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# Supports smart and safe reversing, keeping a close eye on blind spots.

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Supports safe reversing

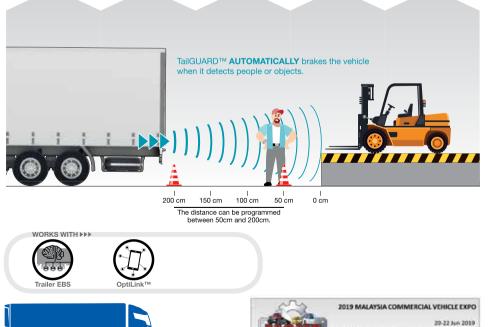
**Retrofit** Solutions

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#### The rear blind spot detection system that automatically stops the vehicle

- Rear blind spot detection system for commercial vehicles
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- Automatically brakes when the vehicle approaches objects within a pre-programmed distance between 50 and 200 cm
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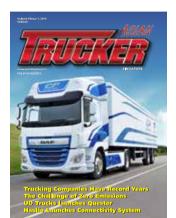


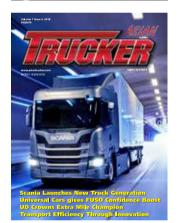


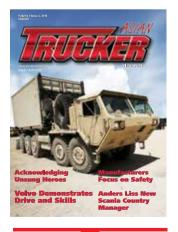


# The Drivers

#### YOUR GUIDE TO ALL THINGS TRUCK







**PDF** versions are available for download at www.asiantrucker.com

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# The Big Picture Must Include People

As technology is developing so very quickly one has to keep an eye on the human side and how all the changes are affecting people.

When I was working on the connected vehicle story it reinforced the fact for me that the trucking industry is growing even more complicated and complex. What all these new innovations and apps can do is probably beyond one person's understanding.

#### It's Beyond Me

Mind you, when it comes to the working of the truck, most of it is beyond my understanding. When the mechanics of a vehicle were relatively 'simple' I would watch in amazement as my brothers, Bill and Dan, fixed an engine. All I knew about an engine was that you were supposed to keep the oil levels up.

But I think that if Bill and Dan were still in the business it would have pretty much passed them by. In the article about Tata Motors Global TechFest and Global SkillFest 2019 it is stated: "The programme familiarizes the participants about various aspects of commercial vehicles through competitive testing on technical know-how, product diagnosis, trouble shooting skills, knowledge on tools equipment usage, safe working practices, knowledge on processes, service IT ecosystems including CRMDMS and customer care APP, customer focused approach, soft skills, and new technological advancements."

Bill and Dan wouldn't know what service IT ecosystems including CRMDMS and customer care APP, customer focused approach, soft skills, and new technological advancements and they haven't been out of the business that long.

#### **Solving Problems**

One reason that governments and owners like 'automated' vehicles is that they can solve the shortage of drivers problem and for the owners reduce their costs. In controlled areas, driverless vehicles are already in use, but in most of the real world drivers are still moving goods and people. And they are doing it in connected vehicles. As it was pointed out on the Bosch website: "Use of a "connected vehicle" doesn't imply that the vehicle is making any choices for the driver. Rather, it supplies information to the driver, including potentially dangerous situations to avoid." The driver is the most important part of the transportation industry and will be for a long time to come. Some companies realize that they must do more for their drivers if they want to not only retain them, but to attract and keep the best.

#### Drivers are Key

In a story I saw on-line by Hans Madsen, he enumerated many good things that can be done for drivers. He wrote: Decker Truck Line Inc., headquartered in Fort Dodge, is doing everything it can to hire and retain drivers and give them a safe, comfortable place to work. Brad Baaed, chief operating officer, stressed the importance of the approximately 800 drivers working on the road. "Drivers are key here," he said. "We have a lot of long-term drivers. It takes one big team to move the freight."

Keeping drivers happy, comfortable and safe when they're out on the road is critical. The company has recently added a number of extras to the trucks to help their home away from home be more of a home. One of those initiatives is furry and barks.

#### **Investing in Comfort**

"We're allowing dogs in our trucks," he said. That actually required an investment. The company created and provides dog friendly areas at each of its facilities. Michael Erritt, vice president of operations, said a number of drivers have taken advantage of the new policy and now ride with Rover. "147 of our drivers have the official papers for a dog," Erritt said.

More than 20 years ago my older brother Bill was taking his dog with him as he transported goods across North America. All the new technology is terrific, but sometimes it is simpler things that makes a job a bit more enjoyable.

Some companies feel they are on the leading edge, when really they are just catching up. Reading through this story, and many others, I see no references to management asking the driver their opinion about what truck to buy, what could make the job better, safer, or more comfortable. Such decisions are, of course, ultimately made by management, but making a decision informed by all opinions will probably result in a better decision.



# Work smarter.

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# COVER STORY ASIAN TRUCK B Dato' Kamarudin Jaffar Deputy Minister of Transport

- 22 JUNE 2019 INES International ibition & Convention Centre Guest of Honour, YB Dato' Kamarudin Jaffar, Deputy Minister of Transport (L) and Stefan Pertz, Editor, Asian Trucker Malaysia (R)

## **MCVE 2019: The Future of Transportation in Asia**

Www.ith an enhanced fringe programme and an influx of new exhibitors, Malaysia Commercial Vehicle Exhibition 2019 once again wrote history and consolidated its position as the largest exhibition dedicated to the commercial vehicle industry.

Anticipation for the event was palpable whenever industry players gathered. Their expectations were met with an exciting show with many highlights to report. Themed "The Future of Transportation in Malaysia", the fourth instalment of the exhibition further highlighted the importance of commercial vehicles to move the nation.

