Regional Conference for AFRICA



4 - 6 MARCH 2014

Cape Town, South Africa



INTERNATIONAL MOTOR VEHICLE INSPECTION COMMITTEE

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Using Technology to Enhance the Quality of, and Prevention of Corruption in Ghana

Michael Larson

Sales Director, BM Autoteknik, Denmark

BM Autoteknik A/S

BM TEST EQUIPMENT - the safe choice

BM Autoteknik

A/S ...expertise from

more than 35 years of business

- Family owned company, founded in June 1977.
- 50 employees in Denmark, England and Germany. Member of CITA.
- In-house R&D, Manufacturing, Sales and After Sales Support.
- Largest manufacture of Test line systems in North Europe.
- Export to 30 countries Worldwide.
- Supplied more than 10.000 systems.





BM in Africa



Morocco



Sierra Leone



Ghana



AFRICA

Sudan



Kenya



Agenda of this presentation

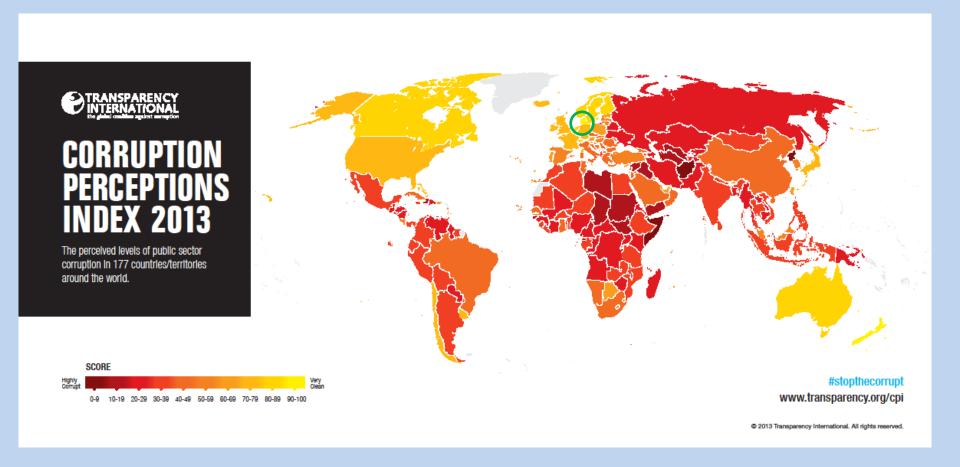


- 1. Practical examples of fraud and corruption.
- 2. The Benefit of using advanced IT systems in PTI
- 3. A quick introduction to BM's IT system; BM FlexCheck.
- 4. Define the fraud fighting strategy via "Setting the scene".
- 5. Examples of practical fraud fighting via PTI IT system.



BM TEST EQUIPMENT - the safe choice

Corruption in Denmark?



Case 1 - Busted



Af Christian Hansen - 30/08-13 15:10

Omfattende snyd med synsrapporter

En synsmand har godkendt 85 biler uden at syne dem. Han udfyldte blot



Gamle biler, der måske ellers ikke ville have klaret et obligatorisk syn, kører sandsynligvis rundt de danske veje

 One PTI inspector passed 85 vehicle by just filling out the inspection report manually, without conducting any sort of inspection.

Case 2 – An investigation by the Danish Department of Transport





Synshaller sjusker med bilsyn

Af Mikkel Sander Rydzy, miry@berlingske.dk,Fredag den 27. februar 2009, 10:53

Næsten hver femte synshal er ikke gode nok til at tjekke bilerne for fejl. Det viser opgørelser fra den kontrol, Færdselsstyrelsen foretager af landets synsvirksomheder.

Næsten hver femte synshal i Danmark sjusker med bilsyn og lader biler med alvorlige defekter slippe ud på de danske veje.

Det afslører Forbrugerrådets magasin TÆNK, der har fået aktindsigt i Færdselsstyrelsens kontrol med synshallerne.

Færdselsstyrelsen foretager løbende kvalitetstjek af de danske synshaller. Det sker ved uanmeldte besøg, hvor de tjekker biler, der netop har været gennemsynet i synshallen, efter igen.

Opgørelserne, som TÆNK er kommet i besiddelse af, viser, at 17 procent af de kontrollerede synshaller i tredje kvartal af 2008 fik karakteren C – den laveste karakter, der står for 'ikke tilfredsstillende'.

