

FOCUS

ON TRANSPORT AND LOGISTICS

FOCUSONTRANSPORT.CO.ZA

KAMAZ CONQUERS DAKAR

RUSSIAN BRAND TAKES TITLE FOR 17TH TIME

WAREHOUSING'S CHANGING FACE

New concepts in service
parts logistics

ALTERNATIVE FUELS

Time to re-evaluate
the options

HAZARDOUS CARGO

Why adhering to
regulations saves lives

PREVENTATIVE MAINTENANCE

A guide to maximising
truck uptime!





AUTHORISED PANEL BEATER AND REPAIR PROFESSIONALS FOR **MAN**

MAN Certified Panel Beaters are the true experts when it comes to MAN Trucks & Buses, using only genuine MAN parts to avoid long term problems. And you get a 2-year warranty on original MAN spare parts.

What more could a MAN ask for!

Contact your nearest MAN Panel Beater today.

www.mansouthafrica.co.za



CONTENTS



PAGE
8

FIGHTING TRANSPORT CRIME

Fesarta joins forces with a forensic investigator



PAGE
14

WAREHOUSING'S CHANGING FACE

New concepts in service parts logistics



PAGE
16

ALTERNATIVE FUELS

Time for South Africa to re-evaluate options



PAGE
18

PREVENTATIVE MAINTENANCE

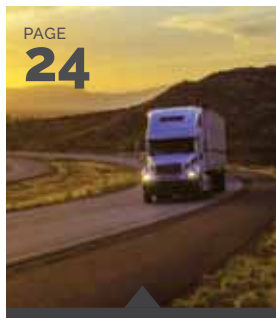
A guide to maximising truck uptime!



PAGE
20

HAZARDOUS CARGO

Why adhering to regulations saves lives



PAGE
24

SPOTLIGHT ON AFRICA

Biggest changes facing the continent's transport industry



PAGE
26

FORD INVADES EUROPE

Ford Trucks tackles the Seven Sisters in their own backyard



PAGE
30

MIGHTY POWERFUL!

World's biggest hydrogen-powered truck in development

COVER

Kamaz takes the Dakar Rally title for the 17th time. See page 6



REGULARS

- 2 Editor's Notes
- 8 Driving Africa
- 10 Firm Advice
- 12 Vic's View
- 13 Hopping Off
- 26 Global Focus News
- 30 Short Hauls
- 32 Naamsa Numbers

Published monthly by Charmont Media Global
Unit 17, Northcliff Office Park, 203 Beyers Naude Drive, Northcliff, 2195.
P O Box 957, Fontainebleau, 2032, South Africa
Tel: 011 782 1070 | Fax: 011 782 1073 /0360

EDITORIAL DIRECTOR

Charleen Clarke
Cell: 083 601 0568
charleen@focusontransport.co.za
womamonwheelsza

PUBLISHER

Tina Monteiro
Cell: 082 568 3181
tina@focusontransport.co.za

EDITOR

Wynter Murdoch
Cell: 082 453 9794
wynter@charmont.co.za

SUB-EDITOR

Jeanette Lamont
jeanette@charmont.co.za

JOURNALIST

Mariska Morris
Cell: 084 788 8399
mariska@charmont.co.za
Patroffie

TECHNICAL CORRESPONDENT

Vic Oliver
Cell: 083 267 8437
voliver@mweb.co.za

CONTRIBUTORS

Mike Fitzmaurice
Carol Holness
Vaughan Mostert

ADVERTISING SALES

Atish Ramachul
Cell: 061 320 2210
atish@focusontransport.co.za

Diana Gouws
Cell: 082 801 8506
diana@charmont.co.za

CIRCULATION MANAGER

Bev Rogers
Cell: 078 230 5063
bev@focusontransport.co.za

DESIGN AND LAYOUT

Nelio da Silva
nelio@focusontransport.co.za

PRINTING

Camera Press

© Copyright. No articles or photographs may be reproduced, in whole or in part, without specific written permission from the editor.



FOLLOW US

facebook.com/focus_mag
twitter @FOCUSmagSA
instagram @focusontransport
Find us on LinkedIn

CLEANING UP REFUSE COLLECTION



A

recent report in a Canadian publication, *Truck News*, caught my eye: The Department of Sanitation in New York (DSNY) had just taken delivery of its first fully electric refuse truck – a Mack LR.

The vehicle's capabilities had been demonstrated to journalists at a handover event, where Jonathan Randall, a senior vice-president at Mack, had said the DSNY – which he described as the world's largest sanitation department – would put the truck through real-life paces from April. "There's no tougher testing ground for a truck like this," he maintained.

DSNY is on a mission to become carbon-neutral by 2050, and to reduce its greenhouse gas emissions by 80 percent by 2035. That's why it's looking to replace its 2 346-strong refuse truck fleet – 99 percent of which are Macks – with electrically powered vehicles.

According to Rocky DiRico, deputy commissioner of the department, the fleet collects about 12 000 t of residential and industrial waste a day. He said the route the electric truck would follow had already been chosen – a 30-km stretch through middle-class New York neighbourhoods.

"Don't read into the short distance," he said. "The real test is how many times the truck stops and starts in the course of the route. We deal more with hours than kilometres."

DiRico revealed that the truck would be expected to handle an eight-hour collection route, at which time its remaining battery capacity would be analysed. Uniquely, New York City uses its collection trucks as snow ploughs during winter months, and DiRico said the first-generation Mack LR Electric would probably fall short in this area. However, he said he was confident that subsequent versions would be able to handle both duties.

"Ultimately, we have to get to ploughing," he said. "We can't have a fleet for ploughing and another for collection. Our success and uniqueness is that we plough with our collection trucks. Battery technology has improved dramatically already and we feel within the next year,

battery technology is going to be 50 percent more efficient – and that should take us to ploughing."

In addition to reduced emissions, other benefits of electric refuse trucks include reduced noise and lower maintenance costs. According to Roy Horton, director of product strategy at Mack Trucks, there's less wear and tear componentry on an electrically powered vehicle. "It uses less oil and lubricants, incurs less brake wear, and there's no combustion engine to service."

Refuse is an ideal application for electrification, Horton told *Truck News*, because it's a closed-loop duty cycle in which the trucks return to home base daily for charging. The frequent starts and stops allow for regenerative braking, during which energy is captured, stored and then used to assist propulsion.

The LR Electric features two battery-driven motors that together produce a maximum of 369 kW and 5 492 Nm. Transmission is through a two-speed Mack Powershift transmission. The truck features four NMC lithium-ion batteries that are charged via a 50 kW charging system. All accessories are electrically driven through 12 V, 24 V and 600 V circuits.

When the vehicle is put into service, DSNY will closely monitor several metrics, including uptime, range, mileage, driver feedback, acceleration, payload, regenerative braking, gradeability, state of charge at start and end of route, charging time and duration, as well as overall functionality.

DiRico said he was looking forward to putting the truck to work, telling journalists that the vehicle wouldn't be babied. "I look forward to beginning the process of testing, piloting and beating the hell out of that truck," he said.

Just a thought: It's a pity that some of South Africa's leading cities don't follow New York's example and put electrified trucks to similar refuse collection tests. Then again, Eskom's load shedding schedule may put a very big spanner in that kind of strategy!

WYNTER MURDOCH



THE SCANIA NEW TRUCK GENERATION

HELPING OUR CUSTOMERS MAKE SMART BUSINESS DECISIONS.

At Scania we set benchmarks, taking innovation to a whole new level. With over 100 years of game-changing innovation and craftsmanship built into our DNA, we ensure that our customers reach the height of profitability. While some may argue that they're pushing the ultimate limits to drive customers business forward, we have only one thing to say, there are no limits. We are the leaders in sustainable transport solutions.

DRIVING THE SHIFT TOWARDS A SUSTAINABLE TRANSPORT SYSTEM.

Scania Southern Africa
www.scania.com/za

SCANIA

GETTING SOCIAL



FOLLOW US
 facebook.com/focus_mag
 twitter @FOCUSmagSA
 instagram @focusontransport
 Find us on LinkedIn

Haven't yet seen **FOCUS** on social media? Not to worry, here are some of our most popular posts from the last month.

FOCUS on Transport and Logistics

Australia's first driverless truck - the Actros - has made its debut drive under. Read all about it: <http://bit.ly/2q9m1u4>

PRIME MOVER MAG.COM.AU
Test Drive: Mercedes-Benz Actros | Logistics, Trucking & Transport News | Prime Mover Magazine

FOCUS on Transport and Logistics

Take a fascinating peek inside Shoprite's mega warehouses. The distribution centre is equal in size to 50 rugby pitches! <http://bit.ly/2P3F7Q3>

SHOPIRE NEWSIDER.CO.ZA
Take a look: inside Shoprite's massive warehouse - which operates in near total silence

FOCUS on Transport and Logistics

How COOL is this truck? Chevrolet has unveiled the E-10 - a concept electric pickup truck based on the automaker's 1962 C-10 pickup. <http://bit.ly/2lFct5u>

SHOPIRE NEWSIDER.COM
Chevrolet just revealed an electric pickup truck concept that's modeled after the 1962 C-10 version - and it looks stunning

FOCUS on Transport and Logistics

Meet a container hauler in the east of England, which runs a fleet of "ladies". <http://bit.ly/2YQ3mlp>

NETRUCKING.CO.NZ
NZ Trucking: INTERNATIONAL TRUCK STOP - One for the ladies

FOCUS on Transport and Logistics

The second North American Commercial Vehicle Show recently took place in Atlanta. Read about all the accessible vehicles on display here: <http://bit.ly/2m7m7u5>

FOCUSONTRANSPORT.CO.ZA
Born in the USA! - Focus on Transport and Logistics
 The second North American Commercial Vehicle (NACV) Show recently ...

