

Periodic roadworthiness tests and technical roadside inspections in Lithuania

### Introduction

**Main objectives** pursued by the adoption of the Directive 2014/45/EC:

# Road safety

The United Nations and the European Union have set out a 'zero-vision' objective where every country should move close to zero fatalities in road transport by 2050. With a view to attaining that objective, vehicle technology is expected to contribute greatly to improvement of the safety record of road transport.

# Environmental protection

Vehicles with malfunctioning emission control systems have a greater impact on the environment than properly maintained vehicles. Therefore, a periodic regime of roadworthiness tests would contribute to improving the environment by reducing average vehicle emissions.

# **Principles:**

- 10 private authorized companies located on a territorial basis.
- Authorized PTI stations of other EU countries (Germany) can also perform technical inspection of vehicles registered in Lithuania.
- These companies are not allowed to generate any income from repairing vehicles.
- Each PTI station has limited number of PTI inspectors, and this number is regulated by Lithuanian Transport Safety Administration (LTSA).
- Association Transeksta is training inspectors, improving database (CTADB), provides methodological assistance for inspectors.
- LTSA is supervising PTI centers and inspectors.
- No competition between PTI companies.
   System is practically closed for new companies.
- Prices are regulated by LTSA from this year.
- Almost impossible to withdraw authorization for violations
- CTADB system is managed and owned by association Transeksta.



A network of 69 technical inspection centers and stations has been established so that any vehicle owner could perform periodical technical inspection within 30 km.

### **Methods**

#### **Article 6 (Contents and methods of testing)**

- 1. For vehicle categories falling within the scope of Directive (exception of categories L3e, L4e, L5e and L7e with an engine displacement of more than 125 cm3), Member States shall ensure that roadworthiness tests cover at least the areas referred to in point 2 of Annex I:
- (0) Identification of the vehicle;
- (1) Braking equipment;
- (2) Steering;
- (3) Visibility;
- (4) Lighting equipment and parts of the electrical system;
- (5) Axles, wheels, tyres, suspension;
- (6) Chassis and chassis attachments;
- (7) Other equipment;
- (8) Nuisance;
- (9) Supplementary tests for passenger-carrying vehicles of categories M2 and M3.
- 2. For each area referred to in paragraph 1, the competent authorities of the Member State or the testing center shall carry out a roadworthiness test covering at least the items referred to in point 3 of Annex I, <u>using the recommended or an equivalent method</u> approved by a competent authority applicable to the testing of those items, as set out in point 3 of Annex I. The test may also include a verification as to whether the respective parts and components of the vehicle correspond to the required safety and environmental characteristics that were in force at the time of approval or, if applicable, at the time of retrofitting.

The tests are carried out using techniques and equipment currently available <u>without the use of tools to dismantle or remove</u> any part of the vehicle.

### **Deficiencies**

### **Article 7 (Assessment of deficiencies)**

- 1. For each item to be tested, Annex I provides a minimum list of possible deficiencies and their level of severity.
- 2. Deficiencies that are found during periodic testings of vehicles shall be categorized in one of the following groups:
- (a) **minor deficiencies** having no significant effect on the safety of the vehicle or impact on the environment, and other minor non-compliances;
- (b) **major deficiencies** that may prejudice the safety of the vehicle or have an impact on the environment or put other road users at risk, or other more significant non-compliances;
- (c) **dangerous deficiencies** constituting a direct and immediate risk to road safety or having an impact on the environment which justify that a Member State or its competent authorities may prohibit the use of the vehicle on public roads.
- 3. A vehicle having deficiencies falling into more than one of the deficiency groups referred to in paragraph 2 shall be classified in the group corresponding to the more serious deficiency. A vehicle showing several deficiencies within the same inspection area as identified in the scope of the test referred to in point 2 of Annex I, may be classified in the next most serious deficiency group if it can be demonstrated that the combined effect of those deficiencies results in a higher risk to road safety.

### **Deficiencies**

• In the case of minor deficiencies only, the test shall be deemed to have been passed, the deficiencies shall be rectified, and the vehicle shall not be re-tested.

If police or LTSA inspector stops vehicle and finds out the same minor deficiencies that were determined during PTI then the driver will be fined.