 Man skal huske, at der kan være forskel på de enkelte synsassistenters skøn, men en gennemtæret badbro

kan man naturligvis ikke overse. Der er mennesker, som træffer rigtige afgørelser, og som går meget op i deres arbejde, og så er der andre, der ikke er helt så kvikke, siger FDM's direktør, Thomas Møller Thomsen til

Antallet af synsvirksomheder, der har fået karakteren C, har det seneste år været stigende. I 2007 fik 149 forskellige synshaller dumpekarakteren C. 66 af disse fik et C mindst to gange. Karakterer ikke offentlige

Mens Fødevarestyrelsen flittigt uddeler sure og glade smileys til landets spisesteder, vil Færdselsstyrelsen ikke ud med de karakterer, de giver på baggrund af deres kontrolbesøg.

 Karaktererne, eller rettere tilsynsresultaterne, som synsvirksomhederne får af vore inspektører, offentliggøres ikke, i hvert fald ikke i øjeblikket. Det er valgt fra for at tage det hensyn, at den private borger Almost 1 in 5 inspection companies obtain the lowest rating "C".

Vice Chairman of the Danish Counsel for Higher Road Safety, Mr. Mogens Wilhert said:

"There are examples of agreements made between those who bring the vehicles to the PTI station and the PTI operators.

If a Used Car Dealer delivers 10 vehicles per month, then the PTI station will off course offer a "special good" service to such a customer....."

Case 3 – The Danish PTI Industries view



Fusk med bilsyn breder sig

Onsdag den 17. januar 2007, 07:00

Den gamle spand og det sminkede lig nyder godt af det private marked for bilsyn.

En sand eksplosion i antallet af synshaller betyder nemlig, at køretøjer med alvorlige fejl kører smertefrit igennem det lovpligtige syn, lyder det fra branchen selv.

Det skriver Århus Stiftstidende onsdag.

I dag er der knap 350 synssteder for personbiler mod omtrent 100, da æraen for Statens Bilinspektion stoppede for to år siden.

Jesper Bech fra Ebeltoft Bilsyn har kendskab til flere episoder, hvor biler med alvorlige fejl er godkendt hos en konkurrent.

"Det underbygger selvfølgelig, at der er nogle steder, der snyder og bedrager," siger Jesper Bech til Århus Stiftstidende.

Dansk Lokal Syn, der er en sammenslutning af 37 mindre synsvirksomheder, advarer mod et skred i konkurrencen

"I dag kan synsstederne alle sammen tilbyde den samme service og tilgængelighed. Det vil sige, at man skal

finde et nyt konkurrenceparameter. Og det er uheldigvis ved at blive kvaliteten af synene," siger sammenslutningens formand, Niels Rask Larsen.

Dansk Lokal Syn hører jævnligt om medlemmer og mekanikere, der vender tommelfingeren ned på et køretøj ved eksempelvis et uforpligtende synstjek. For få timer efter at se køretøjet godkendt i Færdselsstyrelsens it-system.

I frustration over situationen tipper synssteder Færdselsstyrelsen, der har kontrollen med bilsyn, om de mistænkelige syn

"Det sker jævnligt - fra alle parter i øvrigt. Fra køretøjets ejer, fra værksteder og fra synsvirksomheder i en blandet forening," bekræfter chefkonsulent Leif Lorenzen.

Bilisternes vagthund, FDM, der også selv syner biler i dag, kender godt til rygterne om lette syn.

"Jeg ved ikke, om det er blevet værre. Jeg håber det ikke, for det vil være trist," siger teknisk chef Per Antvorskov.

Fra branchen lyder der nu et ønske om mere hemmelige kontroller.

Kilde: Århus Stiftstidende

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Jesper Bech Ebeltoft vehicle inspection:

"We know several cases, where vehicles with serious defects have been passed by a competitor. Clearly this documents, that some PTI stations are cheating and deceiving".

 The PTI industry requests more secret checks and audits to be done by the authorities (ghost inspections).

Case 4 – National TV under cover



Morten Spiegelhauer, vært i 'Operation X - fup på fire hjul', giver sig for at være brugtvognshandler for på den måde at undersøge branchen. Og det viser sig, man kan betale sig fra at få synet biler med alvorlige fejl, uden at de bliver noteret i synsrapporten.

Med skjult kamera afslører "Operation X", hvordan synsmedarbejdere kan syne tre-fire biler om dagen mod bestikkelse og på den måde tjene op til 20.000 kroner.