FOCUS on Transport and Logistics

MAN's new truck generation will be revealed on 10 February 2020 in Bilbao, Spain. Watch this space for more information! @TRATOR_GHOUPI @MANtruckandbus

FOCUS on Transport and Logistics

Spain has signed an agreement with the Indian Ministry of Transport and BOTRA, the Ashjan Transport Company, to deliver 430 buses. <http://bit.ly/2RNMZT7>

FOCUS on Transport and Logistics

Mercedes-Benz do Brazil has opened an "urban farm" at its plant in São Bernardo do Campo. Organic vegetables are being grown at the truck and bus plant and they are being served in the staff canteens. <http://bit.ly/2uqPQ3I>

MEIA DAIHLER.COM
Daimler Trucks & Buses plant in Brazil opens an "urban farm" for growing its own vegetables | marakmediaSite

FOCUS on Transport and Logistics

Daimler will cut thousands of jobs globally by the end of 2021. According to a local spokesman, South Africa is unaffected by the job cuts. Also, they are not expected to impact the company's truck division. @DaimlerTruckBus <http://bit.ly/2v1v5T2>

FLUETOWNER.COM
Truck division unaffected as Daimler plans major job cuts
 Sell Chery car sales and cost of electric vehicle development cited as ...

FOCUS on Transport and Logistics

Volvo Buses is giving a second life to batteries from electric buses. In a unique cooperation with Stena Property and Stena Recycling's subsidiary BatteryLoop, bus batteries are used for energy storage and as an energy source in a residential complex. <http://bit.ly/2V7u5T2>

VOLVOCORPOR.COM
Vehicle batteries provide new energy for households
 Volvo Buses is now giving a second life to batteries from electric buses in ...

FOCUS on Transport and Logistics

Bye-bye windshield wipers! Tesla has filed a patent for high-tech laser beams that clean a vehicle's windshield. This could mean the end of windshield wipers as we know them. <http://bit.ly/2u2u8V4>

INDEPENDENT.CO.UK
Tesla wants to replace windshield wipers with lasers
 "Paired laser cleaning system could soon free its way into one of Elon ...

FOCUS on Transport and Logistics

Opel is going electric BUT South African models will still be powered by diesel. <http://bit.ly/2433m1r> @Opel @OpelSA

FOCUSONTRANSPORT.CO.ZA
Opel takes the electric route - but SA models stick with diesel - Focus on Transport and Logistics

Innovation in every part.

Brake Components



Brake Caliper



Brake Pads



Brake Discs

Telematics Unit



Clutch Components

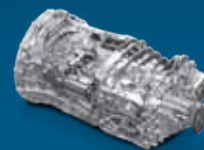


Disc Cover Releaser

Shock Absorbers



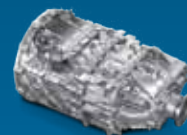
Transmissions



ZF Ecosplit



ZF Ecofluid



ZF AS Tronic

Drive Axle



Steering and Suspension Components



AFTERMARKET

LEMFÖRDER  SACHS  TRW



KAMAZ TAKES THE DAKAR!

LOOKING LIKE SOMETHING OUT OF MAD MAX, THE VICTORIOUS KAMAZES THAT TOOK PART IN THIS YEAR'S DAKAR RALLY WERE PERCEIVED TO EMBODY EVERYTHING THAT'S CRAZY AND WONDERFUL ABOUT THE EVENT

The Dakar Rally is perceived to be one of the motorsport world's greatest challenges; a two-week journey to hell and back across a succession of relentless dunes and rocky outcrops. This year marked the first time the race had been held in Saudi Arabia – but conditions remained just as tough as they had been in previous versions of the event through Africa and South America.

In the highly competitive truck category, the first two places were taken by Russian brand Kamaz, the victorious Kamaz-master team vehicles driven by Andrey Karginov – who became a two-time winner of the Dakar – and Anton Shibalov, who crossed the line in second place. The win marked the 17th time a Kamaz had taken the laurels in the event.

While both the trucks took a hammering in the Dakar's demanding dunes, their 13-cylinder, 857 kW engines never missed a beat, the vehicles heading a top six comprising a Maz driven by Siarhei Viazovich, another Kamaz-master team truck in the hands of Dmitry Sotnikov and, in fifth and sixth places, Ivecos piloted by Marton Macik and Janus van Kasteren.

Looking like something out of *Mad Max*, the Kamazes were perceived to embody everything that's crazy and wonderful about the Dakar. Everything about the trucks is big. Take those huge wheels – they weigh a colossal 150 kg each, turning a task such as changing a punctured tyre into a major marathon.

Overall, the race Kamaz weighs in at 9.5 t, but, unlike a regular truck, it also boasts 50:50 weight distribution, which is perfect for handling. It is powered by a Dongfeng Cummins engine which, when pushed to its maximum, can consume up to 200 litres of fuel every 100 km. To feed the thirst, the fuel tank – situated over the rear wheels – holds 1 000 litres of diesel.

When the rally ended in Qiddiya – a city which is situated about 40 km from the capital, Riyadh, and which is destined to become the entertainment centre of Saudi Arabia – the delighted Kamaz-master team leader, Vladimir Chagin, said of the performance: "I am happy that we managed to delight our numerous fans and partners. It was a difficult victory and each member of the team did everything to achieve it.

"The Dakar in the Arabian Peninsula made everyone happy with interesting routes and a breathtaking struggle. I sincerely congratulate everyone who followed our performance and helped the team to achieve victory in this difficult race!"

Karginov said he was happy that he had managed to win. "In two weeks, we covered thousands of difficult kilometres on some of the toughest off-road routes. It was important for us to win to show the advantages of the Kamaz in a new region for the rally. I am glad that our team delighted fans in Russia and around the world."

Shibalov described the 7 500 km route as interesting and exciting, with lots of battles. "I am very happy to have taken silver. It was a very challenging race," he said. **F**



bandag

BUILT FOR BETTER™

SUSTAINABILITY

RELIABILITY

PROFITABILITY

Refreshed, contemporary, relevant and forward looking. Bandag revisits its branding to ensure the blue print of value and quality continues to deliver a profitable, sustainable and reliable solution to the trucking industry.

Bandag - Built For Better



MIKE FITZMAURICE is the CEO of the Federation of East and Southern Africa Road Transport Associations (Fesarta). He has 42 years of experience in the transport and logistics industry with several major companies in South Africa, as well as overseas exposure with some of the leading transport companies in six European countries. He runs Transport Logistics Consultants, which he established in 2004. In May 2015 he became CEO of Fesarta.

FIGHTING TRANSPORT CRIME

IN AN EFFORT TO REDUCE TRANSPORT CRIME, FESARTA HAS PARTNERED WITH A FORENSIC INVESTIGATOR WHO SPECIALISES IN TRUCK HIJACKING, CARGO THEFT AND DIESEL SCAMS

Over the past 12 months the transport industry – particularly in KwaZulu-Natal – has been plagued by problems. From trucks that were being attacked on main trade routes, to congestion at terminals such as Maydon Wharf and Bayhead in Durban, the issues have been varied, intense and significant.

Theft, too, has been on the increase, with a rising number of cases being reported of bogus trucks being used to collect cargo or containers in and around Durban. In this respect, Fesarta has partnered with ex-South African police captain, Wimpie Nel, who has uncovered the following:

- In order to maximise productivity, transport operators want to carry return loads from Durban to their home destinations. They therefore need to know what loads are available – and this is where a broker system comes into operation;
- Brokers usually communicate via e-mail and WhatsApp groups, inviting transporters to apply to carry particular loads;
- To comply, transporters are usually required to supply company documentation, identification, goods in transit records and logbooks.

"In a perfect world the system is very effective," says Nel. "However, there are some unscrupulous people who steal the transport company's details and sell them on to crime syndicates. The syndicates then clone

a legitimate operator's truck, using a vehicle that looks similar and which bears an identical registration number. Company documentation is also duplicated, with only contact details being changed.

"When notification of a load is posted, the owner of the fake truck will submit an application to transport it using the false documentation. If the offer is accepted, the bogus truck arrives to collect the load – and then disappears with the cargo."



Nel says the scenario can be mitigated if cargo owners carry out a proper risk analysis of the contracted transport company's credentials, as well as those of the truck and driver. "In most cases the real transporter will not be aware that his truck has been cloned," says Nel. "These discrepancies may become apparent only when an in-depth risk analysis is undertaken."

Other risks faced by the road transport industry include a rising incidence of truck hijackings and ongoing protest action. Being exposed to so much peril makes it imperative for fleet owners to ensure that they

are comprehensively insured against all risks.

In Fesarta's view, one of the keys to the successful settlement of insurance claims is to ensure that an insurer has not been placed at risk intentionally. That means the transporter has a duty to take all the necessary steps to honour the conditions of an insurance policy.