 In the case of major deficiencies, the test shall be deemed to have been failed. The Member State or the competent authority shall decide on the period during which the vehicle in question may be used before it is required to undergo another roadworthiness test. The subsequent test shall take place during a period defined by the Member State or competent authority but not later than two months following the initial test.

<u>Lithuania has chosen that initial test should be passed in 1 month. Also if during PTI 10 or more major deficiencies are found, then the vehicle is not retested, but the PTI of original scope has to be passed.</u>

• In the case of dangerous deficiencies, the test shall be deemed to have been failed. The Member State or the competent authority may decide that the vehicle in question is not to be used on public roads and that the authorization for its use in road traffic is to be suspended for a limited period of time, without requiring a new process of registration, until such time as the deficiencies are rectified and a new roadworthiness certificate is issued testifying that the vehicle is in a roadworthy condition.

PTI inspector informs owner that the vehicle can not be used on public roads.

### Roadworthiness certificate

#### **Article 7 (Assessment of deficiencies)**

Testing centers which have carried out a roadworthiness test on a vehicle issue a roadworthiness certificate for that vehicle indicating at least the standardized elements of the corresponding harmonized Union codes as laid down in Annex II:

- (1) Vehicle Identification Number (VIN number or chassis number)
- (2) Registration plate number of the vehicle and country symbol of the State of registration
- (3) Place and date of the test
- (4) Odometer reading at the time of the test, if available
- (5) Vehicle category, if available
- (6) Identified deficiencies and their level of severity
- (7) Result of the roadworthiness test
- (8) Date of the next roadworthiness test or date of expiry of the current certificate, if this information is not provided by other means
- (9) Name of testing organization or center and signature or identification of the inspector responsible for the test
- (10)Other information



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- (9) Name of testing organization or center and signature or identification of the inspector responsible for the test
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### TECHNINĖS APŽIŪROS REZULTATŲ KORTELĖ (ATASKAITA) NR. 099-999999 (Išrašas iš Centrinės techninės anžiūros duomenu bazės)

(3)Technines apžiūros (toliau-TA) atlikimo vietadinija: 099/1

Kasos dok.Nr.: G2

(3)TA atlikimo data laikas: 2018-03-05 08:00

Paslauga, kaina: TA XX.XX Eur

(9)TA atliko: 0987

#### TRANSPORTO PRIEMONÈS DUOMENYS

(2)Transporto priemonés (toliau-TP)

valstybinis Nr. ir šalies kodas LVK000 (LT) Registracijos liudzijmo Nr. E99999

Pirmosios registracijos data 2012-04-19 Pirmosios registracijos LR data 2014-08-09

(I) TP identifikavimo Nr. WDB2110651A000000

(10) Ypatingos žymės -

Marké / modelis MERCEDES BENZ / E320 (5) Kategorija ir klasé / Kodas M1

TP paskirtis -

(Energijos) degalų rūšis BENZINAS ETPN/LEN E1\*98/14\*0183\*00

(4) Rida (km) 123456

Kilmės šalis VOKIETIJA Parengtos ekspl. TP masė (kg) 1645 Tech. didž. TP masė, (kg) 2170

Draudimo poliso Nr. AAA000000

TA periodiškumas 24 mėn

TP valdytojas -Mokesčiai -

#### TECHNINIŲ REIKALAVIMŲ ĮVERTINIMAS

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(7) IŠVADA

TRANSPORTO PRIEMONĖ ATITINKA/ NEATITINKA TECHNINIUS REIKALAVIMUS\*.

Pastabos: -

# **Testing centers**

Requirements for PTI centres and their stations:

- Testing centers have to ensure the objectivity and the high quality of the roadworthiness tests.
- Centers should be able to do periodical technical inspection for all types of vehicles (L1, L1e, L2, L2e, L3, L3e, L4, L4e, L5, L5e, L6e, L7e, M1, M2, M3, N1, N2, N3, O1, O2, O3, O4).
- Centers and stations must be connected to CTADB system.
- Station production base has to meet hygiene, fire and other safety requirements, risk assessment must be performed every 2 years.
- Requirements for premices: sufficient heigt and width, straight PTI lines, entrace radius, ventilation systems, separate room for inspector to formalize procedure.
- Minimum requirements concerning roadworthiness facilities and test equipment (2014/45/EC Annex 3) must be met.
- Lithuanian standart LST EN ISO/IEC 17020:2005 as A type control institution is applied. Also it is recommended to implement a quality management system in accordance with the requirements of the ISO 9000 series of standards.