#### Volvo Trucks Makes Every Hour Count

At the MCVE 2019 Asian Trucker met with Mitch Peden, Managing Director, Volvo Trucks Malaysia, to find out what is behind the golden "12h" that was prominently displayed on their booth. In essence, the promise is that



The 2019 instalment of the Malaysia Commercial Vehicle Exhibition, held June 20 – 22 in Kuala Lumpur offered trade visitors an insight into the state-of-the-art in the commercial vehicle industry and a glimpse of the future.

Volvo Trucks will put a truck back on the road within 12 hours from breakdown, and if this time limit is exceeded, Volvo will offer monetary compensation to the customer.



Gold Service

When asked how this novel promise came about, Peden explained that Volvo Trucks feels that the best outcome for their business partners is through a full partnership arrangement. "Obviously, this is achieved by buying our trucks in combination with the Gold Service Agreement. Many professional operators are looking for incremental increases in their uptime, and ROI in order to provide better performance for their customer. Within peninsular Malaysia we really wanted to showcase with our dealer network and our highly trained technicians that together with a reliable parts supply and the backing of the Customer Care Centre (CCC) we can have a truck back on the road within 12 hours from when an unplanned breakdown happens."



The twelve hours are counted from the time the call is logged with CCC to the moment that the customer is being informed that the truck is ready to be picked up again from the workshop or the roadside. "If we exceed that time, we will put our hands into our pockets and compensate with money to the customer."

#### **Careful Evaluation**

Before the company announced this offer, the performance of the service network was closely monitored for almost a year with the vision to launch it at MCVE. "We obviously tested this as we don't want to be paying out all the time. Hence we are very confident that this will work." Working with stakeholders involved in the Uptime Promise is the next revolutionary step in the service offering that Volvo Trucks uses to back up their customers' decision to buy their vehicles. Following Europe and Australia, Malaysia is the first market in South East Asia where Volvo Trucks is offering this service and the only OEM offering it in Malaysia.

Peden believes that the promise can be kept as the dealer network is substantial and well placed whereas the technicians are highly trained, and genuine parts are readily available. As a basis for this, the Gold Service Agreement ensures that vehicles are always maintained in top condition, thus reducing the risk of breakdowns. "The ultimate goal for us is to not pay out any money and in turn increase the uptime of our customers." Anyone with an existing Gold Service Agreement automatically qualifies for the Uptime Promise, without any extra cost. The Gold Service Agreement needs to be signed when a new truck is purchased, to ensure the truck is being fully maintained by Volvo, instead of opting for an upgrade from Blue Service Agreement at a later stage. For the Uptime Promise to work, the truck needs to be equipped with the telematics gateway, which has been available since 2016.

#### COVER STORY ASIAN TRUCKER | 8

#### **Active Safety**

In line with Volvo's core value of 'safety', the marque has introduced the Active Safety Package which includes some new safety features. The safety features aim to support drivers in improving steering and control, preventing bind spot accidents and tracking lanes, to create a better awareness of the driver's surroundings.

"We have seen a keen interest to do more in this area from both our clients and the new government. In Europe, full safety packages have been mandatory for some time now, while this is only starting to take hold here." Full safety packages are now included in the FH models and optional for FM model sold in Malaysia. Especially transporters of petrochemical products are asking for better safety features according to Peden. "Safe drivers are happy drivers!" he quipped.

#### Zero Accidents

Working towards Zero Accident mission, Volvo Trucks aims at reducing accidents as every accident avoided counts. Feedback from the market indicates that customers understand that an accident is more costly in many ways than having invested more on the truck. The additional functions offered are plug and play as they have been available in other markets for some time.

"As we are a major supplier of heavy-duty trucks on Malaysian roads, in order to reduce risk of fatalities and accidents, then we also need to be offering compelling safety solutions although it may not be legally mandated." Among the safety features introduced include the revolutionary Volvo Dynamic Steering with Stability Assist, Adaptive cruise control with forward collision warning and emergency brake and Driver Alert Support.

#### Diamond Technique: a Market Leader in Quality Spare Parts

Participating in its fourth Malaysia Commercial Vehicle Exhibition 2019, Diamond Technique is all about creating awareness and customer satisfaction. Diamond Technique's vision statement is to be one of the leading and wellrespected auto spare parts organisations in Southeast Asia. The company has done this by its steady growth over the years by providing cost-effective and quality services to their customers.



#### **Quality Spare Parts**

Founded in 1996, Diamond Technique is the market leader in quality commercial vehicles spare parts distribution covering the full range of new spare parts for vehicles ranging from prime movers, heavy duty trucks and machinery. Speaking at MCVE 2019, Diamond Technique General Manager, Mr Law Poh Hong, says product awareness is important in the commercial vehicle industry.

"We started our firm in 1996, and since then our business has grown steadily. We are the market leader in providing quality spare parts in Southeast Asia with reputable brands in our portfolio.

"What I have observed in the local market is that consumers do not like locally assembled goods, and that includes spare parts. That is a shame because they are not aware that even though the packaging is of a local brand, the quality remains the same.

#### **Product Awareness**

"Product awareness is important for consumers as this equips them with the right knowledge before making purchases on spare parts and materials. The need to educate customers will not only benefit the buyer but also the industry as well."

Law goes on to add that Diamond Technique does not take any shortcuts on quality and its products are on par with the popular brands in the industry.

"We don't compromise on quality when it comes to spare parts. Our products are sourced from around the world. For instance, some of the less important parts are from China, brake chambers are sourced from Turkey, exhaust systems from France and head lamps from Taiwan.

"I hope the local market matures in time with every customer understanding about the quality spare parts that we sell. Apart from quality, our prices are affordable, and we can assure that customers will know the difference when they purchase spare parts from us."

