1. The context of roadworthiness testing in South Africa

2. The Role of CITA in developing best practice in roadworthiness inspection

Mrs Ferose Oaten

Chairperson of the CITA Regional Advisory Group for Africa, Chairman of the National Vehicle Testing Association in South Africa, and Managing Director of AVTS Roadworthy Stations
The context of roadworthiness testing in South Africa

Ferose Oaten
Managing Director, AVTS Roadworthy Stations, member of TÜV SÜD

South Africa
# Registered Vehicle Population

### Registered Vehicle Population as at 31 December 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars</td>
<td>6,376,733</td>
</tr>
<tr>
<td>Mini-buses</td>
<td>289,078</td>
</tr>
<tr>
<td>Buses</td>
<td>54,494</td>
</tr>
<tr>
<td>Motor-cycles</td>
<td>367,245</td>
</tr>
<tr>
<td>Pick-ups &lt; 3500kg</td>
<td>2,228,559</td>
</tr>
<tr>
<td>Trucks &gt; 3500kg</td>
<td>350,503</td>
</tr>
<tr>
<td>Heavy Trailers &gt; 3500kg</td>
<td>171,678</td>
</tr>
<tr>
<td>Other</td>
<td>260,004</td>
</tr>
<tr>
<td>Caravans</td>
<td>104,594</td>
</tr>
<tr>
<td>Light trailers &lt; 3500kg</td>
<td>803,297</td>
</tr>
</tbody>
</table>

**Total Registered Vehicles:** 11,006,185

- **7.9%** - Annual / 6-monthly testing
- **13.7%** - Used car registrations
PRIVATE, MUNICIPAL and PROVINCIAL VEHICLE TESTING STATIONS

PROVINCIAL GOVERNMENTS
(Registration of test stations and compliance monitoring)

LEGISLATION
(Road Traffic Act, Land Transport Transition Act)
NATIONAL DoT

South African Bureau of Standards
Vehicle Inspectorate
LEGISLATIVE AND STANDARDS FRAMEWORK

NATIONAL ROAD TRAFFIC ACT

SANS 10216 and SANS 10047

BBBEE Compliance
Employment Equity
Consumer Protection Act

Second Hands Goods Act
Basic Conditions of Employment
Labour Relations Act

INDUSTRY ASSOCIATIONS
CODES OF CONDUCT

ISO 9001:2008

What we should aim for:

ISO 17020
General Criteria for the General Operation of Various Types of Bodies performing Inspections (Competence of Inspection Body)
Regulation 138 (1) requires **roadworthy certification** for:

- A used vehicle of which the owner has changed
- A motor vehicle to which a notice to discontinue has been issued
- A motor vehicle built, imported, or manufactured
- A reconstructed or altered motor vehicle
- RTQS vehicles required to be tested annually in terms of Regulation 142 (1) *(taxis, trucks more than 3500kg)*
- Buses tested every 6 months since 1 November 2010

No emission testing required on any vehicle during regular testing
## Total Test Demand in 2013

<table>
<thead>
<tr>
<th>Type</th>
<th>Demand 2013</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used vehicle registrations for 12 months ending December 2012</td>
<td>1,506,544</td>
<td>Change of ownership</td>
</tr>
<tr>
<td>Buses (no of buses x 2 – tested 6 monthly)</td>
<td>108,988</td>
<td>6-monthly test</td>
</tr>
<tr>
<td>Minibuses</td>
<td>289,078</td>
<td>Annual test</td>
</tr>
<tr>
<td>Heavy Goods Vehicles (trucks &amp; trailers)</td>
<td>522,178</td>
<td>Annual test</td>
</tr>
<tr>
<td><strong>Total Test Demand 2013</strong></td>
<td><strong>2,426,788</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: eNatis; TUV SUD, AVTS Roadworthy Stations **
## REGISTERED TEST STATIONS