# **PTI** inspectors

# Minimum requirements concerning the competence, training and certification of inspectors (Annex IV):

### 1. Competence

- (a) At least a higher (higher non-university) education in the field of transport or mechanical engineering in the field of technological sciences.
- (b) At least half a year (persons with higher university education) or one year (persons with higher or higher non-university education) of practical work related to the assessment of the technical condition of vehicles, maintenance, repair or operation.

### 2. Initial and refresher training

- (a) Initial training and appropriate examination.
- (b) Refresher training and appropriate examination.

### 3. Certificate of competence is issued by LTSA

### Additional requirements:

- 16 hours periodic refresher training each year
- To be entitled to drive vehicles of categories A, B and C.
- Salary can not depend on the quantity of periodical technical inspections.
- · Good reputation.

# PTI inspectors (modification of roadworthiness test)

The results of a roadworthiness test may only be modified, where appropriate, by the supervising body, or in accordance with the procedure set up by the competent authority, if the findings of the roadworthiness test are manifestly incorrect.

### LTSA has established a procedure:

- 1. If vehicle owner doesn't agree with the result of roadworthiness test then immediately (he can not leave PTI station) an appeal to the director of PTI center must be written. This appeal must be examined emediately and re-inspection has to be done at the same day.
- 2. If an appeal is not satisfied then vehicle owner can write an appeal to LTSA (no later than three days). In this case a commission from LTSA and Transeksta experts is formed and reinspection has to be done no later than in 20 days.

# **Examination procedure of PTI inspectors**

- All candidates who apply for a position of an inspector shall be examined by the Board of Examiners, consisting of delegated representatives of the LTSA and the Transeksta Association.
- Qualification exam consist of theoretical and practical elements.
- Each examinee is given 2 hours to test theoretical knowledge and 40 minutes for practical skills.
- Theoretical knowledge is tested in written form or by computer. The test consists of 30 questions.
- During practical examination, the real PTI is simulated, and candidate must fill in roadworthiness certificate.
- During the practical skills test, each examinee must test two vehicles of different classes or categories.
- The examinee's theoretical knowledge and practical skills are assessed on a 10-point scale (10 points is the highest grade). The inspection of each vehicle is assessed separately. If the examination of at least one vehicle is assessed with less than 7 points, the practical part of the test is considered not to have been passed. The exam is passed if the examinee received at least 7 points from each part.
- The PTI inspector must pass the knowledge refresher test in the Administration at least once in 2 calendar years from the date of granting the right to perform the mandatory roadworthiness test.

