CITA Topic Area E meeting Stuttgart, 27<sup>th</sup> of March 2024



## Supervision of PTI in Slovakia (new procedures)



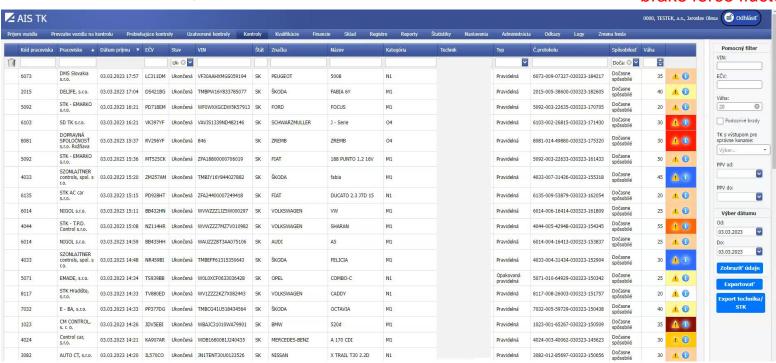
Jaroslav Olexa, head of supervision dpt.

#### The information system



#### Since April 2016 extended data transfer from brake testers

service brake parking brake final values brake force imbalance brake force fluctuation



- braking data final values plus intermediate values
- without the possibility of any intervention by the technician...



#### since 2022: video recording of the brake tester monitor

video sample in the IT system AIS TK (available only to supervisory authorities)



possibility to watch not-transmitted measurements as well



### The use of data in the analysis of the technician's work on brake tester

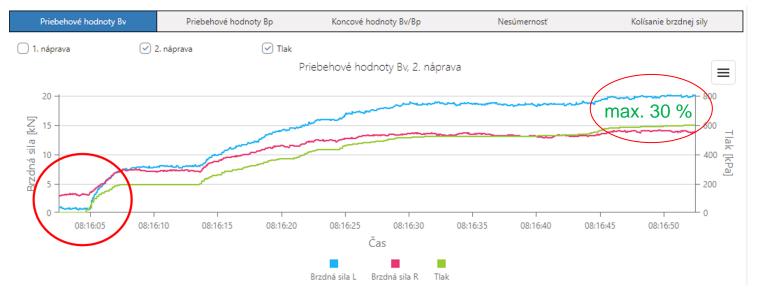
measurement of brake force imbalance in **not-transmitted** measurements (parameter in red)



Vehicle (bus) of the **driving school** (major defect on rear brakes - brake force imbalance over 30%)



transmitted measurements (first value of brake force on right wheel is almost 3 kN)



Náprava	Brzdná s.L [kN]	Brzdná s.P [kN]	Ovládacia s.L [N]	Ovládacia s.P [N]	Tlak [kPa]	Max. tlak [kPa]	Čas L	Čas P
Q	Q	Q			Q	Q	Q 🙃	Q 🙃
2	3	6			0	1038	26.09.2023 08:16:02.536	26.09.2023 08:16:02.536
2	,dB	<i>J</i> 6			0	1038	26.09.2023 08:16:02.586	26.09.2023 08:16:02.586
2	0.83	2.96			0	1038	26.09.2023 08:16:02.636	26.09.2023 08:16:02.636
2	1.04	2.96			0	1038	26.09.2023 08:16:02.686	26.09.2023 08:16:02.686
2	1.04	3.08			0	1038	26.09.2023 08:16:02.736	26.09.2023 08:16:02.736

Braking force at the beginning of the measurement caused by the intervention of the vehicle owner in the braking system (to **decrease** brake force imbalance **under** 30%)



Is it sufficient to transmit only **the final data** from brake testers?

 No, it is not. If only the final values were recorded, it would not be possible to detect the fraudulent behaviour of the technician

**Intermediate values** from brake tester and **video** (from the brake tester and from the PTI lanes) provide us wider possibilities of analysis and demonstration of faulty procedure of the technician (in this case together with vehicle owner).

