EVALUATION OF THE ROAD TRANSPORT MANAGEMENT SYSTEM, A SELF-REGULATION INITIATIVE IN HEAVY VEHICLE TRANSPORT IN SOUTH AFRICA

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- Introduction
- The Road Transport Management System
- Evaluation and observed benefits
- Conclusions
Culture of Non-compliance

- Overloading
- Speeding
- Vehicle maintenance (brakes, tyres, lights)
- Driver hours
- Reckless driving
- False licenses (vehicles & drivers)
- Load securement
- Bribery & corruption
Road Freight Transport Issues

QUALITY OF LIFE
- Road safety
- Congestion
- Cost of logistics
- Road condition

GLOBAL COMPETETIVENESS
- Transport efficiency
- Cost of logistics
- Congestion
- Cross-border delays
- Optimum road maintenance

SUSTAINABLE ENVIRONMENT
- "maintaining and preserving natural systems"
- Transport efficiency
- Road crashes
- Road condition
- Congestion
- Energy consumption
- Emissions

HEAVY VEHICLE TRANSPORT
### Brake & Tyre Watch Results

<table>
<thead>
<tr>
<th>Location</th>
<th>Inspected</th>
<th>Discontinued</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Deep</td>
<td>24</td>
<td>21</td>
<td>88%</td>
</tr>
<tr>
<td>Middelburg</td>
<td>35</td>
<td>24</td>
<td>69%</td>
</tr>
<tr>
<td>Centurion</td>
<td>41</td>
<td>17</td>
<td>42%</td>
</tr>
<tr>
<td>Midway KZN</td>
<td>26</td>
<td>10</td>
<td>38%</td>
</tr>
<tr>
<td>Kroonstad</td>
<td>8</td>
<td>7</td>
<td>92%</td>
</tr>
<tr>
<td>Brackenfell, W. Cape</td>
<td>25</td>
<td>25</td>
<td>100%</td>
</tr>
<tr>
<td>Pietermaritzburg</td>
<td>12</td>
<td>11</td>
<td>92%</td>
</tr>
<tr>
<td>Port Elizabeth</td>
<td>15</td>
<td>6</td>
<td>40%</td>
</tr>
<tr>
<td>Rustenburg</td>
<td>7</td>
<td>5</td>
<td>72%</td>
</tr>
<tr>
<td>Polokwane</td>
<td>11</td>
<td>10</td>
<td>91%</td>
</tr>
<tr>
<td>Midway KZN</td>
<td>24</td>
<td>20</td>
<td>83%</td>
</tr>
<tr>
<td>Bloemfontein</td>
<td>24</td>
<td>20</td>
<td>83%</td>
</tr>
<tr>
<td>Nelspruit/Komati</td>
<td>13</td>
<td>12</td>
<td>92%</td>
</tr>
<tr>
<td><strong>TOTAL (25 events)</strong></td>
<td><strong>540</strong></td>
<td><strong>381</strong></td>
<td><strong>71%</strong></td>
</tr>
</tbody>
</table>

25 B&TW events from Feb. 2006 to date
Fatal truck crash per 100 million vehicle kilometres travelled

Source: OECD report, Moving Freight with Better Trucks, 2011
Road Freight Transport
Issues

Condition of surfaced roads

Very Poor Poor Fair Good Very Good
South Africa’s Road Freight Strategy

**Road Freight Strategy**

1. **Strategic thrusts**
   - Integrated transport mechanisms
   - Road infrastructure management & funding
   - Overload control management system
   - Self-regulation & road safety

2. **Strategic programmes**
   - Integrated Transport Commission
   - Alignment of Transnet’s mandate
   - Rail linkages with other modes / IMT
   - Minimum targets for rail at ports
   - Efficient border posts
   - Change authority over roads
   - Establish road maintenance fund
   - Introduce heavy vehicle user-pay principles
   - Overload control inspectorate
   - Optimisation of existing weighbridges
   - Credible penalties
   - Infringement system and training
   - Weigh-in-motion technology
   - Overload control database
   - Resolve non-physical barriers
   - Promotion of self-regulation amongst operators
   - Improve road safety
   - Optimise transport of dangerous goods and abnormal goods

**Operational issues:** Driver and vehicle fitness; system and systems integration; performance
RTMS is an industry–led, government-supported, voluntary, self-regulation scheme that encourages consignees, consignors and road transport operators to implement a management system (a set of standards) with outcomes that contribute to preserving road infrastructure, improving road safety and increasing productivity.