# **0. IDENTIFICATION OF THE VEHICLE**





# 1. BRAKING EQUIPMENT







# 2. STEERING





# 3. VISIBILITY



# 4. LAMPS, REFLECTORS AND ELECTRICAL EQUIPMENT





# 5. AXLES, WHEELS, TYRES AND SUSPENSION







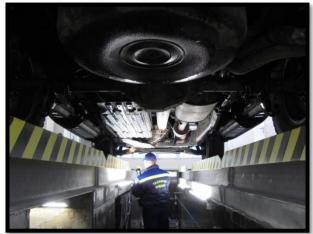


# **6. CHASSIS AND CHASSIS ATTACHMENTS**





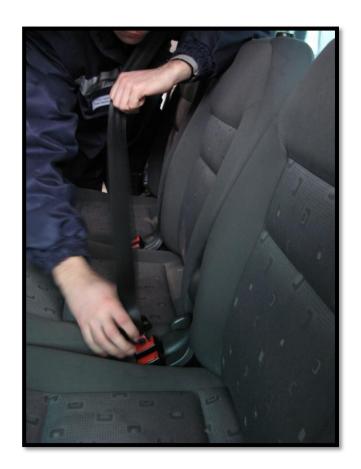




# 7. OTHER EQUIPMENTS







# 8. NUISANCE





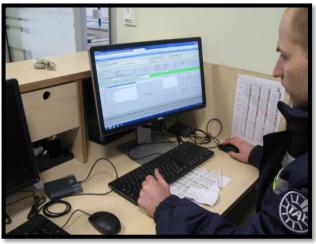


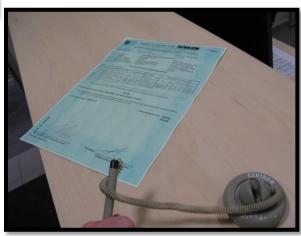


# 9. SUPPLEMENTARY TESTS FOR PASSENGER CARRYING VEHICLES M2, M3



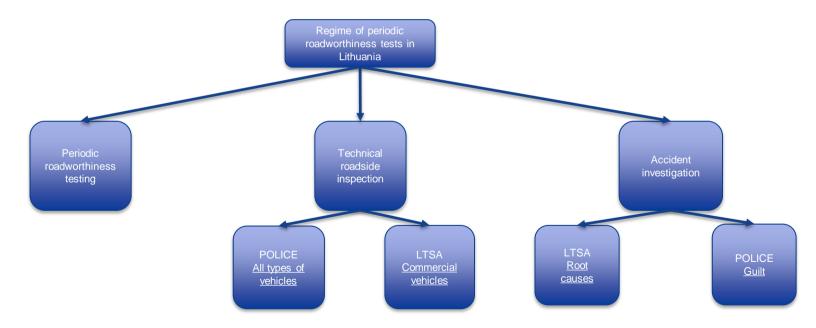




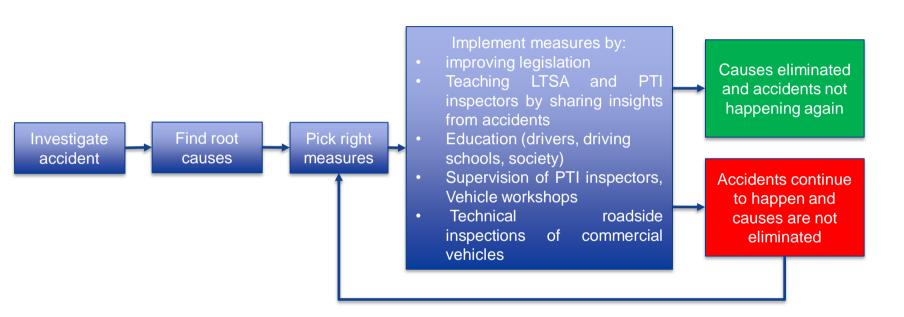


# Regime of periodic roadworthiness tests of vehicles in Lithuania

(3) Roadworthiness testing is a part of a wider regime designed to ensure that vehicles are kept in a safe and environmentally acceptable condition during their use. That regime should cover periodic roadworthiness testing of vehicles and technical roadside inspection of vehicles used for commercial road transport activities, as well as providing for a vehicle registration procedure allowing for the suspension of a vehicle's authorisation to be used in road traffic where the vehicle constitutes an immediate risk to road safety. Periodic testing should be the main tool to ensure roadworthiness. Technical roadside inspections of commercial vehicles should merely be complementary to periodic testing.

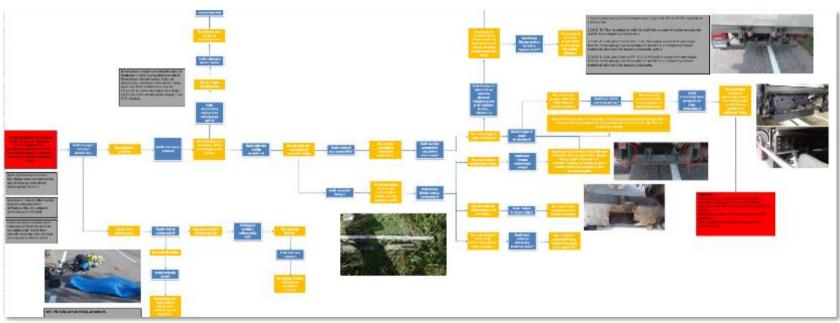


# Technical inspection during accident investigation



# **Technical inspection during accident investigation**

From year 2018 LTSA started to investigate fatal road accidents to find out root causes. Accidents are investigated using one of LEAN tools – 5 why method.