From an anti-hijacking perspective, vehicle tracking companies need to know early on that something is amiss,

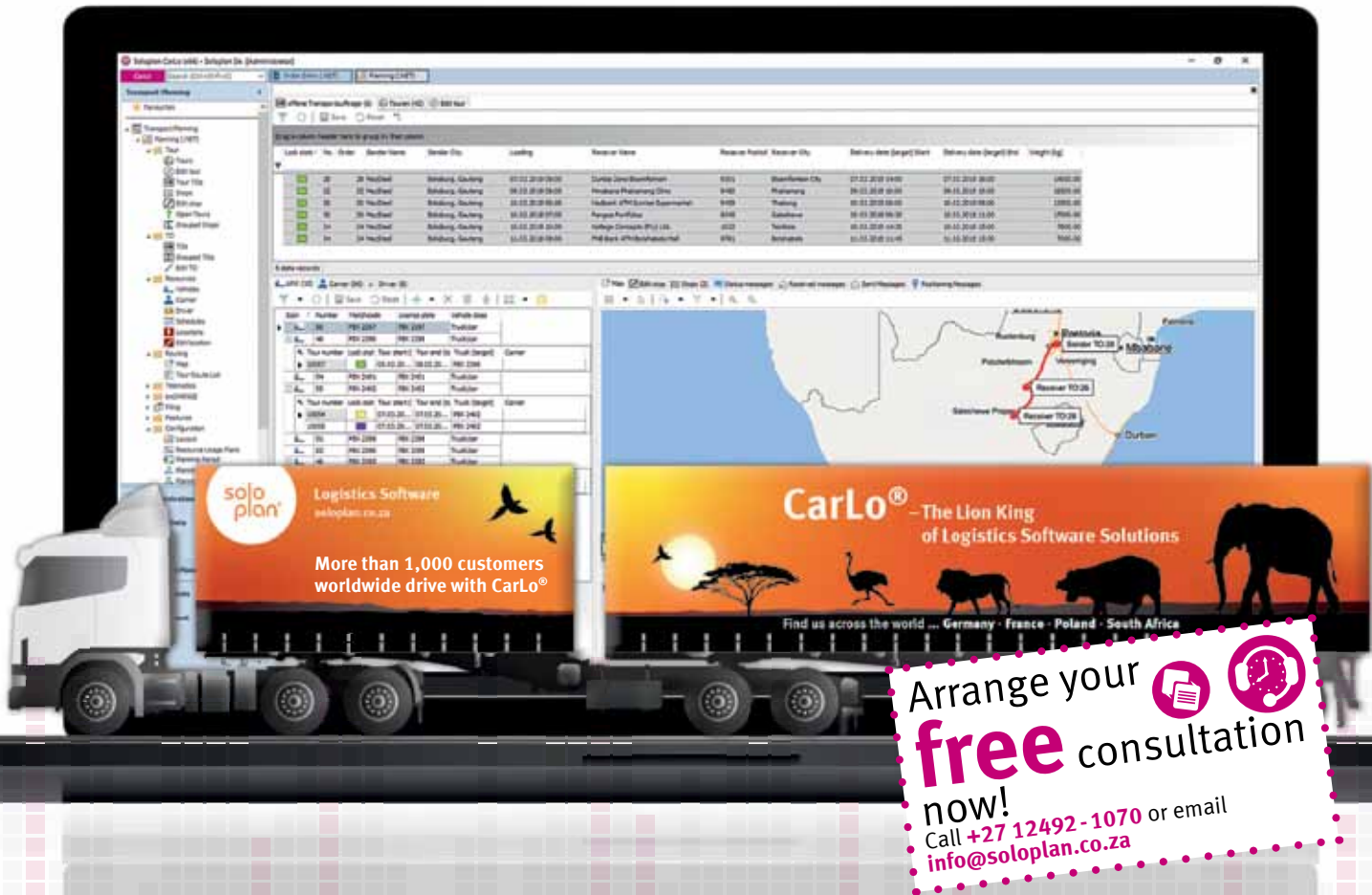
either through the activation of a panic signal inside the vehicle's cabin, or via real-time CCTV footage from in-cab and dashboard-mounted cameras. While this may not prevent a truck from being hijacked, it could help to recover the vehicle and its cargo.

Fesarta recommends that vehicles are monitored from point of collection to point of delivery, and that they travel with escort vehicles if high-value cargo is in transit. Other steps include the installation of: a notification device if the trailer is unhitched from the truck; tracking units on the trailer and in items of cargo; and recording devices inside the vehicle's cab. **F**



CARLO® – YOUR PARTNER FOR LOGISTICS SOFTWARE

FOR FORWARDING, TRANSPORT AND LOGISTICS COMPANIES



Logistics Software that goes straight to the point.



CarLo®
The flexible logistics software for transport management and planning.



CarLo®inAIR&SEA
The ideal air and sea freight management for intermodal transport chains.



CarLo®inTOUCH
The easy access to telematics with positioning and order management.



CarLo®exCHANGE
The Web-based Logistics Platform for Shippers and Forwarding Companies.



CarLo®inMOTION
The efficient software for fleet management and detailed vehicle cost accounting.



CarLo®inSTORE
The integrated warehouse management system for optimal control of warehouse processes.



CarLo®inTOUR
The comprehensive programme for routing and toll cost calculation.



[@NLawGlobal](#)

CAROL HOLNESS is a senior associate in the Norton Rose Fulbright admiralty and transport team based in Durban. She focuses on shipping, admiralty and international trade issues as well as marine, transport and logistics insurance. Holness has represented local and international clients in many aspects of transport law, including questions of marine insurance cover and subrogated insurance recovery actions.

THE HIGH CUBE CONTAINER CONUNDRUM

WILL SOUTH AFRICA'S DEPARTMENT OF TRANSPORT LIFT ITS MORATORIUM REGARDING THE TRANSPORTATION OF HIGH CUBE CONTAINERS? IF SO, WHAT LIABILITY INSURANCE IMPLICATIONS DOES THAT HAVE FOR THE COUNTRY'S TRANSPORT OPERATORS?

Regulation 224(b) of South Africa's National Road Traffic Regulations prohibits any person from operating a motor vehicle on a public road which, together with any load, has an overall height which exceeds 4.3 m. In this respect, the transportation of high cube containers is affected.

the DoT on whether the moratorium will be extended – meaning that Regulation 224(b) may be enforced. If that happens, the implications will be extensive.

One consideration that arises is how it will affect non-compliance with regard to a transporter's liability insurance. Many liability policies include a warranty that the transporter will comply with all local road traffic safety laws.

In this respect, a transport company is obliged to ensure that its vehicles comply with the restrictions set out in the applicable laws and, where necessary, to obtain abnormal load or other suitable permits to transport goods.

If the transporter does not comply with the applicable laws and an

insurance policy. The transporter may face claims from the cargo owner or the third party for the damage and its insurer may not pay out these claims.

Where a goods vehicle is moving through more than one country, different road traffic safety laws and restrictions may apply. This means that the transporter must ensure that the vehicle used complies with the road traffic safety laws in each country through which it passes. However, what is legal in one country may be illegal in another.

This can result in confusion for the transporter as well as additional costs and delays, since the transport company must ensure that it has the applicable permits to ensure that its vehicle complies with each country's laws. If the transporter fails to comply, criminal prosecution could follow, along with fines and the rejection of any claims by its liability insurer in the event of an accident.

The fact that a particular country's road traffic authorities do not enforce certain road traffic safety laws means that a transporter may not face criminal prosecution for failing to comply. However, the transporter's liability insurers may still reject a claim where the transporter has failed to comply with the laws – notwithstanding the fact that those laws are not actively being enforced.

If South Africa does repeal the current moratorium against prosecution for non-compliance with Regulation 224(b), transporters may face both criminal prosecution as well as the rejection of insurance claims by their insurers if they fail to adhere to the letter of the law. **F**



In 2018, the Department of Transport (DoT) put in place a moratorium which exempted the containers from the regulation. The moratorium ran from January 1, 2019 until January 1, 2020. At time of writing (December, 2019), there has been no formal communication from

accident occurs and damage is caused to the cargo, or to some third party – resulting in the transporter's liability to the cargo interest or to the third party – this may result in the transporter's liability insurer rejecting the claim on the basis that the transporter has breached the warranty contained in its



The BPW Group

System Supplier and Mobility Partner for Vehicle Manufacturers and Operators.

Brands of the BPW Group:



ERMAX®



HESTAL®



Brands represented by BPW Axles:



BPW Axles (Pty) Ltd
 Tel (011) 681-3300, (011) 680-1443
 E-mail: bpwsales@bpw.co.za | Website: www.bpw.co.za

we think transport





VIC OLIVER is one of this country's most respected commercial vehicle industry authorities, and has been in this industry for over 50 years. Before joining the FOCUS team, he spent 15 years with Nissan Diesel (now UD Trucks), 11 years with Busaf and seven years with International. Do you have a comment or thought you would like to share based on this column? Visit www.focusontransport.co.za and have your say!

KEY PERFORMANCE AREAS IN ROAD TRANSPORT

MAINTAINING A COMPETITIVE AND PROFITABLE TRANSPORT BUSINESS MEANS KEEPING CAREFUL WATCH ON A HOST OF KEY PERFORMANCE FACTORS, SAYS VIC OLIVER

The start of the New Year is a good time for road transport operators to re-examine the management of their business's key performance areas.

Good management saves money and increases profits – but practices and processes need to be continually monitored, refreshed and upgraded, especially given the type of tough, competitive market environment that has been forecast for this year.

First the basics need to be right in all sectors of the business. Daily operations need to be watched carefully and immediate steps taken to address any procedures that start to run out of line.

In addition to the daily monitoring and controlling of basic vehicle operating costs, both fixed and variable, it is essential to control and monitor other related key performance factors, for instance vehicle productivity.

Operators need to constantly focus on ensuring that all vehicles in the fleet are fully and effectively operating at optimum capacity. Fleet size needs to be carefully controlled to ensure that there are sufficient vehicles in the line-up to do the job effectively without having some standing idle.

Workshop productivity also has to be maximised. Ensuring that all the available labour hours are effectively used is one way of safeguarding efficiency. These hours are being paid



for and if they are not used timeously, they are lost, since they cannot be stored for use at a later date.

Workshop efficiency must also be carefully monitored every day. Productivity can be measured by comparing the number of hours worked in relation to the standard flat rate time that is set by the vehicle's manufacturer.

Retaining satisfied customers is another important key performance area, as your competitors will be monitoring your customer base and trying to steal your good clients. Therefore, looking after your customers and giving them world-class service is another key performance area to be carefully monitored.

Ensure that your entire team is aware of the importance of looking after customers and are well-versed in treating your client base with the utmost respect.

It is also important that good technicians and administrators are well looked after in order to ensure that they are not enticed away by competitors. Offering good reward incentives to employees for efficiency

and work well done is an excellent tool to get people to perform at their best.

Past surveys that have analysed the roles employees play in making a business successful have found that if the following points are understood and implemented by staff members, the company tends to succeed.

- Do I know what is expected of me at work?
- Do I have the material and equipment I need to do my job right?
- Do I have the opportunity to do my best every day?
- Have I received recognition or praise for good work in the last seven days?
- Does my supervisor, or someone at work, seem to care about me?
- Is there someone at work who encourages my development?