#### WABCO is Mobilizing Vehicle Intelligence

WABCO once again booked their space at the MCVE. Showcasing

their latest innovations, the booth was busy with delegates wanting to know what is the latest from the technology innovator. Taking time for an exclusive interview with Asian Trucker Teoh Chee How, Business Leader, Fleet Solutions, Trailer Systems, & Connectivity, Asia Pacific explained the direction WABCO is moving in. Teoh, based in Shanghai, has been with WABCO for over 11 years. He is now heading the business for the Asia Pacific region which includes trailers, fleet solutions, and aftermarket plus fleet management system.



From WABCO's perspective, the entire industry is moving towards automation, connectivity and electrification, which the company calls ACE in WABCO terms. During last year's IAA in Hannover, the company launched a new tagline to reflect this. "Mobilizing Vehicle Intelligence" is its new motto. Under this, there are four pillars anchored around it. "The first one is to advance vehicle autonomy," Teoh said. "The second one is to enhance road safety while the third is to empower future fleets. The last one is to build greener transportation."

#### Advance Vehicle Autonomy

This is linked to the concept of autonomous driving. "We have our active braking and active steering systems. Bundled, this will allow us to offer a lot of ingredients to the OEMs as a solid package that they can implement." Last September, at IAA, WABCO also launched APOPT, which stands for Autonomous Driving Open Platform Technology. Teoh elaborated that this is a platform open to established industry players as well as start-ups to design their solutions for autonomous driving. Part of WABCO's roadmap to take technology from Level 1 to Level 5 autonomous driving is with various global partnerships.

#### **Enhanced Road Safety**

Teoh explained that road safety is one of WABCO's core businesses. Incorporated 150 years ago, the origins of the business trace back to the Westinghouse airbrake system. "We have many industry-firsts that we can lay claim to. For example, ABS and EBS," he said. Furthermore, the ESC (Electronic Stability Control) also originated from WABCO and Teoh said the company will continue to innovate in this area of technology. "We need to innovate products around braking in order to improve road safety with more advanced commercial vehicles." In the pipeline is an A-EBS, which is linked to the ADAS (Advanced Driver Assistance System), that enables autonomous driving within the Level 2 technologies.

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#### **Empowering Future Fleets**

More and more intelligent connected vehicles are entering the market. "Within WABCO, we have substantial data on this. Data taken from onboard systems, combined with industry-leading fleet management applications can help fleets optimize their vehicles for safety, fuel efficiency, cargo loading, security and maintenance, in addition to enhancing their assets performance through realtime access to performance data."

#### **Build Green Transportation**

Teoh sees it as a responsibility of the company to work on improving the industry so that there is less pollution. Through this, WABCO is also helping fleet owners to improve on their fuel consumption and fuel efficiency. For example, WABCO also offers solutions to improve the aerodynamics of trucks and trailers, thus improving fuel efficiency. Within this realm, Teoh also cites the efforts of WABCO in the area of e-mobility. The "E-Trailer" was launched at IAA in 2018.

Talking about the overall performance, Teoh provided further detail on sales figures. In total, the business has a turnover of USD 3.8 Billion, of which 18 percent is contributed by the Asia Pacific region. He is proud to report that in recent years the growth of Asia Pacific has been double digits. Out of this, Teoh noted that the growth of business in Southeast Asia has also been a remarkable double digit, contributing more and more to the growth of WABCO Asia Pacific and global business.

#### Sustainable Growth

The Southeast Asia market is important for WABCO's long-term sustainable growth. Although he sees a lot more potential, he said: "From a commercial vehicle perspective, we don't have local OEMs. There are only imported ones. However, the trailers are mainly made locally. If you compare them with the ones made in Europe, North America, or even China, we can see that the trailers made here (In Southeast Asia) are not as advanced yet." In Europe, for instance, ABS on trailers already has a 100 percent penetration rate and EBS penetration over 80 percent already. Also, brake systems have long moved from drums to disc brakes. However, here in Southeast Asia, we mainly see airbrakes.

#### COVER STORY ASIAN TRUCKER | 10

Leading the change are petrochemical companies as safety is paramount for them and the strict regulations demand for systems that not only prevent trucks from jack-knifing in emergency braking situations but offer RSS (Roll-Over Stability). "From a road safety perspective, there is an issue if the truck has all the latest features, but the trailer is still running on airbrakes!"

#### **Costs Reduced**

Teoh observed that the cost of advanced technology has come down drastically, however, as the law does not demand for these to be used, transporters may shy away from the additional investments. "We need to start in segments that are critical and then move across all sectors of the industry." In total, there are some 40 intelligent trailer programme options that WABCO offers to enhance the performance of commercial vehicles.

Leveraging on cloud computing, WABCO offers fleet management systems and cargo management solutions. Utilising the EBS platform, the algorithms help optimising the load. In addition, cameras inside the trailer can monitor the capacity inside the trailer. Paired with this, the driver management system can further enhance the fleet's performance. Through the data gathered, fuel management is also offered. When bundled, all this raw data is a lot to comprehend and fleet owners may neither have the expertise nor the time to interpret it to make sense of it. "It is our role to bring this data to the cloud and convert it into valuable data that the fleet operator can take action on." Given the huge potential for improvements in vehicle technology, Teoh is confident that the region under his stewardship will continue to yield double-digit growth for the company.