# Lithuania:

	Vehicles	First PTI	Thereafter		
<u>~</u>	Vehicle of category M1	36 months after first registration*	Every 24 months		
ு	Vehicle of category N1	24 months after first registration**	Every 12 months		
	Vehicles of categories M2 and M3	12 months after first registration	Every 6 months***		
	Vehicles of categories N2, N3, O3 and O4	12 months after first registration	Every 12 months		
	Vehicles of category T5 the use of which mainly takes place on public roads for commercial road haulage purposes:	36 months after registration****	Every 24 months		

# Lithuania (not regulated by Directive 2014/45/EU):

	Vehicles	First PTI	Thereafter
ક <u>્ત્ર</u>	Vehicles of categories L1, L1e, L2, L2e, L3, L3e, L4, L4e, L5, L5e, L6e and L7e	36 months after first registration	Every 24 months
	Vehicles of categories O1 and O2 (trailers and semi trailers)	36 months after first registration	Every 24 months
STATE OF THE PARTY	Heavy ATV*	24 months after first registration	Every 24 months
ADR	Vehicles of categories N2, N3, O3 and O4, carrying dangerous goods	-	Every 12 months
	Camper**	24 months after first registration	Every 24 months
	Ambulance***	12 months after first registration	Every 12 months
M	Vehicles used for driving lessons****	-	Every 12 months first 10 years after the date on which the vehicle was first registered, thereafter – every 6 months
TAXI	Taxi	-	Every 12 months first 5 years after the date on which the vehicle was first registered, thereafter – every 6 months
H00000	Vehicle of historical interest***	-	Every 60 months

# Lithuania require to undergo a roadworthiness test before the dates:

- ➤ after an accident affecting the main safety-related components of the vehicle, such as wheels, suspension, deformation zones, airbag systems, steering or brakes – decision made by Police;
- when the safety and environmental systems and components of the vehicle have been altered or modified;
- ➤ when road safety is seriously affected during the roadside inspection, decision made by Police or LTSA.

### **Technical inspection information system (TAIS)**

### **Centralized technical inspection database (CTADB)**

The association of companies for vehicle technical inspection "Transeksta" combine all the companies in Lithuania working in the field of State technical inspection of road vehicles. It provides to its members with consulting and methodical help, represents their interests both in the country and abroad. The association "Transeksta" for more than 8 years is developing new standards, analyzing and resolving problems, administering TAIS CTADB and Network, developing TAIS CTADB specification and application, developing news system, introduce technological innovations, communicating with measurement systems suppliers, analyze the inspection statistics and the quality of inspections.

There are 10 technical inspection companies in Lithuania which have set up 69 technical stations in total with up to 141 technological lines all over the country.

<u>www.vta.lt</u> web page represents Lithuanian Association of companies for vehicle technical inspection "Transeksta".

Centralized technical inspection database (CTADB) based on Oracle SQL and Java technologies and developed for real-time vehicle technical inspection. CTADB has about 600 active users. Association "Transeksta" is the main CTADB administrator and developer. CTADB performs about 1.5 million procedures every year. All technical stations computers, servers and CTADB system servers are connected to MPLS VPN network. Vehicle inspection system is centralized what makes it possible to see all real-time changes. CTADB communicates and exchanges data with other institutions and information systems.

#### CTADB data

#### **CTADB** stores:

- Vehicle data (VIN, registration plate number, first registration date, registration document number, mark, model, fuel type, body type ...);
- Vehicle inspection services:
  - Vehicle technical inspection data (exhaust emission, brake system and light measurements, technical inspection date and time...);
  - Expertise inspection data (vehicle technical data, type approval document numbers, vehicle photos with all the details ...);
  - Type approval inspection (mark, model, VIN, fuel type, ecological requirements, blank number ...);
- Vehicle technical inspection data from other countries (Germany)
- Bookkeeping (date and time of financial transactions, service costs, checks, invoices ... );
- Photos of the vehicle and/or identified deficiencies;
- · One day permission data to arrive to roadworthiness;
- Vehicle use limitation/restriction data after accident or technical inspection abolitions on the road made by the Police officers;
- Technical inspection control components: suspicious vehicle data, tools for analyzing inspection processes.