Positive responses to the above questions correlated to higher productivity, profitability, employee satisfaction, customer satisfaction and staff retention.

To reiterate, a focus on the retention of good people is critical for a transport business to survive and continue to produce good results. **F**



VAUGHAN MOSTERT lectured on public transport issues at the University of Johannesburg for nearly thirty years. Through Hopping Off, Mostert leaves readers with some food for thought as he continues his push for change in the local public transport industry.

PRASA AND THE MASTER PLAN

NOW THAT THE PASSENGER RAIL AGENCY OF SOUTH AFRICA (PRASA) IS UNDER ADMINISTRATION, WILL THIS AFFECT THE VARIOUS TRANSPORT "MASTER PLANS" OUT THERE?

I don't see it happening. In November last year, *Business Day Motor News* reported on a workshop organised by a transport engineering consultancy, where participants "plotted a vision" for the transport sector.

Apparently someone has discovered that some minibus taxis are empty on their return trips. So we are going to have a pilot project using an app to link minibus-taxi operators with passengers.



That's fine. I hope it works, although I have my doubts. If it does work it will be the first time in South Africa that existing vehicles will be used to improve public transport. Remember that all big projects up to now have involved new vehicles – Mynah, Go!George, ReaVaya, MyCiti, Gautrain – and, in the last three cases, vast amounts of spending on new infrastructure as well.

Predictably, one of the engineers at the workshop had to put in an appeal for even more infrastructure, calling for "an accelerated programme of investment in rail infrastructure, as trains were capable of moving 80 000 to 100 000 people an hour versus only 2 000 by car".

That irrelevant argument has helped get us into this mess. Please show me a route in South Africa that moves more than 30 000 people an hour! It's also time for "master plans" to start calculating the tonnes of carbon that new rail (and road) construction will generate.

The Gauteng provincial government is still in denial about these things, as seen in its 2019 Budget documents.

On page 367 we read: "The Gauteng Integrated Transport Master Plan (ITMP25), dated 2013, is in the process

no "need" for any Gautrain extension study to be included. We first need to fix the collapse at Prasa before any rail expansion can even be considered.

Still on page 367: "Although the Gautrain Management Authority (GMA) will lead the ITMP25 review process, the department will contribute from a transport planning integration perspective..."

The GMA has no business leading a policy review process. This column has previously pointed out that this is a conflict of interest, similar to putting South African Airways (SAA) in charge of an airline policy for the country! The GMA is the last place we should go to for advice on transport policy.

Continuing to page 380, it gets worse: "The expenditure (on Gautrain) increased between 2015/16 and 2017/18 from R1.6 billion to R1.8 billion in line with the agreements with the concessionaire. The budget is expected to grow from R2.1 billion in 2019/20 to R2.4 billion in 2021/22, mainly for the maintenance and capacitation of the current system."

We should stop tip-toeing around the Gautrain, whose bailouts are now increasing at seven percent a year. The Gautrain serves the car-owning middle class. It loses around R100 per passenger, while the mismanaged Prasa, which now loses around R25 per passenger, is catching up fast.

The Gautrain doesn't need "capacitation" – together with several sections operated by Prasa, it needs to be converted into a busway. The fact that the Gautrain now has legal powers to run rail services throughout Gauteng should cause concern.

We need to implement an integrated network of bus and rail transport not only in Gauteng, but around South Africa. Neither the Master Plan nor the GMA are going to do it for us. **F**

of being reviewed owing to the Gautrain Extension Study that needs to be included as well as the latest Gauteng Household Travel Survey data."

This column has previously pointed out that the 2013 ITMP was a weak document to start with, except where it admitted that densities were too low in Gauteng to justify anything more than a decent bus service. There is therefore

THE CHANGING FACE OF WAREHOUSING



THE INTRODUCTION OF AUGMENTED REALITY, ARTIFICIAL INTELLIGENCE (AI) AND ROBOTIC SYSTEMS ARE AMONG THE MANY DIGITAL TOOLS THAT ARE BEGINNING TO CHANGE CONCEPTS OF WAREHOUSING IN THE SERVICE PARTS LOGISTICS SECTOR

A

According to a recent study by the Service Logistics Division at DHL, digital tools aimed at boosting worker productivity, increasing speed and reducing errors are beginning to revolutionise the way service parts warehousing works.

In the evolving warehouse – equipped with 5G and high-speed Wi-Fi connections – staff members will be guided by augmented-reality glasses to correct stock locations for order picking or replenishment activities, while digital communication tools – such as video-conferencing systems or live-feeds from body cameras – will help companies to manage service parts divisions more effectively.

“A warehouse worker receiving a returned part of unknown condition or origin will immediately be able to call on advice from a remote expert to ensure the item is correctly identified, classified and sent on for repair or recycling. That expert might even be an AI assistant,” the study says.

It adds that recently introduced technology already allows parts to be compared – using high-resolution photographs taken at the time of production, for example – to enable manufacturers to establish whether the returned items are within warranty, or to spot counterfeits.

According to the study, some aspects of the warehouse of the future are already with us, robotic systems having made their way into high-volume, high-throughput retail and e-commerce facilities. “As robotic picking systems continue to become cheaper, more capable and more flexible, they will become viable options for service parts logistics environments, too,” the study predicts.

It points out that the service parts logistics industry could also provide the elusive answer for additive manufacturing. “The capabilities of three-dimensional printing technologies are continually improving, handling a wider range of materials, producing a wider range of geometries and operating at higher precision. That paves the way for

many more types of parts to be built on demand, either at dedicated facilities or even in micro factories, embedded in warehouses or forward stock locations.”

According to the study, the final stage of the service parts logistics chain presents significant opportunities for companies to differentiate themselves from competitors and tailor their offerings to suit specific customer needs.

“Service logistics operations may benefit from innovative approaches now being pursued by e-commerce companies. If an area has sufficient aggregate demand, shared, collaborative or crowd-sourced last-mile transportation strategies can combine rapid response with low cost and a small carbon footprint,” it says, adding that automated lockers used for unattended e-commerce deliveries have already been adapted to hold vendor-managed inventory and consignment stocks of parts at customer sites.

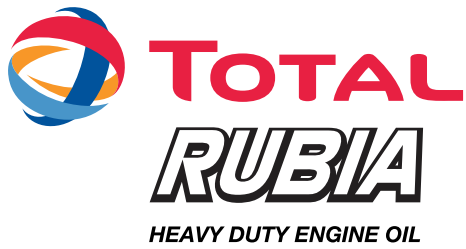
“Delivery to vehicle approaches, guided by global positioning system trackers, could boost the productivity of service technicians, allowing them to receive parts for future jobs while they are working on earlier ones.

“In the longer term, drones or autonomous ground vehicles may become viable delivery systems for some categories of parts.”

Another innovative solution highlighted in the study involves virtual technicians – a role that DHL believes will be unique to the service parts logistics process, which often requires the schedules of technicians and parts deliveries to be closely aligned.

“Augmented reality systems and AI-powered personal assistants may help couriers or end customers to perform some service tasks themselves. For complex and safety-critical service tasks, skilled and properly qualified technicians are an essential, but often limited, resource.

“Advanced planning and scheduling systems will help to maximise the availability and productivity of the field workforce by dynamically adjusting job sequences and parts deliveries based on real-time information,” the study concludes. **F**



* 55% less wear for lower maintenance costs



* 70% less deposit for longer engine life



* 83% less oxidation for better performance

TOTAL RUBIA OPTIMA

Does your current oil have the latest specification?



TOTAL

Committed to Better Energy



THE MOST TECHNOLOGICALLY ADVANCED RUBIA ENGINE OIL

Total presents RUBIA OPTIMA 15W-40. The new heavy-duty engine oil meeting API CK-4 formulated to optimise engine performance – pushing HDEOs to a higher standard surpassing API CJ-4.

*Independent laboratory test.



ANOTHER CASE FOR ALTERNATIVE FUEL

IF THE ENVIRONMENTAL BENEFITS OF ALTERNATIVE FUELS DO NOT PROVIDE ENOUGH MOTIVATION FOR TRANSPORT OPERATORS TO RECONSIDER THEIR OPTIONS, THE RECENT CONFLICT BETWEEN THE UNITED STATES (US) AND IRAN COULD! MARISKA MORRIS INVESTIGATES

American President Donald Trump started his year with a literal bang when he ordered a United States air strike that killed top Iranian military official Major General Qassem Soleimani. According to the American government, Soleimani was planning an attack on American diplomats and services members.

Although Iran launched some missiles and mistakenly shot down a passenger aircraft, the situation has fortunately not escalated into a war, nor has it greatly affected the global fuel price. It is, however, not over yet with the price of crude oil still hanging in the balance.

More importantly, it should have countries, like South Africa, that import the majority of their oil, questioning whether there isn't a better alternative.

Iran is no longer a main oil provider for the country, as South Africa imports most of its oil from Saudi Arabia (42 percent), Nigeria (34 percent) and Angola (13 percent). As a result, the cost of fuel is determined by international prices and supply. A war could result in a rapid spike in price or a shortage of supply.

For the transport industry, which is already under tremendous financial stress with small profit margins, a fuel price increase could be disastrous. Should the transport

industry finally switch to alternative fuel sources? At the very least, the industry should re-evaluate its options.

Aside from the environmental benefits, alternative fuels can be easier to source and more efficient. There are also many alternatives to choose from including gas, biofuel, hydrogen and electricity.

ELECTRIC TRANSPORT

Arguably the most discussed alternative receiving the biggest investment is electric vehicles (EVs). While the technology is advancing quickly, it is expensive – partly due to the cost of lithium batteries (see **FOCUS** Issue 9, 2019) and partly due to the luxury income tax imposed on these vehicles.