En synsmedarbejder, ansat ved Danmarks største synsvirksomhed APPLUS, har synet en række af Operation X's biler mod betaling. Konfronteret med bestikkelsessagen siger Andreas Roost, der er leder af teknisk rådgivning i Applus:

"Det er helt uacceptabelt og noget, vi griber ind over for med det samme. Sagen betragter vi som meget alvorlig."

Nysynet, men fuld af feil

Ifølge forbrugerstyrelsen er flere brugtvognsforhandlere blevet taget i

at sælge nysynede biler med alvorlige fejl. Og flere gange inden for de seneste år er synsmedarbejdere blevet mistænkt for at have modtaget bestikkelse.

Både brugtvognsforhandlere og synsfolk kan tjene mange penge på et samarbejde, hvor biler med fejl bliver udstyret med flotte synspapirer og solgt videre til intetanende kunder.

Morten Spiegelhauer køber i programmet selv en række brugte biler for på den måde at få et indblik i, hvordan der snydes, ikke kun med syn, men også med for eksempel forkert kilometertal.

Minister vil se på sagen

Flere firmaer i Danmark har specialiseret sig i at stille på brugte bilers kilometertal, en praksis, der er fuldt lovlig, så længe man oplyser om det forkerte kilometertal, når man sælger bilen videre.

Transport- og energiminister Flemming Hansen vil nu undersøge, om det fortsat skal være lovligt at stille på kilometertælleren.

"Der er ingen grund til at stille på kilometertallet, med mindre man vil snyde. Jeg vil derfor se, hvad vi kan gøre for at stoppe det, for noget vil vi gøre" - understreger han.

Antallet af klager over brugte biler og motorcykler er steget til det dobbelte de seneste år, og forbrugerstyrelsen får hver dag henvendelser fra danskere, der føler sig godt og grundigt snydt af brugtvognsforhandlere rundt om i landet.

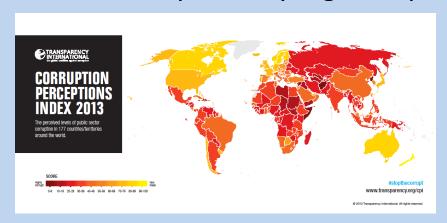
National TV station program "Operation X" goes under cover:

- PTI operators can make up to DKK 20.000 (Euro 2.500) per month on such scam.
- Also Car Dealers makes a lot of money from using corruption to ensuring PASS on vehicles with serious defects."



Is there Corruption in Denmark?

Within PTI: "YES" – and it's probably a global problem.



Issues documented:

- 1. Traditional corruption between Driver and Operator.
- 2. Fraud without corruption involved.
- 3. A high financial incentive drives corruption.
- 4. The PTI industry itself, requires better enforcement by the Authorities to ensure "fair play".

The Benefit of using advanced IT systems in PTI



Commercial and QA benefits:

- Reduced PTI inspection time, increasing throughput and turnover.
- More consistent PTI procedures no manual input of test data.
- Reduction of the training period for new staff.
- Faster adaption of PTI to legislation changes, and new vehicle types.

Fraud and Corruption fight benefits:

- Prevention
- Detection



A Quick introduction to BM FlexCheck PDA based – WiFi - Bluetooth

Handheld units (PDA or Windows Phones)















