si proiecte cu beneficii regionale sau globale pentru mediu.

regionale sau globale pentru mediu...... cooperare între BERD și BM

...Republica Moldova a devenit membru al IFC în 1995. IFC a acordat 87 de

milioane de dolari din fondurile sale proprii și a asigurat 25 milioane dolari în

consortii pentru proiecte de infrastructură, telecomunicatii, agrobusiness s

cuprind (a) studiul de fezabilitate privind reabilitarea drumurilor......

Cooperarea între Banca Mondială și BERD a permis elaborarea studiului de

fezabilitate privind reabilitarea drumurilor. Moldova a devenit membru al IFC

din anul 1995. IFC a acordat 87 de milioane de dolari din fondurile sale proprii și a asigurat 25 milioane de dolari în consorții pentru proiecte de

infrastructură de drumuri. (date eronate, aceste cifre fiind valabile în

### 2014!!!!!)

UE dezvoltă o relație tot mai strânsă cu R. Moldova pentru integrarea economică treptată și aprofundarea cooperării politice. R. Moldova este o țară partener în cadrul Politicii Europene de Vecinătate, cu un plan de acțiune comun UE-Moldova, bazat pe Acordul de Parteneriat și Cooperare. R. Moldova este, de asemenea, un participant activ în programul Parteneriatului Estic al UE pe ambele piste multilaterale și bilaterale și a parafat Acordul de Asociere și Acordul de Liber Schimb Cuprinzător și Aprofundat în noiembrie 2013.

BEI are mandatul de a oferi finanțare pentru R. Moldova în conformitate cu Acordul Cadru, semnat în noiembrie 2006. R. Moldova este eligibilă pentru a primi finanțare pentru proiectele de interes comun în domeniul infrastructurii de mediu, de transport, energie și telecomunicații.

#### Concluzii și recomandări

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Sistemul WIM utilizează senzori piezoelectrici sau quartz în covorul asfaltic pentru a cântări și a clasifica vehiculele. Cu ajutorul acestui sistem sunt adunate informații foarte detaliate, de exemplu: dimensiunile autovehiculelor, tipurile acestora, numărul de osii, greutățile pe osie, greutatea totală a autovehiculului........

Astfel, Hight Speed WIM reprezintă un sistem de cântărire de mare viteză, care se instalează pe drumuri naționale pentru a cântări vehicule la viteze normale (20-130 km/h), pentru a detecta, număra și clasifica vehiculele. Clasa de încredere a acestui sistem este de 95%. Hight Speed WIM se utilizează pentru verificarea camioanelor supraîncărcate înainte de o zonă de control echipată cu cântărire statică sau Low Speed WIM. Low Speed WIM este un mijloc de cântărire pe fiecare osie a autovehiculului. Oferă un mijloc de măsurare a greutății autovehiculelor, fie static fie dinamic, aplicând limitele de greutate a vehiculelor sau prevenirea supraîncărcării pentru companiile de transport.

Notă: în teză este referința la sursa bibliografică (vezi pagina 147)

sectorul financiar .....

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UE dezvoltă o relație din ce în ce mai strânsă cu Republica Moldova, pentru integrarea economică treptată și o aprofundare a cooperării politice. Moldova este o țară partener în cadrul Politicii Europene de Vecinătate (PEV), cu un plan de acțiune comun UE-Moldova bazat pe Acordul de Parteneriat și Cooperare. Moldova este, de asemenea un participant activ în programul Parteneriatului Estic al UE pe ambele piste multilaterale și bilaterale, și a parafat Acordul de Asociere și Acordul de Liber Schimb Cuprinzător și Aprofundat în noiembrie 2013.

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Sursa 3. ELEMENTE DE MONITORIZARE A TRAFICULUI RUTIER.

Sursa 3. ELEMENTE DE MONITORIZARE A TRAFICULUI RUTIER.

PARTEA I - TEHNICI DE CONTROL, Mircea BĂDESCU, Carmen PURCAR,

2019

2.3 Low Speed WIM/Hight Speed WIM

Sistemul Weight in Motion (WIM) utilizează senzori piezoelectrici sau quartz în covorul asfaltic pentru a cântări și a clasifica vehiculele. Cu ajutorul acestui sistem sunt adunate informații foarte detaliate, de exemplu: dimensiunile autovehiculelor, tipurile acestora, numărul de osii, greutățile pe osie, greutatea totală a autovehiculului.

Hight Speed WIM - sistem de cântărire de mare viteză. Este instalat pe autostrada sau drumuri naționale pentru a cântări vehicule la viteze normale (20 - 130 km/h), pentru a detecta, număra și clasifica vehiculele. Clasa de încredere a acestui sistem este de 95 %. Hight Speed Wim este în general utilizat pentru verificarea camioanelor supraîncărcate înainte de o zonă de control echipată cu cântărire statica sau LS - WIM. Low Speed WIM - este un mijloc de cântărire pe fiecare osie a autovehiculului. Oferă un mijloc de măsurare a greutății autovehiculelor, fie static fie dinamic, aplicând limitele de greutate a vehiculelor sau prevenirea supraîncărcării pentru companiile de transport.