However, some electric car owners and enthusiasts feel the cost saving outweighs the expensive initial purchase price. According to an article by *Independent Online*, one such owner pays only R170 to fully charge his BMW i3 (2017), which cost more than R500 000. This adds up to an estimated R80 000 saving each year on petrol.

Unfortunately, the vehicle can only travel between 200 and 240 km when fully charged. While there are numerous charging points throughout South Africa, transport companies might not have 50 minutes to spare in order to

wait for the vehicle to recharge. While access to electricity is a concern, the cost of EVs is still the biggest hurdle.

Even with the savings on fuel, not all transport operators or logistics companies can afford these expensive vehicles. Fortunately, while the industry waits for lithium battery prices to drop and government to lift the luxury tax, there are other alternatives. A surprising contestant already being introduced in the commuter transport industry is gas!

A CASE FOR GAS

In August last year, *The Citizen* reported that 1 200 minibus taxis were running on comprehensive natural gas (CNG) and liquefied petroleum gas (LPG). A key motivation for the shift is the savings on running costs and the affordability of the technology.

In a pilot study, conducted by gas provider CNG holdings, it was found that it would cost R3 059 to travel 3 173 km in

stations. There are currently 10 gas filling stations in Gauteng.

If converting an older vehicle into a dual-fuelled vehicle isn't an option, transport operators renewing their fleet can look to companies like Tetra4, a division of Renergen, which supplies buses and heavy commercial vehicles that run on CNG and liquid natural gas (see **FOCUS** 4, 2019). With an ample, locally sourced supply, gas seems to be a more viable option.

POTENTIAL OF HYDROGEN

Although not a new technology, until recently hydrogen hasn't received quite the same attention and investment as the other alternatives – and possibly for good reason. When hearing hydrogen, many think of water, and since water has become an incredibly scarce and valuable element in South Africa, organisations might be less inclined to pursue

this technology.

However, hydrogen can be manufactured from contaminated water that would have been dumped! In fact, Hydrogen South Africa (HySA) argues that South Africa is in the perfect position to produce hydrogen for a global market by essentially having hydrogen production piggyback on the desalination of seawater.

There are roughly 10 desalination plants throughout the country, which can use desalinated water to produce hydrogen. Inland, HySA suggests using contaminated water sources such as mine water, to produce hydrogen. With Japan looking to import large amounts of hydrogen

in the coming years, South Africa could earn a lot by investing in the technology.

In fact, HySA reckons South Africa could have a US\$ 600-million (R8,6-billion) market if it captures only 25 percent of the Japanese import market. Government seems to be backing this technology. The Department of Transport discussed introducing hydrogen-powered transport in its Green Strategy document with several trials running in 2019.

Although hydrogen technology seems promising, sourcing it from desalination plants might not be productive, and there are concerns over their impact on surrounding sea life.

The transport industry is spoiled for choice and with some alternatives proving easier to source, cheaper to run and more environmentally friendly, the industry might finally want to reconsider whether fossil fuels are still worthwhile. **F**



a CNG-powered vehicle, while a petrol-powered vehicle covered the same distance for R5 423. Converting a petrol-powered vehicle into one powered by gas is simple and the technology is very affordable.

By fitting an LPG gas kit, Gasdrive can convert a passenger or light commercial vehicle to a dual-fuel vehicle. A simple flick of a switch will convert the vehicle back to petrol when LPG gas is low. The company estimates a minimum of 40-percent savings on a fuel bill.

The gas is housed in its own tank with separate piping and injectors. According to Gasdrive, LPG is a cleaner fuel and causes less wear and tear on the engine. It is also 100-percent lead-free, produces fewer emissions and causes less oil contamination.

The taxi industry is taking it a step further by encouraging its stakeholders to invest in the technology and infrastructure to fast track the rollout of gas filling



BENEFITS OF PREVENTATIVE TRUCK MAINTENANCE

STICKING WITH A CONSISTENT PREVENTATIVE MAINTENANCE PROGRAMME WILL HELP TO KEEP YOUR TRUCK RUNNING SMOOTHLY AND SAFELY, SIGNIFICANTLY REDUCING THE POSSIBILITY OF BREAKDOWNS

P

reventative truck maintenance is designed to help to get the most use out of a truck. Experts agree that a good maintenance programme can lower overall running costs and increase the lifespan of a vehicle.

It can also help to improve safety and reduce legal liability. If a vehicle is deemed to be unroadworthy because of a lack of repairs or maintenance, the owner can be held liable for any injury or damage that it causes. Truck maintenance can also help to avoid

expensive breakdowns – those that always seem to occur when they are least expected, or when you need your truck the most.

Regular oil changes and careful inspection of critical, visible components help to prevent the possibility of breakdowns and more expensive repairs later on. This is because small problems can be taken care of promptly, with worn or damaged parts – such as hoses or belts – replaced or repaired before they fail. Performing heavy truck repairs timeously prevents small issues from becoming big problems.

“
Truck maintenance can help to avoid expensive breakdowns – those that always seem to occur when they are least expected, or when you need your truck the most.

A preventative maintenance routine should include a daily inspection that focuses on:

- Keeping the cabin clean and the floor free of loose objects;
- The condition of seat belts, buckles and mechanisms;
- The proper functioning of instruments, defrosters, windscreen wipers and heaters;
- The condition of headlights, tail lights, brake lights, indicators, body lights and outside reflectors;
- Oil and fluid levels, including a visual check for obvious leaks from hoses and seals, or cracks or frayed edges on drive belts;
- The state of tyres, including a pressure check of each tyre;
- A check of emergency equipment.

The actual maintenance portion of a preventative maintenance programme is composed of scheduled and standardised inspections and services, commonly known as A, B, C or D services. As you move down the alphabet, the nature of the service increases in complexity, and the time required to carry it out extends accordingly.

Basic A services are also known as maintenance checks or safety inspections and generally consist of checks of components such as those that would be carried out on a daily basis – inspection of oil and fluid levels, brakes, lights and tyres. Usually, they will include adjustment of high-wearing mechanisms or components. Typically, these services are scheduled at half of the oil change interval of the vehicle.

Preventative maintenance B services usually include all of A's items, but extend to action regarding trouble codes or problems reported by the vehicle's on-board management system, oil and filter changes as well as more in-depth checks of the engine and driveline.

Preventative maintenance C services call for both A and B schedules, as well as more extensive service applications in terms of wheel alignment, scheduled component replacement and other scheduled engine and driveline component inspections or replacement of parts. Usually, C services happen annually. To make sure they are carried out timeously, it is not unusual for big carrier companies to schedule them at 10- or 11-month intervals.

D services usually involve the rebuild or replacement of major components – including engine, transmission, differentials or axles – or special upgrades. Scheduling of D services tends to vary, depending on the nature of the item to be replaced, rebuilt or upgraded.

To keep trailers in optimal condition, it's important to introduce preventative maintenance services for them, too. Like trucks, daily visual checks should include careful inspection of tail lights, brake lights, indicators, body lights and reflectors, couplings, electrical and hydraulic connections and hoses, brake lines, the state of tyres and their pressures, as well as a check of safety equipment, tarpaulins and tie downs.

T1 or TA services are usually scheduled every three months and incorporate careful inspection and lubrication of components, as well as a check of lights, tyres, brakes, coupling devices, safety equipment and any other systems that the trailer may incorporate – a refrigeration unit, for instance, or sliding axles.

T2 or TB services occur every six months and include all the items checked during a T1 inspection, as well as additional maintenance – re-greasing of wheel bearings or suspension components, or the retorquing of lugs.

T3 or TC services are usually scheduled annually. These include all the inspection and maintenance procedures included in T1 and T2 services, along with more extensive maintenance tasks such as wheel alignment or a complete overhaul of the brake system.

By following these guidelines, experts say that in the long term truck owners will benefit from increased vehicle uptime, lower running costs and more profitability. **F**

KEEPING A STRICT CHECKLIST



WHILE ALL TRANSPORT LEGISLATION IS IMPORTANT, TRANSPORT OPERATORS WORKING WITH PETROCHEMICALS AND DANGEROUS GOODS NEED TO BE EXTRA VIGILANT. MARISKA MORRIS TAKES A CLOSER LOOK AT SOME OF THE REQUIREMENTS

T

ransport operators dealing with dangerous or hazardous goods need to ensure strict compliance with relevant regulations. This includes having the correct identification papers on the vehicle, ensuring that staff are well trained and goods are secured.

This can save lives while protecting communities and the environment.

The correct signage on the vehicle, for example, notifies emergency services of how to respond when an accident occurs. If a vehicle carrying water-sensitive gas (such as hydrogen) is in an accident, firefighters may not use water to extinguish any fires. A sign notifying the firefighters of the gas content should therefore be clearly displayed.

If radioactive material is being transported, emergency services require specific protective equipment to approach the vehicle, while the driver would need to receive specific

medication and treatment immediately.

An informed driver will be able to better assist emergency services or contact relevant authorities. Properly securing the load can help prevent spills or leaks should the vehicle be involved in an accident.

The National Road Traffic Act 93 of 1996 and the South African National Standard 10228 outline the requirements for transporting dangerous goods. For those transport operators considering expanding their operations to include the transportation of dangerous goods, it might be useful to consult with experts in the field.

Some of the basic requirements are straightforward (see **FOCUS** Issue 2, 2018), but others – such as the packaging and signage on the vehicle – can be more complicated. For example, some goods are considered hazardous only at specific quantities.

As global transport and logistics company DSV points



out: "Some goods that are not 'dangerous' in a low quantity can suddenly become so once a certain limit is exceeded or if different packaging is used." These goods can include lithium batteries, aerosol sprays or even perfume. Packaging and labelling also become extremely important when operating across borders.

According to DSV, a major retailer faced fines of US\$ 144 000 (R2 million) when its shipping declaration for the dangerous materials in its retail-sized bottles of nail polish and sunblock was incorrect. Another fine was issued to a pharmaceutical company for undeclared alcohol in its skincare products.