Key focus areas are:
- load optimisation
- driver wellness
- vehicle maintenance
- productivity
The Road Transport Management System

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TRA2014 Paris 14-17 avril 2014
RTMS Rules of Compliance

- Maintain a haulage fleet inventory
- Assess the vehicle mass before each trip
- Verify mass determination method
- Vehicle and load safety
- Vehicle maintenance
- Driver wellness (fatigue and health)
- Provide training & education
- Assign tasks and responsibilities
- Keep records and documentation
- Perform internal reviews
- The RTMS standards are aligned with ISO 39001: Road Traffic Safety management systems, released in October 2012
RTMS participation

- Number of RTMS Certified Companies
- Cumulative Number of RTMS Certified Companies

Year:
- 2007: 4
- 2008: 3
- 2009: 7
- 2010: 18
- 2011: 33
- 2012: 53
- 2013: 90

Cumulative:
- 2007: 4
- 2008: 3
- 2009: 10
- 2010: 28
- 2011: 53
- 2012: 74
- 2013: 90
<table>
<thead>
<tr>
<th>Loading Control</th>
<th>Safety &amp; Compliance</th>
<th>Driver Wellness</th>
<th>Training &amp; Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Prevent Overloading</td>
<td>✓ Systematic Vehicle Maintenance</td>
<td>✓ Medical Certificate of Fitness</td>
<td>✓ Training Plan</td>
</tr>
<tr>
<td>✓ Optimise payload</td>
<td>✓ Minimise Vehicle Breakdowns</td>
<td>✓ Management of Chronic Conditions e.g. Diabetes</td>
<td>✓ Driver Recruitment Process</td>
</tr>
<tr>
<td>✓ Safe loading Practices</td>
<td>✓ Verify Daily Vehicle Inspections</td>
<td>✓ Fatigue Management</td>
<td>✓ Competency Evaluation</td>
</tr>
<tr>
<td>✓ Compliance with dimensional limits</td>
<td>✓ Prevent speed violations</td>
<td>✓ Rest Day Allocation</td>
<td>✓ Structured Training Programme</td>
</tr>
<tr>
<td></td>
<td>✓ Avoid Crashes</td>
<td>✓ Monitoring of Driving Hours</td>
<td>✓ Driver Assessments</td>
</tr>
<tr>
<td></td>
<td>✓ Minimise traffic violations</td>
<td>✓ Provision of Resources</td>
<td>✓ Effective Communication on Safety/Compliance</td>
</tr>
<tr>
<td></td>
<td>✓ Manage route risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Monitoring of safety indicators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Loading Control**
- Prevent Overloading
- Optimise payload
- Safe loading Practices
- Compliance with dimensional limits

**Safety & Compliance**
- Systematic Vehicle Maintenance
- Minimise Vehicle Breakdowns
- Verify Daily Vehicle Inspections
- Prevent speed violations
- Avoid Crashes
- Minimise traffic violations
- Manage route risks
- Monitoring of safety indicators

**Driver Wellness**
- Medical Certificate of Fitness
- Management of Chronic Conditions e.g. Diabetes
- Fatigue Management
- Rest Day Allocation
- Monitoring of Driving Hours
- Provision of Resources

**Training & Development**
- Training Plan
- Driver Recruitment Process
- Competency Evaluation
- Structured Training Programme
- Driver Assessments
- Effective Communication on Safety/Compliance

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RTMS benefits: Crash reductions

- Barloworld Logistics: 66% reduction in the number of crashes in 2012 (owner driver fleet);
- Vehicle Delivery Services: 42% reduction in serious crashes from 2011 to 2012;
- Timber Logistics Services: 50% reduction in crashes and incidents from 2009 to 2012;
- The City of Cape Town, Electricity Support Services: 44% reduction in the number of crashes;
- Unitrans Amatikulu: cost of crashes reduced from 5.0% of revenue to 1.3% of revenue (reduction in the frequency and severity of crashes)
Reduction in crash rates

![Graph showing incident rate vs. km travelled]
Reduction in overloading: forestry & sugar industries
Reduction in speeding: coal industry
City of Cape Town: Electricity Services

Improved fuel consumption
Km/Liter

<table>
<thead>
<tr>
<th>Month</th>
<th>5.9</th>
<th>6.7</th>
<th>7.6</th>
<th>8.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/08</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>08/09</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>09/10</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10/11</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
RTMS qualitative benefits

- Reduced turnover of drivers due to HIV-related issues;
- Improved standard of living of drivers;
- Improvement in driver wellness, resulting in a consequent decrease in absenteeism;
- Reduction in breakdowns and drivers reporting breakdowns;
- Improved fleet utilisation (reduced downtime);
- Improved driver behaviour;
- More control and confidence in the company;
- Reassurance that drivers are medically fit to drive a heavy vehicle; and
- Improved motivation of employees
Conclusions

- RTMS standard has a meaningful role to play in promoting self-regulation in the road transport sector in South Africa.
- RTMS certification adds significant value to an operator’s compliance, safety performance and efficiency.
- Greater awareness of the standard and the accrued benefits will yield even better results as more companies embrace the standard.
- Adoption of RTMS by consignors and consignees either to become certified themselves or to promote compliance amongst their transport operators is critical.
- Continued support by government will further enhance the efforts to promote RTMS as an effective and sustainable mechanism to achieve a safe, compliant, and efficient transport network in South Africa.