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>PRIVATE STATIONS</th>
<th>MUNICIPAL / PROVINCIAL</th>
<th>TOTAL (2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>29</td>
<td>22</td>
<td>51</td>
</tr>
<tr>
<td>Free State</td>
<td>11</td>
<td>65</td>
<td>76</td>
</tr>
<tr>
<td>Gauteng</td>
<td>108</td>
<td>33</td>
<td>141</td>
</tr>
<tr>
<td>KZN</td>
<td>49</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>Limpopo</td>
<td>16</td>
<td>20</td>
<td>36</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>17</td>
<td>27</td>
<td>44</td>
</tr>
<tr>
<td>North West</td>
<td>11</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>6</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Western Cape</td>
<td>55</td>
<td>43</td>
<td>98</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>302</strong></td>
<td><strong>272</strong></td>
<td><strong>574</strong></td>
</tr>
</tbody>
</table>

Source - NDoT Feasibility Study on the Implementation of Periodic Testing; Vehicle population - eNatis
TESTING EQUIPMENT AND VEHICLE FLOW

- Inspection Pit (lifts not used)
- Brake Roller Tester
- **Camera** (new provision SANS 10216)
- Axle Play Detector
- Side Slip Tester
- Head light tester
- Portable equipment
  - Measuring tapes
  - King pin / Fifth Wheel gauge / Vernier
  - Trolley Jack
  - Crow bar
  - Tyre tread depth guage
  - Straight edge
  - Height gauge

National Traffic Information System; government data base, with vehicle data and status of roadworthiness of vehicle; annual licence fees (road tax) vehicle owner information; traffic offenses. Different access for different modules.
### ROAD FATALITIES

<table>
<thead>
<tr>
<th>Population</th>
<th>53m (52 981 991 July 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle population as at 31 December 2013</td>
<td>11 006 185</td>
</tr>
<tr>
<td>Total road fatalities in 2011</td>
<td>14 500</td>
</tr>
<tr>
<td>Fatalities per 100 000 people</td>
<td>31.9</td>
</tr>
<tr>
<td>Total persons injured</td>
<td>229 619</td>
</tr>
<tr>
<td>Injury accidents per 100 million vehicle km</td>
<td>124</td>
</tr>
<tr>
<td>Costs of accidents in 2012</td>
<td>ZAR 157bn – 308bn</td>
</tr>
</tbody>
</table>

## ROAD FATALITY RATE - WHO

<table>
<thead>
<tr>
<th>Country</th>
<th>Fatalities per 100,000 people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>38.1</td>
</tr>
<tr>
<td>Nigeria</td>
<td>33.7</td>
</tr>
<tr>
<td>South Africa</td>
<td>31.9</td>
</tr>
<tr>
<td>Lebanon</td>
<td>28.4</td>
</tr>
<tr>
<td>Burkino Faso</td>
<td>27.7</td>
</tr>
<tr>
<td>Namibia</td>
<td>25</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>24.8</td>
</tr>
<tr>
<td>Ghana</td>
<td>22.2</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>20.9</td>
</tr>
<tr>
<td>Russia</td>
<td>18.6</td>
</tr>
<tr>
<td>Mozambique</td>
<td>18.5</td>
</tr>
<tr>
<td>Morocco</td>
<td>18</td>
</tr>
<tr>
<td>Dubai UAE</td>
<td>12.7</td>
</tr>
<tr>
<td>Turkey</td>
<td>12</td>
</tr>
<tr>
<td>Portugal</td>
<td>11.8</td>
</tr>
<tr>
<td>Phillipines</td>
<td>9.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>8.1</td>
</tr>
<tr>
<td>Austria</td>
<td>6.6</td>
</tr>
<tr>
<td>France</td>
<td>6.4</td>
</tr>
<tr>
<td>Spain</td>
<td>5.4</td>
</tr>
<tr>
<td>Japan</td>
<td>5.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>4.7</td>
</tr>
<tr>
<td>Ireland</td>
<td>4.7</td>
</tr>
<tr>
<td>Germany</td>
<td>4.7</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4.3</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>3.9</td>
</tr>
<tr>
<td>Great Britain</td>
<td>3.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: eNatis; TUV SUD, AVTS Roadworthy Stations, World Health Organisation Road Safety Report 2010
According to statistics from Arrive Alive, 14500 road deaths annually, of which 39% are pedestrians.