#### **For Here**

At MCVE, WABCO displayed locally adapted technology. On display were WABCO's new FCW (Front Collision Warning) and LDW (Lane Departure Warning). The camera-based system is facing the road and will give warning sounds and lights whenever there is a departure from the lane or a distance too close for comfort to the vehicle in front. "Later on, this will be linked to an automated braking system. If you wish, what we show here is the entry level system." Also on display were tyre pressure monitoring systems by WABCO. Shown was the solution that uses the sensors installed inside the wheel. Teoh hinted at an introduction of a system that can easily be strapped onto the rim in order to allow for ease of use and swift installation. Furthermore, WABCO was showing a fleet management system that gives fleet owners a health check of their trailers in real time via a SIM card that is installed within the systems in a trailer. The data included braking alerts among others.

#### **Joining Forces**

As announced in March 2019, WABCO is being acquired by German firm ZF. On 26 June, a shareholder meeting was held to approve the take-over. Following that, the legal proceeding of approving this acquisition will initiated. "For us, this is very exciting as it brings together two great firms that work on the same vision," Teoh said.

#### Deauto Brings in the Trucks at MCVE 2019

Deauto Industries Sdn Bhd (DISB) is the company behind the CAMC trucks you see on Malaysian roads. DISB was incorporated on 1 December 2009 with the main purpose of manufacturing and assembling heavy commercial vehicles such as prime movers, coaches and special purpose vehicles to cater for the local as well as export market in the ASEAN region.



DISB was established in-line with the National Automotive Policy to build a heavy commercial vehicle manufacturing base in Malaysia. The company thus entered into a technical collaboration agreement with China's An Hui Hualing Automobile Group Co Ltd (CAMC) to ensure that it possessed the necessary technical expertise to be the leading heavy commercial vehicle manufacturer in the region.

As a result of the collaboration with CAMC, DISB's seven acres manufacturing and assembly plant in Westport, Klang is equipped with state-of-the-art equipment to ensure compliance with the demanding specifications of CAMC and the Malaysian Road Transport Department.

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#### About An Hui Hualing Automobile Group Co Ltd (CAMC)

CAMC is one of the leading heavy commercial vehicles manufacturers in China, located in the Economic and Technological Development Zone of Ma'anshan in East China's Anhui Province, about 45km from the ancient city of Nanjing.

The company has established a long-term technological cooperation with Japan's Mitsubishi Fuso and Isuzu Auto Stock Company. It signed a 10-year technology introduction agreement with Mitsubishi Fuso. Using the know-how from Mitsubishi and integrating some European styles and technology into their trucks, CAMC has succeeded in developing models that represent state-of-the-art trends in China's heavy-duty commercial vehicles that are of high quality and reliability.

The company's trucks are sold to over 20 countries such as Russia, Australia, Algeria, the United Arab Emirates, Kazakhstan and Vietnam. In August 2006, CAMC was included in the first group of "national whole vehicle export bases" by China's Ministry of Commerce and National Development and Reform Commission.

Their production plant utilises a high level of mechanization and automation and is one of the most advanced heavy-duty truck production plant in China, built with the technology and assembly techniques of Mitsubishi.

The company has won numerous awards including "the most promising self-developed brands in China" as well as a "Automobile Self-development and Innovation" award for its contribution towards China's Automobile Industry.

Asian Trucker caught up with Vincent Hoo, Chief Operating Officer of DISB at the MCVE 2019. When asked why they chose CAMC as their truck of choice, Hoo said that CAMC has been proven to produce reliable products and a trustworthy business "CAMC is partner. extremely responsive to our suggestions and the market demand. I think these qualities show that they are serious about the needs of their partners and customers, and we appreciate that."

#### Wealth of Knowledge

As the sole distributor for the Malaysian market, it was not an easy process during the initial stages. Representatives of DISB had to pitch their company to CAMC officers to prove that they had the capability and resources to provide equal levels of quality and precision that was essential to CAMC.

As an associated company of the Edaran Pekemas Group of Companies, DISB started off with a wealth of knowledge in the

#### COVER STORY ASIAN TRUCKER | 12

automotive industry. "Although we are a relatively new company of seven years, our customers are confident in the quality of our products after seeing and testing it for themselves. The quality of our products speaks for itself."

After the initial resistance against Chinese-branded trucks faded, Hoo said that most operators now see the advantage of Chinese trucks. "They offer the same quality as other trucks at a cheaper price. This advantage is one of the, if not the main, characteristics most operators look into as it allows them a faster return of investment. For an operator, it is no doubt that profit-generating is a prime issue. Nobody would want to do a business that does not generate profits."

#### Wide Service Network

DISB provides a wide service network all over Malaysia to ease the operation of their customers. "Our service network covers the northern, southern, eastern and western regions of peninsula Malaysia so that customers can service their vehicles at the location closest to them. Spare parts availability is abundant. Some spare parts importer are already importing parts for CAMC trucks from China itself due to the demand from customers."

DISB handles both rigid bodies and prime movers, therefore they cater to a wide range of customers. Customers can customize their trucks to any configuration to cater to their needs. The company is planning to launch several new products sometime next year.

#### **Filling Up at Your Place**

Introducing Malaysia's first mobile refuelling service, PETRONAS is delivering fuel beyond petrol stations in a convenient, seamless and safe manner.

Petroliam Nasional Berhad (PETRONAS) keeps Malaysians on the move with ROVR, the first mobile refuelling service offered by PETRONAS Dagangan Berhad (PDB) in the country. ROVR's innovative service allows for a seamless and safe refuelling experience for both commercial and everyday drivers, beyond conventional petrol stations.



#### **Increasing Service**

ROVR has been serving commercial customers (B2B) since its pilot run in October 2018 and has since delivered over 1 million litres of fuel. ROVR is now ready to cater to more B2B customers nationwide with the introduction of more ROVR trucks.