There is a universal system for classification, packaging, marking and labelling of dangerous goods set out by the United Nations. Among these are the nine classes of hazardous or dangerous goods ranging from explosive and flammable materials to toxic, infectious or radioactive materials.

In addition to the national and international standards,

transport operators also need to comply with rules set out by local municipalities. These might include approved routes and times at which to transport the goods or additional permits.

The City of Johannesburg, for example, requires all vehicles that transport dangerous goods to have a valid permit issued by the chief fire officer. This needs to be in the vehicle at all times and made available during an inspection. The permit may not be issued for a period longer than 12 months.

In addition, the vehicle should be equipped with a nine-kilogram, dry-chemical fire extinguisher and be physically earthed to the storage facility when goods are transferred.

DSV advises transport operators to consider appointing a safety adviser who has undergone relevant training in dangerous goods – especially if transporting dangerous goods will become a regular service.

However, even with professional advice, transport operators are discouraged from relying on summarised

versions of the various legislations. As Arrive Alive points out: "Dangerous goods legislation is very voluminous and quite intricate. It will be difficult to do more than create awareness with a summarised document."

Along with the safety adviser, transport operators should ensure all employees handling the hazardous materials are well-trained – particularly the driver, who requires a professional driving permit (PrDP) category D to be able

the first responder in the case of an accident (in which the driver is unharmed and conscious) and takes primary responsibility for the packaging and load securing of dangerous goods.

In addition to the PrDP D and material-specific training (such as detecting and managing a dangerous goods spill), drivers can benefit from roll-over prevention training. When a vehicle transporting dangerous goods rolls over, it poses



to transport dangerous goods and substances (including liquids, solids and gases) above certain quantities.

Generally, the training for a PrDP D touches on the legal aspects such as which materials can be transported together and the signs that should be displayed. In order to take this course, a driver needs to be older than 25 years, have a valid driving licence and a valid PrDP. The PrDP D certificate should be renewed every year and the driver should undergo retraining every two years.

This specific training is essential as the driver will be

the greatest risk to other road users and the environment.

If a roll-over or accident does occur, Arrive Alive suggests a few guidelines for other road users to safely pass the dangerous goods vehicle. First, they are discouraged from approaching or remaining in the vicinity of the vehicle. If untrained and without the correct protective equipment, road users are encouraged to evacuate the area, to avoid using a cellphone until at a safe distance and to inform the relevant authorities.

When passing the accident, motorists should also remain in their vehicles, keep all windows closed and avoid inhaling fumes. Smoking, lighting a cigarette or disposing of flammable goods is also strongly discouraged. **F**



In addition to the national and international standards, transport operators also need to comply with rules set out by local municipalities.

LOADING - PERFORMANCE - COSTING



IT'S TIME TO
MOVE ON FROM
TRANSSOLVE

TruckScience

The logo for TruckScience, featuring a stylized graphic of colored dots and lines above the company name.

To upgrade to our new app,
visit www.truckscience.com

SETTING INDUSTRY BENCHMARKS

EXTENSIVE TESTING, COMBINED WITH CONTINUOUS ENHANCEMENT THROUGHOUT THE RESEARCH, DEVELOPMENT AND DESIGN PROCESS, ENABLES SUMITOMO RUBBER SOUTH AFRICA TO PRODUCE WHAT IT CONSIDERS TO BE THE BEST AND MOST CAPABLE TRUCK AND BUS RADIAL TYRES FOR AFRICAN ROAD CONDITIONS

Being innovative and first to market is what drives tyre manufacturer and brand leader Sumitomo Rubber South Africa's quest to remain at the forefront of the industry. The strong history and heritage of the Dunlop brand, coupled with world-class manufacturing capabilities, have strengthened the company's position as a leader in the truck and bus radial (TBR) tyre markets on the African continent.

"We rank research, development and pro-active testing as priorities," says Riaz Haffeejee, the company's CEO. "Our innovative and advanced products show that we fully understand the dynamics of specific applications in the truck and bus industry. This enables us to continue making performance-enhancing design changes throughout the product development process, resulting in significant advances in safety, durability and reduction of cost per kilometre (CPK) to fleet owners."

Benchmarking against existing and competitor products, extensive testing in all applications and continuous enhancements are made throughout the research, development and design process. "We test our tyres rigorously in all applications and highly rate the valuable feedback we get from fleet owners to enable us to produce the best and most capable tyres for African road conditions," says Haffeejee. "As a result, we are able to develop the most innovative and custom-designed truck and bus radial range and establish best practice in the industry."

Enabling the manufacture of Dunlop and Sumitomo TBR tyres in Africa has been made possible through extensive investment in the establishment of a state-of-the-art, dedicated 180 000 m² factory in Ladysmith, KwaZulu-Natal, with Haffeejee acknowledging the key role investment into research and development plays in economic growth.

Expansion of the factory has provided significant direct socio-economic benefits to employees, women, young

people and the local community as a whole. Prioritising education for future skills development, employees are engaged in mentoring Grade 11 and 12 students in maths and science. A recent donation of a fully equipped classroom for matric learners at the Bhekinthutuko Secondary school near Ladysmith has enabled learners to prepare for their final examinations in an environment that is conducive to learning.

"At the core of our business is our commitment to innovation, people, safety and quality throughout the development of our tyres, during and post manufacturing," says Haffeejee. "Our stringent processes during manufacturing, our accredited sales channels and in-field technical services personnel across Africa ensure that safety starts on the factory floor and continues throughout the sales process and lifespan of our products."

An example of the company's innovation-driven focus is the Dunlop Energy Control Technologies (DECTES), which is the result of extensive research and development into the needs of the truck and bus industries. The unique technology delivers next-generation innovation that results in reduced tyre maintenance and rotation requirements, increased re-treadability, and an up to 30-percent reduction in tyre rolling resistance to deliver significant CPK and bottom-line savings to truck and bus fleet owners.

New patterns released in July last year demonstrate Sumitomo Rubber South Africa's commitment to continual development, enhancement and tyre innovation. The new 315/80R22.5 Sumitomo ST719A and 315/80R22.5 and 385/65R22.5 Dunlop SP320 both offer a wider tread pattern and premium tread depth in addition to stone drilling protection. These two new additions demonstrate better fuel efficiency, increased mileage, improved re-treadability and better ride comfort.

For more, visit www.srigroup.co.za/home **F**



A ROAD TO ONE AFRICA

WHILE THE FREE TRADE AGREEMENT BETWEEN AFRICAN NATIONS COULD MEAN MORE BUSINESS AND GROWTH FOR THE TRANSPORT INDUSTRY, THERE ARE STILL MANY OBSTACLES TO BE OVERCOME. MARISKA MORRIS TAKES A LOOK

Although it officially came into force in mid-2019, the African Continental Free Trade Area (AfCFTA) agreement is potentially the biggest change facing the transport industry in 2020. The agreement could lead to an increase in cross-border trade among African countries and change the way in which many companies trade.

With the 90-percent tariff liberalisation to come into effect by July 1, cross-border trade will be much more affordable – especially for smaller businesses. According to the United Nations, without the tariffs intra-Africa trade could increase by 52 percent in less than five years.

In addition, the planned Pan-African Payments and Settlement System (PAPSS) will provide low-cost and risk-controlled payment options for businesses, which could further motivate growth, or change how companies conduct transactions.

As one of the few industrialised countries on the continent,

South Africa is in a particularly good position to trade under the AfCFTA agreement.

However, despite the immense opportunity for growth, the continent still faces many obstacles, of which a lack of transport infrastructure is possibly the biggest. The vast underdeveloped road and rail networks in Africa will limit the ability to trade, as transporting goods will prove challenging.

According to estimates, less than a fifth of the roads in western Africa are paved. Among the countries neighbouring South Africa there are many challenges. Zimbabwe, for example, requires road infrastructure investments of up to US\$ 34 billion (R493 billion) over the next decade – about US\$ 3,4 billion (R49 billion) each year – according to the African Development Bank (AfDB). An additional US\$ 43 million (R624 million) is required for road maintenance.

South Africa has a vested interest in the maintenance of transport infrastructure in Zimbabwe, as the country



connects South African transport operators with Zambia and the Democratic Republic of Congo (DRC). The three countries are also connected by rail – another underdeveloped form of transport infrastructure.

Only a handful of African nations have an extensive rail network spanning across the entire country. Among the countries that have any rail at all, very few have networks crossing into a neighbouring country. The South African rail network is among the most advanced on the continent as it runs into all neighbouring countries and connects with different networks all the way to Angola, the DRC and Kenya.

In addition to addressing the need for better transport infrastructure, many African countries need to improve the efficiency of border post crossings. There are many horror stories of transport operators waiting days or weeks to cross a border. If there is an increase in cross-border trade on the continent, border posts will need to be very efficient to deal with the increased number of vehicles passing through.

Along with the road infrastructure, countries will need to address other infrastructural challenges such as access to

electricity and recurring social issues, including xenophobia. South Africa is also not the only country on the continent facing serious electricity shortages.

Zimbabwe has seen daily 18-hour load shedding with an estimated US\$ 1,14 billion (R16,6 billion) needed to build sustainable energy infrastructure according to the AfDB. The bank also suggested major investments into the Zimbabwean communication sector – particularly fibre optics.

Closer to home, anti-migrant sentiment could lead to continued violence and destruction that could cripple the South African transport industry. Last year, transport operators had a taste of this when their vehicles were targeted in violent attacks during which many trucks were burned and lives were lost – allegedly because they were employing foreign nationals

According to the Road Freight Association's (RFA's) estimates, 1 200 vehicles and cargos were destroyed and 213 lives lost with many more drivers injured. Many of these drivers were, in fact, South African. The RFA estimates the cost to economy was about R1,2 billion (see more in **FOCUS** Issue 7, 2019).



Along with the road infrastructure, countries will need to address other challenges such as access to electricity.