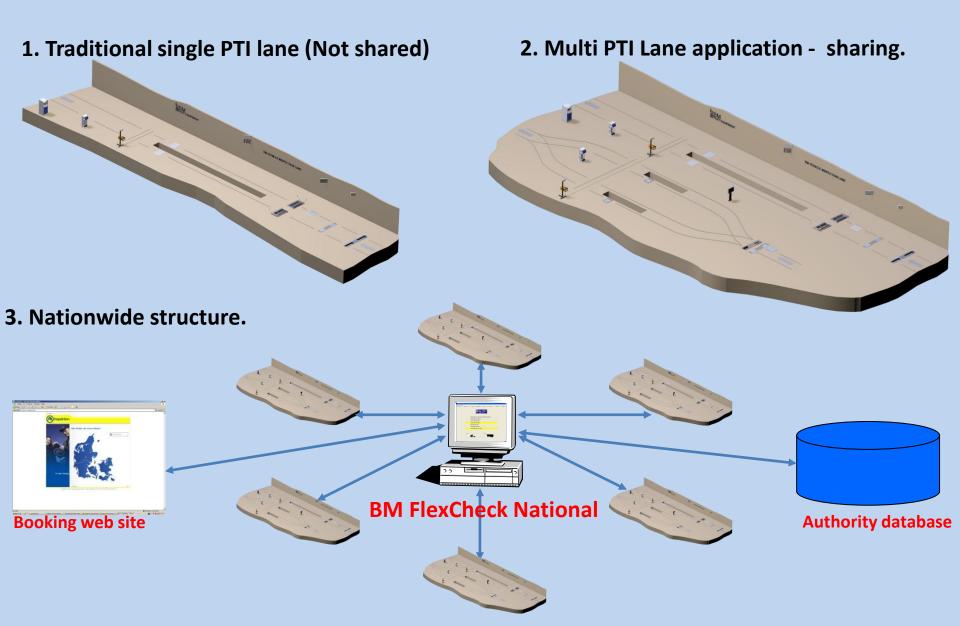








A quick introduction to BM FlexCheck PDA based – WiFi - Bluetooth





Prevention and Detection of fraud and corruption – Defining the scenes

Scene 1: Vehicle owner cheats by himself

- Temporary fittings of good parts.
- Tampering with the vehicles emission and safety systems.
- The fraud fighting benefit of a local PTI IT system is limited.

Scene 2: Vehicle owner and PTI operator cheats via corruption

A local PTI IT system can <u>significantly</u> improve prevention and detection.

Scene 3: Vehicle owner, PTI operator and Manager/owner cheats via corruption

• The fraud fighting benefit of a local PTI IT system is very limited.

Scene 2: Prevention - Vehicle owner and PTI operator cheats



Actions:

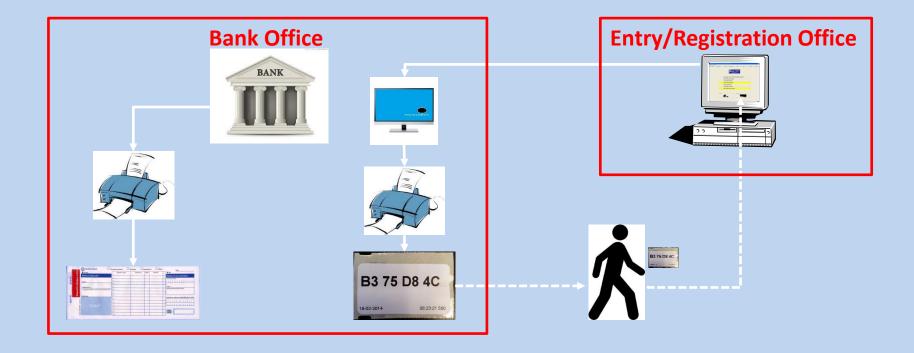
- 1. Break the linkages between the two parties via "smart solutions"
- 2. Test data from all electronic equipment is collected automatically.
- 3. Software requires User ID and Password from VI Operator.
- 4. Test results during PTI procedure are (partially) hidden from PTI staff.
- 5. Prevent PTI staff from editing the PTI test results.
- 6. Automatic photographing of vehicle that is stored with PTI test results.
- 7. CCTV surveillance (with live inspection data).

Add 5: Re-entry of User ID and Password, if any changes to already stored date is done or any other data manual entry is required.

Example of securing payment



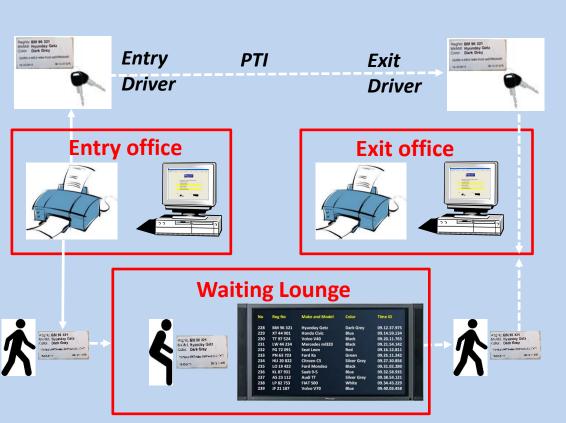
Payment security system.