Vehicle factors are responsible for at least 9.3% of accidents, as a direct factor, and up to 13% as a contributory factor.

Within these vehicle factors, in fatal crashes:
- 36% tyre burst due to damaged and smooth tyres
- 25% faulty brakes
- 24% unsafe and faulty steering
- 15% other

Source: RTMC Crash Report 2009
Amendment of regulation 138 of the Regulations

35. Regulation 138 of the Regulations is hereby amended by the addition of paragraph (k) after paragraph (j):

(k) motor vehicle which is 10 years and older as from 1 December 2012 calculated from the first date of registration of such motor vehicle in the Republic excluding any vintage motor vehicle: Provided that such motor vehicle will thereafter be require to be certified roadworthy after every 24 months.”
## Statistics on Roadworthy Tests

### Total Test Demand in 2013

<table>
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<tr>
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<tr>
<td><strong>Total Test Demand 2013</strong></td>
<td>2 426 788</td>
<td></td>
</tr>
</tbody>
</table>

### Number of Vehicles Older than 10 Years as at Feb 2012

<table>
<thead>
<tr>
<th>Description</th>
<th>Demand 2012</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of vehicles older than 10 years</td>
<td>5 548 688</td>
<td>55% of vehicles older than 10 years</td>
</tr>
</tbody>
</table>

Source: eNatis; TUV SUD, AVTS Roadworthy Stations
• Partly a Political decision
• Non-compliance of a small percentage of existing test stations
• Lack of investment / resources by some role players to meet the equipment requirements – Possible public private partnerships
• An industry in a “holding pattern” with financial sustainability a current challenge
• Corruption
OTHER RECOMMENDATIONS (NOW)

- Structure of the Inspectorate capacitated with technology and resources
- Use Key Performance Indicators for audits and make the results and compliance of audits measurable on a national basis
  - Customer complaints, reasons for failure, categorising major and minor compliance issues and measuring them
- Analyse test results and reasons for failure on a national basis through the eNatis system
- All test stations to belong to an Industry body, and to commit to a code of conduct; and subject themselves to a Peer Review mechanism
- Audits, Audits and more Audits (internal, external, peer reviews etc)
- Decisive action to be taken against non-compliant test stations (private and public)
- National Black List / Register of all de-registered examiners
- Review legislation to prevent non-compliant test stations / corrupt stations from re-opening
- Implement and enforce existing legislation (15th amendment) etc
- Ongoing training of examiners, management reps and proprietors
- Limit the use of cellphones by examiners while testing
OTHER RECOMMENDATIONS (AFTER PVT)

- Use of technology to automate the testing process and test results and limit human discretion (many different suggestions and systems currently in use)
- Link up the Inspectorates with the DVLA recorded camera interface to all stations and centres analysing trends
- Requirement for VTS to be the gold standard in all areas.
- Ensure the independence of the Inspectorate in terms of an examination of the repair of motor vehicles
- Formal peer review of the testing to be set up by industry; quality checks done by external persons
- Implementation of a “Mystery Shopping” programme administered either by the Inspectorate of by Industry Body
- Encourage certification to ISO 17020 within test stations, which will ensure Independence, Impartiality and Integrity. This standard itself establishes rules for preventing fraud, and that the inspection body shall be free from any commercial, financial and other pressures which may affect their judgement.
2. The Role of CITA in developing best practice in roadworthiness inspection

Mrs Ferose Oaten

Chairperson of the CITA Regional Advisory Group for Africa, Chairman of the National Vehicle Testing Association in South Africa, and Managing Director of AVTS Roadworthy Stations
The Role of CITA in developing best practice in roadworthiness inspection

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About CITA

• Who are the Members?
  • Test centre operators, Governments and private sector, Equipment manufacturers
  • 120 members worldwide from 50 countries, who conduct more than 250 million vehicle inspections

• Recognition by the UNECE and WP 29

• Why do they belong?
  • Share a common interest in exchanging information
  • Developing best practices
  • Input into the drafting of international standards in the field of vehicle inspection
Executive Governance of CITA