Carin Smith, in an article for *Fin 24*, quotes senior futurist at the Institute for Future Research in Stellenbosch, Njeri Mwangiru: "At social levels, while the slogan of one Africa is catching within the political economy, at community level issues of xenophobia, ethnic rivalry and anti-migrant sentiments continue to be rife.

"Social animosity tends to intersect with economic relations, and competitive rivalry between groups can hamper economic integration."

It is, however, important to keep things in perspective. It's never easy for an entire continent comprising many countries to work together. President of the Lagos Chamber of Commerce and Industry, Toki Mabogunje, explains it best in an article for the Nigerian news organisation *The Guardian*.

"I do not think any African country is ready for the AfCFTA. I think when you want to do regional integration like this, it is the spirit, passion and the will to do it that is important, because I lived through the European Union being formed, and it was not easy at all for all of them to get together."

It might take many years, but with commitment and investment from the private sector, the African economy could enjoy rapid growth. **F**

GLOBAL FOCUS NEWS



FORD INVADES EUROPE!

We have been watching the progress of Ford Trucks with great interest. Back in July 2018, we met with the company, and heard all about its plans to take on the so-called "Seven Sisters" (the seven established European brands, Mercedes-Benz, MAN, Iveco, Renault, Scania, DAF and Volvo) in their own backyard – namely Europe.

To be frank, we wondered if the company could achieve its highly ambitious goals, but things appear to be very much on track.

Recently, Ford Trucks concluded a distribution partnership in Portugal. The first facility in Portugal was opened in Lisbon in partnership with Oneshop. The plan is to add four more major cities (Porto, Leiria, Algarve and Viseu) to the Portuguese dealership network by 2021.

Then we attended the signing of a new distribution partnership in Spain. The company's Spanish distributor, F-Trucks Automotive Hispania, will be operating from nine different locations. This was followed by an announcement that Ford Trucks

had selected F-Trucks Italia as its official distributor in Italy.

According to Ford Otosan CEO Haydar Yenigün, the company is breaking the mould in the heavy commercial industry. "The Ford F-Max brought us the coveted 2019 International Truck of the Year award, winning acclaim for its engineering, design and power among its heavy commercial industry competitors.

"We have already established our distributorship network across three continents (Asia, Europe and Africa), reaching 44 countries by the end of 2019. The high interest in F-Max led us to revise our global expansion plans, so we decided to shift gear and upgrade our goals, and now we aim to be present in at least 80 countries by the end of 2023," he tells **FOCUS**.

AMAROK WINS PICK-UP TRUCK OF THE YEAR

The Volkswagen Amarok has retained its title as Best Pick-up Truck at the What Car? Awards 2020.

The winning model, the Amarok Trendline 3.0-litre TDI V6 4Motion, once again won over the hearts and minds of the What Car? judging panel with its unique blend of on- and off-road abilities and all-round quality.

Commenting on the result, editor of What Car? Steve Huntingford said: "Just because a pick-up truck is expected to lead a hard-working life, that doesn't mean quality in other areas must be compromised, and the Volkswagen Amarok presents the most compelling all-round package



in the class. In fact, the Amarok even gives conventional sports utility vehicles a run for their money."

For now, however, the focus is very much on Europe – and taking market share away from the Seven Sisters. "Europe is our main export market and its potential is a key factor in our growth strategy. In terms of revenue, we aim for Europe to account for 50 percent of our international sales. We want to create close ties with our customers across Europe through the dealership network as well as through our aftersales services. Our recently concluded Europe-wide agreement with TIP Trailer Services gives us an opportunity to achieve complete customer satisfaction as we continue to expand," adds Yenigün.

It certainly appears as though Ford has got its ducks in a row when it comes to its plan to conquer Europe. We've driven the F-Max, which is a brilliant truck, and – thanks to the agreement with TIP Trailer Services – a good warranty and excellent aftersales service is in place. Now the distribution network is growing... As we've said before, we'd love to see Ford do the same in the southern African market one day...



TOP: The F-Max strikes a pose at the Circuito del Jarama, which is where the agreement with the new Spanish distributor was signed.

ABOVE: Dignitaries gather after the signing of the agreement with the Italian distributor.

IVECO AND NIKOLA LAUNCH TRE

Iveco, FPT Industrial and Nikola have unveiled the prototype of the remarkable Nikola Tre, the first vehicle resulting from the joint venture between CNH Industrial and Nikola Motors. The vehicle is based on the Iveco S-Way heavy-duty truck launched in July 2019.

proprietary operating technology that integrates infotainment and navigation functions, as well as controls for the bulk of the vehicle's functionalities. The system's features include climate control, mirror adjustment, suspension height adjustment, 360° camera system, navigation, Bluetooth audio



The prototype battery electric Nikola Tre 4x2 tractor is for regional applications, with a range of up to 400 km and dynamic performance equal or better than a diesel equivalent model.

The vehicle will feature a modular battery system with a total capacity of up to 800 kWh, which can be tailored to match different customers' applications. The electric driveline will deliver 480 kW continuous power output with 1 800 Nm of peak torque.

system, comprehensive vehicle settings and admin vehicle diagnostics.

The vehicle leverages Bluetooth low-energy technology to create a secure link between the vehicle and the customer's mobile device, creating a truly hands-free media experience. This also enables a smart keyless entry system to unlock as the driver approaches the vehicle. The system can even adjust settings such as ride height and climate temperature to driver preference.



The Nikola Tre will also be available in two- and three-axle rigid versions, with a gross vehicle mass (GVM) of up to 44 t, for urban distribution and municipal applications.

The Tre will feature a new infotainment system and bluetooth audio system based on Nikola's

The battery electric Nikola Tre will be launched at the IAA exhibition in Hannover later this year and also at Nikola World 2020. The first units will be delivered to customers in 2021 (the fuel cell electric derivative will be available to customers by 2023).

DAF INTRODUCES REMOTE TACHO DOWNLOAD


DAF Trucks is introducing a new function to its DAF Connect fleet management platform: Remote Tacho Download, which transport operators can use to read, store and analyse the memory of driver cards and tachographs online and in real time. Remote Tacho Download helps the operator to maintain an accurate tacho administration system and to save time.

Remote Tacho Download can be added as an app to the DAF Connect dashboard, the online fleet management platform that monitors the performance of vehicles, fleets and drivers in real time. The new application offers quick and comprehensive access to the full range of tacho information available from connected vehicles and their drivers. Driving times and rest periods are shown in real time.

With Remote Tacho Download, DAF offers three solutions in one: a tool for downloading, storage and analysis, as DAF Connect manager marketing, Jorg Wijnands, explains: "Maintaining an accurate record of driver cards and the tachograph's memory is very labour intensive and prone to error. You can end up paying thousands for each instance of inaccurate bookkeeping."

DAF Connect's new Remote Tacho Download function ensures automated reading and storage of tacho information that is fully compliant with all legal requirements. "The transport operator can also monitor its trucks and drivers constantly to ensure that they are complying with driving and rest period guidelines and to intervene where necessary. This offers a greater sense of security in terms of road safety and the risk of fines," concludes Wijnands.



 @womanonwheelsza

CHARLEEN CLARKE is editorial director of **FOCUS**. While she is based in Johannesburg, she spends a considerable amount of time overseas, attending international transport events – largely in her capacity as associate member of the International Truck of the Year Jury.

SHORT HAULS

ANGLO AMERICAN TO DEVELOP WORLD'S LARGEST HYDROGEN-POWERED MINE TRUCK

Anglo American has announced a partnership with Engie – a global energy and energy services company – to develop and fuel the world's largest hydrogen-powered mine haul truck. The project is part of Anglo American's approach to sustainable mining, dubbed FutureSmart, with the aim of applying innovative thinking and technological advances to address mining's major sustainability challenges.



The collaboration with Engie – in which the energy company is providing hydrogen-generation solutions and Anglo American is developing the truck – marks the first time a vehicle of this size and load capacity has been converted to run on hydrogen.

Following a testing and validation programme at Anglo American's Mogalakwena platinum group metals mine near Mokopane in Limpopo, a fleet of the trucks is expected to be deployed at other Anglo American

operations. Performance of the converted vehicles is expected to match or better that of the original diesel-powered trucks, with the additional benefits of cleaner air, less noise and lower maintenance costs.

Tony O'Neill, technical director of Anglo American, says the mining company is looking forward to implementing the technology. "As part of our recent Smart Power Project, we analysed our mine site power requirements and applied a unique decision process on how we looked at renewable energy systems and their benefits.

"We came up with a mix that allows us to be carbon neutral and have a very different footprint. Conversion of the trucks is part of our plan to create a smart energy mix that moves us closer towards our carbon and energy targets for 2030 and, ultimately, our vision of operating a carbon-neutral mine."

Michele Azalbert, CEO of Engie's hydrogen business, says the solution will help to decarbonise the mining sector. "Anglo American's global footprint and its journey to operational carbon neutrality are aligned with Engie's strategy to develop large-scale integrated hydrogen solutions in local and global markets."

The agreement between the two companies was signed recently in London aboard the Energy Observer, a unique, electrically powered vessel fuelled exclusively by hydrogen and renewable energies. The boat, which is on a round-the-world voyage to test new technologies in extreme conditions, serves as a floating laboratory.

"The Energy Observer is a fully functioning example of the full decarbonisation solution that Anglo American and Engie are working towards," says a statement issued by the companies after the signing of the agreement.

BORDER MANAGEMENT BILL IN THE PIPELINE

The Minister of Home Affairs, Aaron Motsoaledi, has welcomed the adoption by the National Council of Provinces (NCOP) of the Border Management Authority Bill, saying the move lends impetus to the country's efforts to deal with porous borders that enable illegal immigration and the movement of illicit or stolen goods, including vehicles.

"We welcome the adoption of the Bill by the NCOP. The department must now increase its efforts to prepare for the establishment of the Border Management Authority. Implementation protocols with border law enforcement agencies for the mandatory coordination of their

respective functions within the border law enforcement area and at ports of entry must be finalised within six months of the Bill being passed," he said.