#### mSTK - a mobile application for PTI developed by TESTEK



#### Smart devices in the process of PTI: since 2020

- scanning and transferring data from OBD (vehicle with first reg. 2012 and further)
- mobile application for deceleration measurement (mandatory)
- scan (shoot) the vehicle's VIN + mileage (to exclude bringing identical vehicles for PTI), dashboard (with indicators), production label, pictures marked with the GPS coordinates
- a set of mandatory slides





#### mSTK - a mobile application for PTI developed by TESTEK



In 2023 we introduced **mandatory** picture of dashboard

results: (an attempt to cover up an airbag malfunction)



#### mSTK - a mobile application for PTI developed by TESTEK



In 2023 we introduced mandatory picture of dashboard

results: (an attempt to cover up an ABS malfunction – regular inspection + 3 repeated inspection)









In 2023 we **intensified** the re-inspection use as one of methods of supervision

#### reason:

- data and video analysis has its limits (brakes, lights...)
- technicians have adapted their behaviour to the presence of cameras on PTI lines, the number of brake measurement frauds has decreased significantly
- what is not visible on the cameras is not checked as thoroughly



#### What can't be **seen** on the cameras?

#### corrosion











#### What can't be **seen** on the cameras?

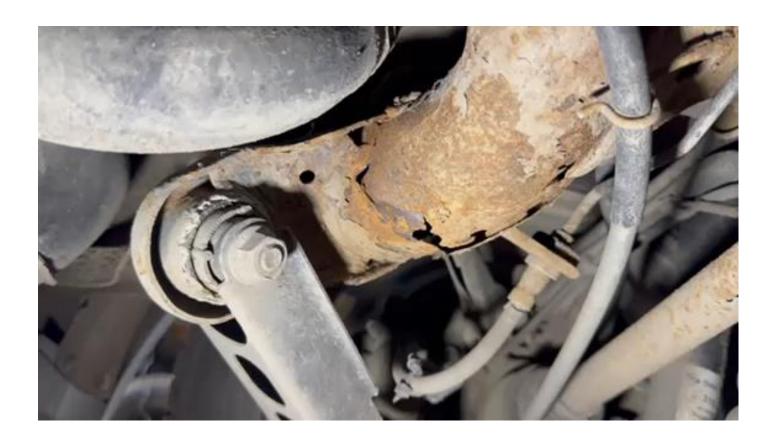
corrosion





#### What can't be **seen** on the cameras?

corrosion





#### What can't be **seen** on the cameras?

corrosion (amateur repair)



#### Re – inspections

### TES TEK

#### What can't be **seen** on the cameras?

dipped beam headlights







#### What can't be **seen** on the cameras?

rear view mirrors

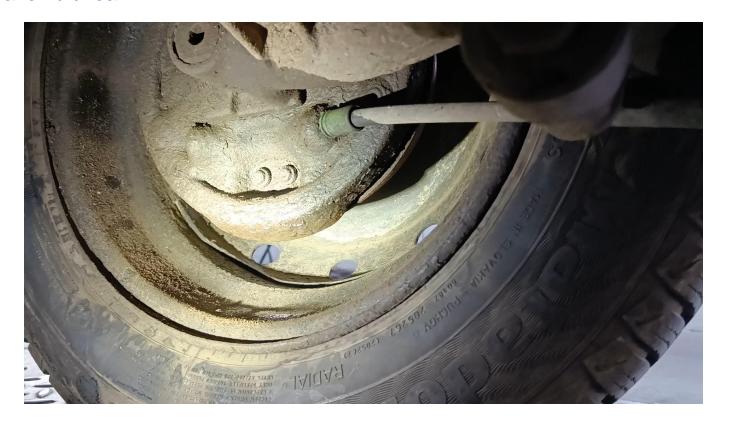


#### Re – inspections

### TES TEK

#### What can't be **seen** on the cameras?

brake fluid leak





#### What can't be **seen** on the cameras?

absence of an airbag (activated) + corrosion



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#### Consequences of more consistent supervision



- Some PTI station operators decided for resistance against the supervision, because they see the anti-fraud measures as a disadvantage for them in the free market competition – they are trying to achieve a reduction of technical means and cancellation of supervision performed by TESTEK. The supervision impartiality, transparency and equal attitude to all PTI operators are crucial to demonstrate that the supervision can establish the fair situation on the PTI market for everyone.
- In a country without supervision, PTI fraud will grow and the reputation of PTI may be destroyed for very long period.
- If the EU would like the Member States to recognize PTIs performed on their vehicles in other Member States, the effective supervision must be ensured in every Member State. There should be measurable criteria for effectiveness of the national supervisory systems. Otherwise, the vehicle owners would prefer the possibility to get the positive PTI result in countries with "softer" supervision.

Support by a recognized international organization like CITA is crucial, especially for countries in which the supervision's role is questioned. We propose to update the CITA Rec. No. 19 "ANTI-FRAUD MEASURES", reflecting the recent progress in supervisory methods.

#### THE END



### Thanks for your attention

Questions?

link to download presentation with videos

https://1drv.ms/f/s!AskVyg-5iEGKhKFj6kMtl5hXR-kC6w?e=CjjUme

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