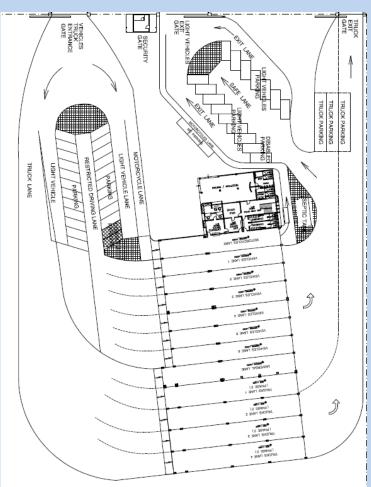






Vehicle Key management system.





Scene 2: Prevention - Vehicle owner and PTI operator cheats



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Photo of Vehicle as part of PTI







- Photo taken automatically when the brake test result is saved.
- This ensures that the photo is linked to the actual brake test.
- This concept prevents corruption and fraud.

Scene 2: Prevention - Vehicle owner and PTI operator cheats



Actions:

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Scene 2: Detection - Vehicle owner and PTI operator cheats



Make statistics of PTI test result database to establish:

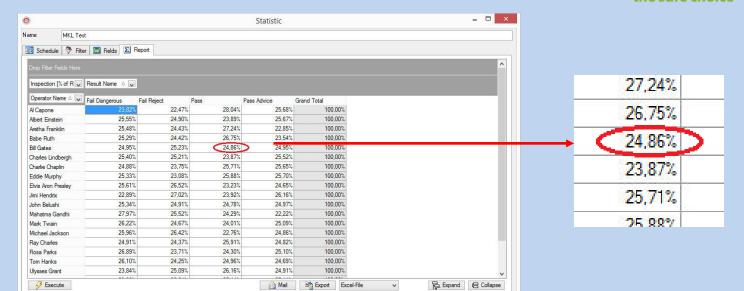
Who did what when?

Data mining example:

- A given period of time (for example 3 months)
- Define the vehicles to be considered (e.g. 1st registration between 2000 and 2002)
- 1. Comparison of Pass rate between the PTI operators
- Compare development of these Pass Rates between 2 or more periods.
- 2. Comparison of the Number of Visual Inspection (VI) points registered between different PTI inspectors
- Compare development of these numbers between 2 or more periods.
- 3. Comparison of Average time taken to conduct a PTI between different PTI inspectors.
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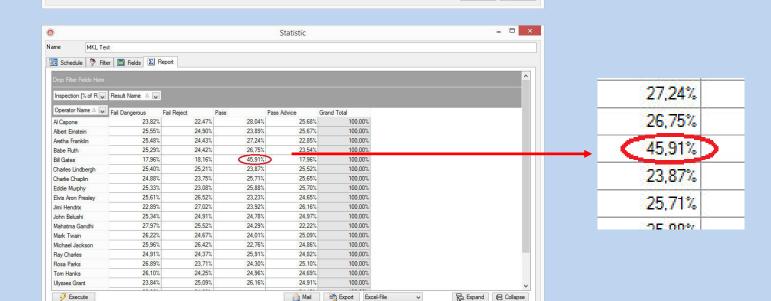
Pass Rate





Save X Cancel

Save Cancel



Scene 2: Detection - Vehicle owner and PTI operator cheats



Make statistics of PTI test result database to establish:

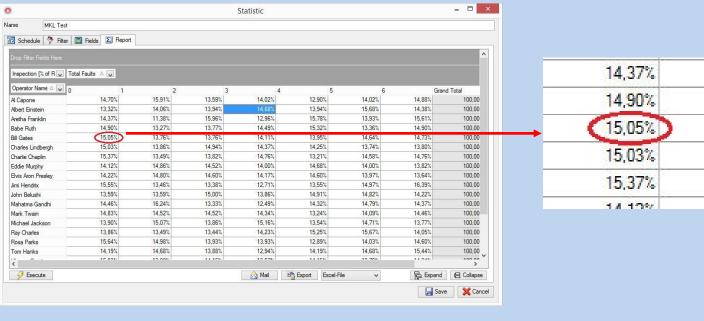
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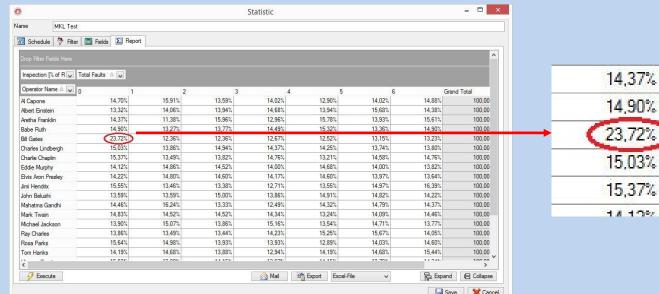
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VI Fault Rate