End-consumers (B2C) will soon be able to experience this innovative solution as ROVR will be delivering the latest PETRONAS Primax95 with Pro-Drive at high-traffic hotspots, widening PDB's coverage area beyond the extensive network of PETRONAS stations nationwide.

ROVR

PETRONAS debuts the ROVR







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#### **Move Like Never Before**

"At PDB," said Dato' Sri Syed Zainal Abidin, MD/CEO of PDB, "we invest heavily in understanding the customer journey and we address the frictions in their daily lives by offering progressive solutions. ROVR provides a new refuelling experience, and we are excited to have our customers be the first in Malaysia to experience this. We have received positive feedback from our B2B customers, and we are ready to cater to more. We want our customers to move like never before as we continue to deliver a seamless and frictionless customer experience."

ROVR provides scheduled deliveries of PETRONAS Dynamic Diesel to B2B customers, providing a hassle-free experience in the logistical management of the fleet. This allows for the refuelling process to take place at the customers' convenience on their premises.

#### **Many Benefits**

Mr. Sua Hee Yuan, Chief Financial Officer of Landbridge Haulage (M) Sdn Bhd stated: "I am pleased with this new offering from PDB. It's not easy for our large trucks to navigate on roads, and some stations set a limitation on large commercial vehicles. With ROVR, we just schedule for fuel deliveries, and ROVR trucks and Rangers will show up for our drivers to refuel without the need to leave the yard or take a detour. This definitely eases logistical planning, reduces costs and improves our time management."

ROVR fuel trucks are guaranteed safe and certified for fuel delivery and dispensing, according to the stringent health, safety, security, and environmental (HSSE) requirements stipulated by national authorities and regulatory bodies. All ROVR trucks are equipped with sensors to monitor vital information and maintain operational safety throughout the duration of service.

ROVR's current fleet includes a 4,000-liter capacity and three 11,000-liter capacity trucks for commercial customers. ROVR's 3,000-liter capacity truck for end-consumers is in its pilot stage. By the end of this year, PDB will expand ROVR services nationwide and set up more refuelling sites.

#### Upcoming MCVE 2021

While the exact date has not been confirmed, the next instalment of the Malaysia Commercial Vehicle Exhibition will take place in Q2 of 2021. Companies interested in taking up space or sponsoring the event are encouraged to make their bookings early in order to avoid disappointment. **7** 



# Tata Motors Holds Fourth TechFest & SkillFest

Over 11,000 dealer technicians and service advisors participated in programmes to improve skills and knowledge.

(Mumbai) True to its moto of 'Connecting Aspirations', Tata Motors recently conducted Season-4 of Tata Motors Global TechFest and Global SkillFest 2019, an initiative to improve the skill and knowledge of commercial vehicles technicians and service advisors across the globe. The programme saw over 7400 technicians and 3400 service advisors' entries from 29 countries globally, including 801 channel partners from India and 500 from 28 countries globally i.e. Asean, LATAM, SAARC, LHD Africa, RHD Africa and Middle East.

#### Promoting Understanding

Through this championship, Tata Motors aims to promote a mutual understanding between Tata Motors' and the technicians and service advisors of their commercial vehicles channel partners. The theme of this year's edition was to celebrate the technical and advisory skills of participants, allowing them to learn the latest in-service technologies while at the same time understanding their training needs, ensuring the highest levels of service quality and delivery.

The winners' (pictured above) won cash prizes worth \$2000 (1st), \$1500 (2nd) and \$1000 (3rd) for SkillFest, while cash prizes worth \$1700 (1st), \$1200 (2nd) and \$700 (3rd) for awarded at TechFest.

#### Skills Shortage

Commenting on the championship, Mr. R. Ramakrishnan, Global Head Customer care, CVBU, Tata Motors Limited said, "The automotive industry is challenged with acute shortage of skilled manpower, especially technicians. With the transforming nature of the industry, it is imperative that the service aspect evolves correspondingly. The aim of this initiative is to bridge the skill gap in the industry and provide participants with hands-on learning. As a responsible company, we are committed towards the cause of promoting skill development and employment generation in the industry."

The programme familiarizes the participants with various aspects of commercial vehicles through competitive testing on technical know-how, product diagnosis, trouble shooting skills, knowledge on tools equipment usage, safe working practices, knowledge on processes, service IT ecosystems including CRMDMS and customer care APP, customer focused approach, soft skills, and new technological advancements.

#### Practical Application

The 5-stage competition was based on technical and theoretical tests, which analyses the quality of technicians. Through these evaluation processes, Tata Motors has been able to design and develop advanced training modules to upgrade technical skills and usage of specialised tools, also rewarding and recognising best talent, and thereby creating healthy competition among channel partners. Since its inception, the programme over the last four editions has trained and provided exposure to more than 20,000 technicians and service advisors of their commercial vehicles channel partners.

# **Events & Exhibitions**

#### **MIMS AUTOMECHANIKA MOSCOW**

Date : 26 Aug – 29 Aug 2019 Venue : Expocentre, Moscow, Russia

Contact Info: Tel. info@itemf.ru

Details : The exhibition, organized by ITEMF Expo, a joint venture of ITE Group and Messe Frankfurt international exhibition companies, traditionally presents a wide range of products from the leading Russian and international manufacturers, such as AD Russia, AKOM, BOSCH, BREMBO, BRISK, Carvile, Contitech, DAYCO, GAZ GROUP, GATES, DELPHI, Fenox, Gates, JP Group, KYB, MERCEDES-BENZ RUS, LADA-Image, MANN&HUMMEL, Marcon, Mutlu, OPTIBELT, SCHAEFFLER GROUP, SAIPA, SOGEFI GROUP, TENNECO, TMD Friction, VARTA, VALEO, VolgaAvtoProm, ZF FRIEDRICHSHAFEN, and many others. The exposition covers the following product groups: automotive & spare parts, car washing, workshop and filling-station equipment, IT products and services, accessories and tuning.