CITA Council and Bureau Permanent

CITA Secretariat

Regional Advisory Group
Asia/Australasia
- 11 Countries
- 18 Full Members

Regional Advisory Group
Europe
- 31 Countries
- 67 Full Members
- 14 Corporate Members
- 5 Affiliated Association
- 6 Affiliated Non-Association
- 1 Vehicle Industry

Regional Advisory Group
Central and South America
- 5 Countries
- 7 Full Members

Regional Advisory Group
North America
- 1 Country
- 4 Full Members
- 1 Corporate Member

Regional Advisory Group
Africa
- 4 Countries
- 6 Full Members
Members from Africa

IVORY COAST

Société Ivoirienne de Contrôles Techniques Automobiles & Industriels (SICTA)

MOROCCO

Fédération Nationale de Centres de Visites Techniques et de la Sécurité Routière au Maroc

SGS Automotive SA

SOUTH AFRICA

AVTS Roadworthy Stations (Pty) LTD

DEKRA Automotive (Pty) LTD

TUNISIA

Agence Technique des Transports Terrestres
What does CITA do?

- develops best practice recommendations and draft international standards
- co-ordinates research, studies and investigations
- organises conferences and seminars
- works to improve and harmonise
  - inspection methods, standards and equipment
  - quality control, quality assurance and accreditation
  - training for inspectors
  - information systems used to improve inspection consistency and effectiveness

www.cita-vehicleinspection.org
CITA Recommendations on International Best Practice

1. Inspection items for passenger and goods vehicles
2. Additional inspection items for Large Passenger Vehicles (Buses)
3. Measuring Equipment
4. In-use vehicles with technical modifications
5. Inspection items for Motor-cycles
6. Inspections on LPG Equipment
7. Inspection Station Equipment
8. Brake Testing of Heavy Vehicles & Cars
10. Content now covered under R1, 2 and 5
11. Roadside inspection items, Methods and Reasons for Rejection
12. Road Speed Limiter Systems
13. Quality Measurement Methods
14. Testing of Electronically Controlled Safety Systems (draft)
15. European Data base for PTI Purposes
16. Suspension Systems (draft)
17. Roles of supervising bodies for vehicle inspection operators under CITA Recommendation 9B.
CITA Studies and Research Reports (Published and Planned)

1. Second CITA Programme on Emission Testing 2002
3. AUTOFORE (Study on Future Options for Roadworthiness Testing in the European Union) 2007
4. TEDDIE (Testing of low emission diesel vehicles – 2011
5. Testing of Electronically Controlled Safety Systems
6. European Data base for vehicle data and PTI results – planning phase
Consultative Engagement with the UN ECE

United Nations Economic Commission for Europe

World Forum for Harmonization of Vehicle Regulations - Working Party 29

Construction Standards
- 1958 Agreement – Adoption of Uniform Technical Prescriptions (Type Approval Regulations)
- 1998 Agreement – Global Technical regulations

In-Use Roadworthiness Standards
- 1997 (Vienna) Agreement - Concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections
Purpose of the RAG Africa

• To provide a platform for the exchange of information on best practices with regard to periodic vehicle testing

• To promote membership of CITA and to promote the activities and interests of CITA; but would promote activities with non-members initially

• To provide a resource to role players in the establishment of the legislative framework and standards compilation for vehicle testing in the region

• To provide a professional network of stake-holders to ensure that the furthest reaches of Africa becomes accessible to all interested parties.

• To promote awareness and provide support to countries in their efforts to fulfill the mandate adopted in the African Charter for Road Safety
What kind of information exchange?

- Activities in each country on vehicle testing and vehicle safety initiatives
- Business models used in the region
- Best practices to share across the continent
- Challenges needing assistance and input for:
  - Local challenges related to own immediate environment
  - Legislative influence and motivation within own countries and regions; especially in the light of the draft African Road Safety Charter
  - Issues to be taken forward to the various CITA and UN Forums
Focus Areas and the Way Forward

- Regional Advisory Group for Africa meeting a 2pm Thursday
- Evaluation form will request your input
  - Discussion on the outcome of the conference
  - Key issues that require attention
  - Recommendations on the way forward

Thank you