Scene 2: Detection - Vehicle owner and PTI operator cheats

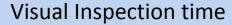


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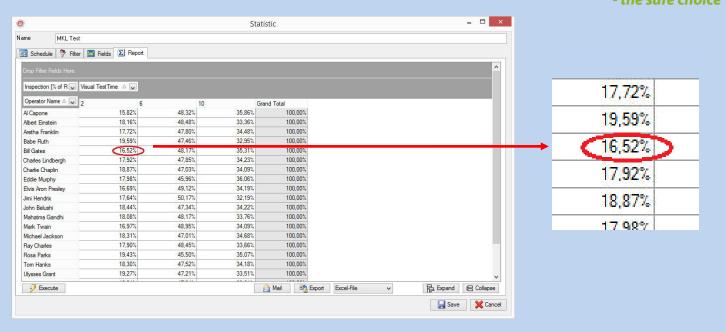
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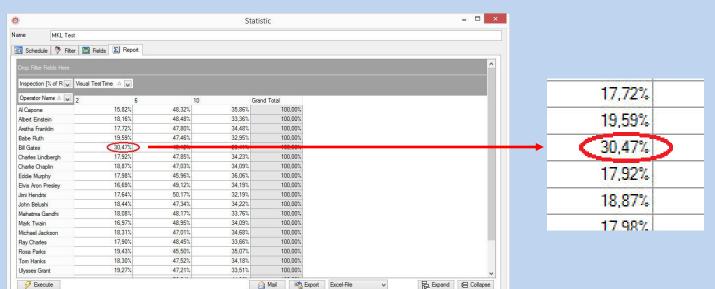
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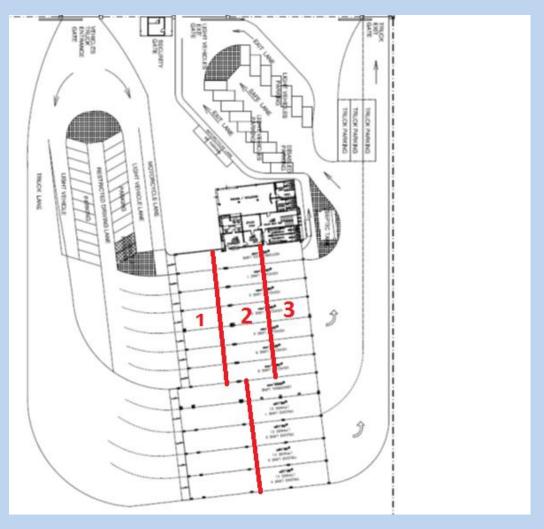
Scene 2: Preventation/Detection - Vehicle owner and PTI operator cheats

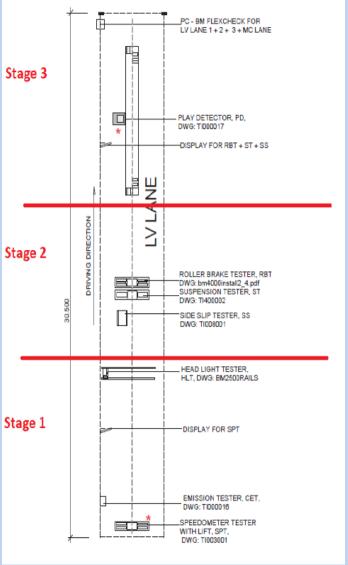
What else can be done:

- 1. Staff organizing of PTI production area:
 - It is preferable to break down inspection in "stages".
 - Job rotate staff between stages and lanes.
- 2. Whistleblower system
 - Create an anonymous whistleblower system for staff to owner.
- 3. Salary
 - Be aware of hidden income regime, when introducing IT system as measure against fraud and corruption.

Break down of PTI lane into stages









Scene 2: Preventation/Detection - Vehicle owner and PTI operator cheats

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The Authorities role



The Authority is a key player

- Implement approval procedures for IT systems.
- Benchmark PTI stations via data mining.
- Conduct unannounced Audits (Ghost audits).
- Create an anonymous whistleblower system for the industry.







Photos from Elie Company Ltd - Periodic Technical Inspection in Ghana