#### INTERNATIONAL COMMERCIAL VEHICLE AUTO SHOW

Date : 2 September – 7 September 2019 Venue : IEC Crocus Expo, Pavilion 3, Halls 13, 14, 15 Contact Info: s.ribchak@itemf.ru

Details : Trucks and vans, buses and minivans, special vehicles, municipal vehicles, trailers and semi-trailers, components, spare parts, tools, maintenance equipment, tires, wheels, lubricants / Commercial transport.

#### HOME DELIVERY ASIA

Date :24 September 2019

Venue : Suntec Convention Centre, Singapore

Contact Info: aristeo.arcilla@terrapinn.com +65 6322 2731

Details :E-commerce is booming and growing at an unprecedented rate. Between 2016 and 2017 the number of online customers in Asia grew by 50% to over 200 million across the region.

With this growth has also come a change in customer expectations: same day delivery, efficient returns, the delivery of groceries and perishable goods and omnichannel delivery options. Logistics companies across the ecosystem and across Asia are adapting their business models and processes to meet this rising demand.

New technologies bring greater efficiency, cost savings and sustainable business practices. Asian logistics professionals from retailers and logistics providers are desperate for new solutions. Can you help?

Home Delivery World USA is the leading event for the retail logistics industry in the US and runs annually in Philadelphia, attracting over 2,000 attendees from the American logistics industry. And we're bringing it to Asia.

Held in Singapore, a world logistics and innovation hub, in September 2019, the event will consist of:

- A showcase of the world's best logistics solutions
- 150 presentations from logistics professionals from around Asia
- 1,500 attendees from retailers, logistics providers and technology solutions
- The latest and most innovative local start-ups

The conference programme consists of six stages each featuring twenty four presentations.

#### SUPPLY CHAIN & LOGISTICS EXHIBITION – GCCSCL

Date : 7 October – 9 October

Venue : Oman Convention & Exhibition Centre (OCEC)

Contact Info: http://www.infraoman.com/

Details :Infra Oman - dubbed as one of the largest building and construction expo in the Middle East has been continuously defining the industry's development for the last 8 years. It is considered as the annual meeting place for industry leaders, suppliers and buyers in the Sultanate of Oman. Infra Oman has proved to be an ideal starting point not only for the local companies, but also for foreign entities that are more determined to be part of Oman's growing market.

The 9th five-year development plan (2016-2020) attaches a great importance to construction development by ensuring optimum utilization of resources and investment opportunities in the various governorates in the Sultanate. The private investments shall be in commodities production activities (32.6%), services activities (37%) and in infrastructures (29%)

Infra Oman 2019 will be co-located with Electro Oman – Electricity, Energy & Lighting exhibition which is dedicated solely to energy and clearly partitioned to cover all aspects of the sector, including electricity, water, lighting and HVAC, with a special emphasis on sustainable solutions and renewable energies.

Also, co-located with Infra Oman 2019 will be the GCC Supply Chain Logistics & Conference showcasing logistics services, shipping, maritime services and investment opportunities.

Participate in Infra Oman and showcase the difference that your company can make to the Sultanate's highly impressive infrastructure development plan.





#### **NACV 2019**

Date : 29 October 2019 – 31 October 2019 Venue : Georgia World Congress Centre, Atlanta, Georgia Contact Info: ibfox@hfusa.com

Details : Mark your calendars again for the North American Commercial Vehicle Show (NACV Show) – the new B2B trade show for the commercial vehicle industry will take place October 28-31, 2019 in Atlanta, Georgia.

The NACV Show is a brand new concept for commercial vehicle trade shows, focusing on fleet decision makers and influencers. The inaugural event in 2017, boasted over 440 exhibiting companies covering more than 370,000 square feet of net exhibition space at the Georgia World Congress Center.

Leading truck and trailer manufacturers and commercial vehicle parts and components suppliers will demonstrate their latest product offerings on the show floor. A new feature will be the addition of Class 4-5 lighter-duty vehicles to bolster our bigger Class 6-8 trucks.

#### **KOREA TRUCK SHOW 2019**

Date : 7 November – 10 November 2019 Venue : Songdo Convensia, Incheon Contact Info: Tel. +82-51-784-7901 Fax. +82-51-792-6370 Email. info@ctfairs.kr

Details : -

# The Complex of Connecte Vehicles

There are many aspects to vehicle connectivity that are impacting the way vehicles are being driven and maintained and more developments are coming that will make the mobility world safer and more sustainable.

Connected mobility is no longer something of the future but is today's reality. Gartner, Inc. an American research and advisory company, estimates that by 2020 250 million vehicles worldwide will be connected. Connected means they will be constantly exchanging data between the cloud, their surroundings, other vehicles and infrastructure. A wide range of new and innovative services are being developed that are making mobility safer and more efficient. This is a complex area which grows even more important and more complicated as new developments are put to use in the real world.

#### More than you Know

"Simply stated, connected vehicle technologies allow vehicles to communicate with each other and the world around them," Bosch notes on its website, "Your vehicle is likely already more connected than you realize. Navigation systems already include connected vehicle functionality, such as dynamic route guidance. Your GPS-based system receives information on congestion in the road ahead through cellular signals (4G LTE or 3G) and suggests an alternative route.

"The connected vehicle concept is about supplying useful information to a driver or a vehicle to help the driver make safer or more informed decisions. Use of a "connected vehicle" doesn't imply that the vehicle is making any choices for the driver. Rather, it supplies information to the driver, including potentially dangerous situations to avoid."