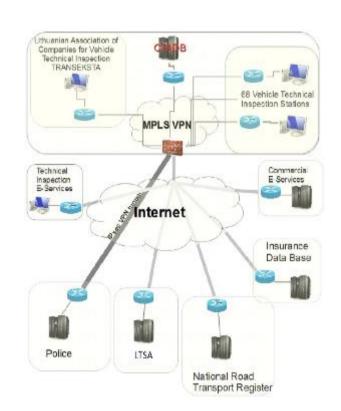
#### TAIS CTADB Network

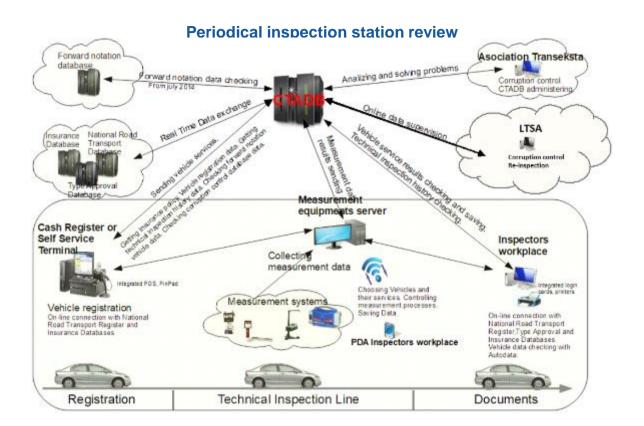
TAIS CTADB, technical inspection stations, administrative computers and servers are in virtual private network (VPN) (Pic. 3). Connections from Police, LTSA, National Road Transport Register and Insurance Data Base are secured by personal certificate, username and password. Police database is connected to TAIS CTADB through VPN tunnel, all other connections are allowed through internet only from defined IP addresses.

The Association Transeksta is also administering and granting permissions for the VPN users to reach TAIS CTADB from outside MPLS VPN network.

All requests between TAIS CTADB and National Road Transport Register and between TAIS CTADB and Insurance Database are made using HTTPS data stream with XML data packets.

Data in CSV and XML data packets can be changed depending on the needs and agreed technical documentation. All attributes, data and error messages are specified.





# A national contact point in Lithuania





The State Enterprise <u>REGITRA</u> is a national contact point and acts under the <u>Ministry of the Interior of the Republic of Lithuania</u>

The Enterprise keeps the Register of Vehicles of the Republic of Lithuania and the Register of Vehicle Drivers of the Republic of Lithuania.

#### Main activities:

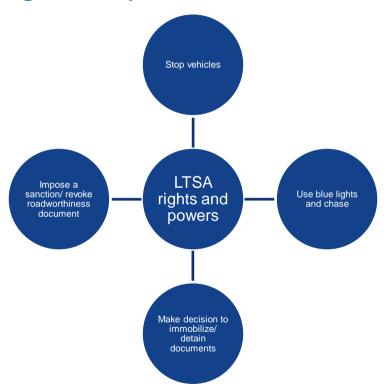
- registration of vehicles
- examination of drivers
- issuance of driving licenses

The Enterprise provides data from registers about the motor vehicle fleet and driving licenses in accordance with the legal acts regulating the activities of registers. Furthermore, the Enterprise also renders compulsory motor third party liability insurance mediation services.

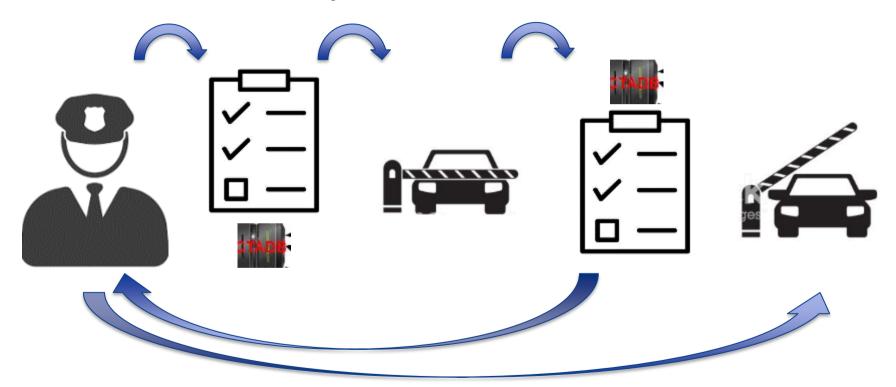
Video "Maybe we will agree?"

https://www.youtube.com/watch?v=Altl8bicQFQ&feature=emb\_title

# **Technical RSI – LTSA rights and powers**



# **Technical RSI – Detailed inspection**



# Thank you for your attention!



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