The NCOP has referred the Bill to the National Assembly, which will consider it before it goes to the president to be signed into law.

Motsoaledi said in the interim Home Affairs had been preparing for implementation of the Bill through its project management office. He indicated that adoption of the Bill by the NCOP meant that the work of the project management office would accelerate significantly.

EXTENDED WARRANTY TERMS FOR FUSO RANGE

Following extension of the warranty period last year of its Canter line-up, Fuso Trucks recently applied lengthy extensions to its FA, FI, Fighter and FJ ranges.

In line with the Canter's revised warranty period, the FA range is now covered by a four-year, 240 000 km policy, while vehicles in the FI, Fighter and FJ line-ups are covered for four years or 300 000 km. Prior to the extensions, the warranty term for the entire truck range was two years or unlimited kilometres.

Commenting on the decision, Ziyad Gaba, head of Fuso Trucks, said the move signified the brand's determination to stay close to its customers and align its product offerings to their demands. "It also demonstrates the confidence that Fuso – which is a Daimler brand – has in the performance of its vehicles," he said.

Gaba added that Fuso had made a commitment to continue to review trends and solicit

customer feedback to keep the market supplied with vehicles that lived up to the brand's motto: Simply Better Trucks. "I am happy to say the extended warranty is a true testament of the team's tireless efforts to meet the needs of our customers," he said.

The new warranty includes bumper-to-bumper coverage, excluding usual wear and tear items. Gaba concluded: "The warranty offers up to 1 460 care-free days and this is complete peace of mind, making us a true solution provider."



BOARD FOR ROAD ACCIDENT FUND APPOINTED

The appointment of a permanent board for the Road Accident Fund (RAF) was recently announced by the Minister of Transport, Fikile Mbalula. The board has already taken office, with advocate Galetlane Rasethaba appointed as chairman.

Making the announcement at a media conference in Centurion, Mbalula said the appointment followed an extended period during which the RAF did not have a permanent board. "We are under no illusion about the challenges facing the fund. We are equally confident that the new board will rise to the occasion and tackle the challenges with vigour. The challenges confronting the RAF are huge and require a collective effort to resolve," he acknowledged.

Mbalula said the RAF had an actuarial liability of R292 billion. "This means the entity does not have enough money to cover claims as they are lodged. In the short term, RAF owes R17,2 billion on claims that have been finalised, but has no money to settle the debt."

He said in the current financial year, the organisation was involved in the settlement of about 189 000 claims which were at the litigation stage. "In the previous financial year, 22 366 cases were allocated trial dates,

but of those only 86 came before a judge," he said. "This means that in 99,6 percent of cases, the RAF settled out of court," he said, adding that the entity spent about R10 billion annually on lawyers' fees.

"In addition to the settlements, the RAF also had to pay complainants' legal costs, which amounted to about R6,3 billion. This is an area to which the new board will have to pay serious attention," he said.

Mbalula said serious consideration would also have to be given to building internal capacity at the RAF. "This may involve in-sourcing legal work and directly employing attorneys to process the case load. We believe this course of action can save the entity R2,9 billion year – it's a model the Legal Aid Board employed to bring down costs and improve efficiencies."

The RAF's new board consist of: Khotso Mothobi; Moses Nyama; Dr Prieur du Plessis; Thembelihle Msibi; Hilmi Daniels; Dr Nomonde Mabuya; Dr Maria Peenze; Thulani Tshabalala and Lusani Mulaudzi. Two additional members, who will both be women, are scheduled to be announced shortly, bringing the total number of non-executive directors to 12, made up of six men and six women.



Fikile Mbalula, Minister of Transport

PUTCO AND NETSTAR TEAM UP TO KEEP ROADS SAFE

Putco has teamed up with vehicle tracking company Netstar to help implement a range of initiatives aimed at increasing road safety and reducing accidents involving its buses, especially along the notoriously dangerous R573 Moloto Corridor.

The initiatives follow meetings between Putco and transport MECs Jacob Mamabolo (Gauteng) and Gillion Mashego (Mpumalanga). The Moloto Corridor stretches over 160 km and spans three provinces – Gauteng, Mpumalanga and Limpopo – and is used by over 60 000 commuters daily.

In addition, with a view to improving driver competency, Putco's bus drivers are already undergoing advanced driver training courses at Armscor's Gerotek facility near Pretoria. So far, 20 Putco drivers from Tshwane and Mpumalanga have completed the training.



"Netstar has been working with Putco for three years, taking it on a journey which kicked off with the installation of telematics systems to provide data on driver and passenger behaviour," says Shaun Bradshaw, a Netstar executive.

He says the data is now being mined and is used as part of the driver training curriculum. "The Netstar fleet-management solution offers features including driver behaviour, incident escalation and digital inspection.

"The data we collect provides insights into aspects such as over-idling, speeding, extreme braking and harsh acceleration, and can be used as a tool for improved driver training. The initiative represents a real manifestation of how data can be analysed and translated into real-time benefits."

Other initiatives introduced by Putco include road safety information sessions for drivers presented by officials from the Road Traffic Infringement Agency and the Road Traffic Management Corporation.

Additionally, 300 drivers operating along the Moloto Corridor have attended a defensive driving safety presentation given by a senior instructor from Gerotek.

"Putco and Gerotek (both accredited driver training providers) have signed a Letter of Intent to enter into a partnership to establish an accredited driver training academy to service the post-licence driver training needs of the industry, ensure adherence to the norms and standards of driver training and enhance advanced driver training to the benefit of the industry," says Franco Pisapia, Putco's managing director.

STATE OF THE COMMERCIAL VEHICLE MARKET, DECEMBER 2019

New vehicle sales ended 2019 on a high note with 41 698 units moving off showroom floors in December, a rise of 4.2 percent compared with the figure for the corresponding month the previous year. While passenger car sales increased by 9.1 percent, volumes in the light commercial market dropped by 6.7 percent. Sales of medium and heavy commercial vehicles were up by 19.0 percent and 18.8 percent respectively, while sales of extra-heavy commercial vehicles declined by 19.1 percent.

Light Commercial Vehicles < 3 501 kg	Total: 10 461
Changan	14
Fiat Chrysler Automobiles South Africa	16
Ford Motor Company	1 753
GWM	109
Hyundai Automotive SA	179
Isuzu Motors South Africa	1 345
JMC	4
Kia South Africa	99
Mahindra	184
Mazda South Africa	18
Mercedes-Benz SA	99
Mitsubishi	28
Nissan	1 530
Opel	6
Renault	4
Suzuki Auto	28
Toyota	4 626
Volkswagen SA	419

Medium Commercial Vehicles 3 501 – 8 500 kg	Total: 714
FAW	3
Ford Motor Company	4
Hino	152
Hyundai Automotive SA	4
Isuzu Motors South Africa	158
Iveco	68
JMC	5
Mercedes-Benz SA	141
Peugeot Citroën South Africa	3
Tata	27
Toyota	96
Volkswagen SA	53

Heavy Commercial Vehicles 8 501 – 16 500 kg	Total: 423
FAW	31
Hino	57
Isuzu Motors South Africa	165
Iveco	7
MAN Automotive	17
Mercedes-Benz SA	46
Powerstar	10
Tata	31
UD	58
VECV (Eicher)	1

Extra-Heavy Commercial Vehicles > 16 500 kg	Total: 980
Babcock DAF	3
Daewoo	16
FAW	21
Hino	42
Isuzu Motors South Africa	44
Iveco	10
MAN Automotive	117
Mercedes-Benz SA	235
Powerstar	30
Scania	191
Tata	7
UD	99
Volkswagen	11
Volvo Group Southern Africa	154

Buses > 8 500 kg	Total: 155
MAN	104
Mercedes-Benz SA	12
Scania	34
Volkswagen	5

Note: Mercedes-Benz SA reports only aggregated sales data. The company's commercial vehicle market split volumes are estimates based on historical trends and forecasting techniques. All figures are supplied by Naamsa.

THE TATA ULTRA

IT'S NOT JUST A TRUCK
IT'S A BUSINESS UTILITY VEHICLE.



2 Year/
120 000km
Service
Plan

2 Year/
unlimited
km
Warranty

91
TOUCH
POINTS
ACROSS
SOUTH AFRICA



TATA ULTRA 814 4.5 TON
Body length 5 to 5.5m

TATA ULTRA 1014 5.5 TON
Body length 6m

Common rail engines for low fuel consumption • Full airbrakes with ABS • Widest walkthrough cabin

Pictures are for illustrative purposes only.

Eastern Cape: Port Elizabeth 076 637 0077 **Queenstown** 082 496 0662 **Free State:** Bethlehem 064 751 6814, Bloemfontein 082 554 6004 **Gauteng:** Boksburg 073 128 4369, Brakpan 072 765 3074, Langlaagte 082 927 6607, Meyerton 076 464 2381, Midrand 082 494 6392, Newlands 083 472 6860, Pretoria 082 891 3086, Turffontein 082 887 4074 **KZN:** Ladysmith 082 446 9144, Pinetown 084 300 0572, **Mpumalanga:** Nelspruit 083 412 0344, Witbank 076 793 2866 **Northern Cape:** Kimberly 083 923 8572 **North West:** Rustenburg 082 680 0636, Vryburg 082 334 4612 **Polokwane:** Polokwane 071 613 4103 **Western Cape:** Cape Town 082 788 8545, George 082 423 5520 **Other Countries:** Botswana 00267 7173 7375, Namibia 00264 6126 9127, Swaziland 00268 7605 1785



WE'LL DO WHAT IT TAKES TO UNDERSTAND YOUR BUSINESS

We'd love to get to know your business. After all, it's the only way we can offer you a customised insurance solution, matched to your exact needs and budget. So, why not put us to the test? Call us today for a quote or to arrange a meeting with a Business OUTsurance Agent at your place of work.

Visit outsurance.co.za | call 08 600 60 000 for a quote



PROUD PARTNERS