A White Paper by SAS notes that there are a host of opportunities to support better decisions about an OEM's internal operations and new ways to improve the customer experience:

• Quality and reliability. Automatically generates quality alerts at the individual or fleet level to spot issues sooner, reduce time to resolution and better manage warranty costs.

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- Driver safety. Use driver behavioural data to spot aberrations and motivate better driving habits.
- Customer experience. Make tailored and relevant offers to customers for fuel, parking, restaurants and more based on location, direction of travel, time of day and customer preferences.
- Dealer services. Provide predictive maintenance alerts and optimize the availability of parts, technicians and bays to service customers' vehicles.
- Usage-based insurance. Analyse real-time driving behaviour to predict accident risks and offer usage-based insurance for on-demand transportation services.
- Behaviour/policy monitoring. Monitor young drivers for unusual deviations, shut off and recover stolen vehicles.

#### **Connectivity is Key at Scania**

For many years truck manufacturers have been integrating connectivity apps into their





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new vehicles. "In our data-driven world, the connected vehicle is key to our customers' profitability and competitive edge," says Anders Liss Country Manager Scania Singapore. "With connectivity, Scania is able to provide customers with services that analyse data in meaningful ways to improve their vehicle uptime, safety and fuel efficiency. Our customers benefit by having more real-time control over the fleets. They can have fleets fully maintained and operating at the most optimum health. They can analyse performance trends and use remote diagnostics to predict problems before they occur, so they can follow-up with corrective actions, such as additional preventive maintenance and driver training and coaching."

Connectivity provides owners and maintenance personnel with information about the truck and the driver that can result in better care for both. Since 2011, Scania has equipped all its vehicles with on-board communication. This has enabled Scania to mine data to provide a suite of value-added services designed to maximise the connected vehicle's uptime and total operating economy for a fleet owner.

#### These services include:

#### Fleet Management System

The data collected on board Scania trucks gives valuable insight into driving styles, productivity and economy. This level of tracking and diagnostics can bring significant benefits in increased uptime, improved safety and reduced operating costs.

Areas that can be monitoring include gear-changing: Correct and efficient use of gears is vital for fuel economy, safety and performance; it can improve driving styles and reduce risk and costs.

Braking: By tracking drivers' braking behaviour, it's possible to teach them the driving habits that will improve safety, reduce wear on renewables and increase productivity.

Speed control: Keeping a constant speed can significantly improve fuel economy and reduce maintenance costs. Scania's smart data collection makes this quick and easy.

#### Fleet Care

Scania Fleet Care uses a dedicated fleet manager and remote diagnostics to maximise a fleet's uptime so the fleet owner can focus on his/her core business. The fleet manager performs central coordination and service planning to optimise the whole fleet and makes sure each vehicle is performing at peak condition. The fleet manager also provides performance analysis from the data collected to identify operational disturbances and monitor trends.

#### **Optimising Wendy's Fleet**

In 2018, Wendy Transport Enterprise took Scania's level of support further by becoming a pioneer customer of Scania Fleet Care in Singapore. This latest service offering dedicates a Scania Fleet Manager to manage the fleet proactively to ensure it is running in optimal condition.

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In the past, an employee would act as the inhouse fleet manager to handle reports of problems from the drivers and to schedule service appointments. With Scania Fleet Care, the Fleet Manager from Scania is a single point of contact who monitors the state of the fleet remotely by analysing real-time data gathered from the vehicles and by working directly with drivers to troubleshoot problems and to arrange service appointments at the Scania workshop.

According to Tony Loke, Operations Manager at Wendy Transport Enterprise, the investment in Scania trucks has elevated the company's reputation as a leading transportation and distribution company for containers, tankers and loose cargo in Singapore, With more vehicle uptime and reliability from Scania, the company is able to offer better service and uphold its promises to customers, many of whom have been repeat customers for at least 15 years.

#### **Relieves Headaches**

"Scania Fleet Care is an outsourced service that takes away our headache and gives us peace of mind," says Tony. "We don't have to rely on drivers reporting problems to us. The Fleet Manager takes care of everything, letting us know if there are problems, which faults require immediate attention and when our vehicles need to be in the Scania workshop. And when the vehicles go in, the service technicians have already prepared the spare parts and diagnostic equipment needed for our particular problems."

Resulting from these efficiencies, Tony finds that vehicle downtime at the workshop is even shorter, from an average of two days to one day, or even half a day. The in-house fleet manager can also be deployed to handle other tasks within the office.



Scania Fleet Care also includes monthly reports on the performance and fuel efficiency of each truck as well as the performance of each driver. With these insights, management can look into continuous improvement measures, such as Scania Driver Training and Coaching to impart safer and more fuel-conscious driving habits.

#### **Distance Alert**

Connectivity can do many things in addition to monitoring the condition of the vehicle. For Volvo Trucks, where safety is its number one priority, new technology can make driving safer.

Volvo Trucks has introduced Distance Alert, which makes it easier for truck drivers to keep a safe distance from the vehicle ahead and avoid critical situations. Accidents where one vehicle runs into the back of another currently make up around 20% of all serious collisions involving trucks. Distance Alert makes it easier for drivers to maintain a safer distance from the vehicle in front.

Carl Johan Almqvist, Traffic and Product Safety Director at Volvo Trucks adds detail: "Often accidents of this kind are caused by inattention and too short distance to the vehicle in front. Distance Alert warns drivers with a red light in the windscreen as soon as the truck gets too close to the vehicle ahead and in most cases a collision can be prevented."

#### **Elevated Warnings**

Distance Alert is part of the most recent version of Volvo Trucks' driving support system, Collision Warning with Emergency Brake,



which is designed to help drivers to prevent accidents in several stages. If Distance Alert does not have the intended effect, a flashing light and an audible alarm are used to warn the driver. Finally, the advanced emergency brake is activated. All of this happens within seconds.

The function is intended for use on major roads outside cities and is switched on at speeds over 60 km/h, unless the adaptive cruise control system is in use. In the same way as the collision warning system's other functions, Distance Alert uses a combination of camera and radar technology to calculate the distance and identify objects on the road.

#### **Technology Improving Drivers**

"By continuously improving the active safety systems in our trucks," Carl Johan Almqvist continues, "we are giving drivers better ways of reducing the risks that they and other road users are exposed to. Distance Alert is one of many examples of how technology can help to make good drivers even better.

"For haulage companies, investing in safety makes sense not only to protect people, but also to save money. Lower insurance and repair costs and less unplanned downtime are some of the arguments. In addition, a safe driving style is generally fuel-efficient. The combination of welltrained, safety-conscious drivers and safer trucks benefits everyone.".

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#### **Platooning Potential**

The term "platooning" refers to a system that vehicles use on the road in which at least two trucks drive in a tight convoy on a motorway, supported by technical driving assistance and control systems. All vehicles driving in the platoon are electronically linked to each other. The truck in front sets the speed and direction, and the others follow.

Testing of platooning in Singapore has been going on for several years with the government wanting to explore the benefits for the country. The Ministry of Transport and PSA Corporation have signed agreements with Scania and Toyota to design, develop and testbed an autonomous truck platooning system for use on public roads. The trials began in January 2017 and will continue until December 2019. The trials are being conducted by Scania and Toyota in their respective research centres in Sweden and Japan, to leverage their existing development work.

#### Safe & Reliable

In Europe, researchers see great potential in real operations after the successful completion of a pilot project run by DB Schenker, MAN Truck & Bus and Fresenius University of Applied Sciences. Operating electronically linked trucks on German motorways is safe, technically reliable and easily applicable in the routine of a logistics company are the key results of the world's first field test with truck platoons in real logistics operations.

As part of a research project sponsored by the Federal Ministry of Transport and Digital Infrastructure (BMVI), professional drivers drove two electronically linked vehicles on Autobahn 9 between branches of the logistics company DB Schenker. The time period for the testing was August until December 2018. Having covered some 35,000 test kilometres, the truck drivers, who drove at a distance of only 15 to 21 meters, praised the driving comfort and the general sense of safety. The field test also demonstrated savings in fuel consumption.

#### **Efficiencies Realised**

According to the project partners, the use of truck platoons could ensure more efficient use of space on motorways, less congestion and increased road safety. Andreas Scheuer, Federal Minister for Transport and Digital Infrastructure said, "The mobility of the future will be automated and networked. I fully support the industry in bringing technologies such as platooning to market maturity. We want to make the processes even safer, more efficient and more environmentally friendly, all along the value chain. The drivers have a key role to play here. In a digital truck they will be modern logistics specialists. This will open up new prospects for the profession."

The platooning system operated smoothly 98% of the time. Active interventions by the driver were necessary only once every 2,000k, which is much less than expected. In addition, the pilot project demonstrated a 3% to 4% reduction in fuel consumption. "We were able to show that platooning has the potential to contribute to



the reduction of fuel consumption and CO2 emissions," Joachim Drees, Chairman of the Management Board of MAN Truck & Bus SE claimed. "First and foremost, we are pleased that the system works reliably and can increase safety on motorways. Accordingly, platooning is an important step for us on the way to automation."

#### **Drivers Feel Safe**

Scientists from the Fresenius University of Applied Sciences investigated the psychosocial and neurophysiological effects on the drivers. Having experienced the actual field test brought about a significant change in the previously sceptical attitude of the drivers. "A general sense of safety and trust in the technology is echoed in the drivers' assessment of specific driving situations," said Professor Sabine Hammer from the Institute for the Science of Complex Systems. "None of these were described as uncontrollable. The drivers experienced vehicles of other road users cutting in from adjacent lanes or cutting across multiple lanes as "disagreeable", but not critical. "Due to the fast response times of the system, drivers would now prefer a distance of 10-15m," said Prof Hammer.

Professor Christian Haas, Director of the IKS added, "The EEG measurements show no systematic differences between platoon runs and normal runs when it comes to the neurophysiological stress placed on drivers, i.e. in terms of concentration or fatigue." For international use, the scientists recommend further research with longer periods in platooning mode.

#### Autonomous Technology Group

As of June 1, 2019, Daimler Trucks began establishing the Autonomous Technology Group as a global organisation for automated driving, bringing together its worldwide expertise and activities. The main tasks of the new unit comprise overall strategy and implementation of the automated driving roadmap, including research and development as well as setting up the required operations infrastructure and network, heading towards the series production of highly automated trucks (SAE level 4).

The newly established Group is part of Daimler Trucks' global effort to put highly automated trucks onto the roads within a decade. To achieve this, Daimler Trucks announced an investment of more than EUR 500 million. In commercial trucking, level 4 is the logical next step after level 2 to increase safety as well as efficiency and productivity.

#### The Next Step

Martin Daum, Member of the Board of Management of Daimler AG responsible for Trucks & Buses stated: "With the formation of our global Autonomous Technology Group, we are taking the next step, underscoring the importance of highly automated driving for Daimler Trucks, the industry and society. With the new unit, we will maximize the effectiveness of our automated driving efforts and the impact of our investments in this key



strategic technology. We will therefore be in the perfect position to put highly automated driving onto the roads, making transportation safer, saving lives and helping trucking companies boost their productivity."

Software development for highly automated driving will be one of the key activities of the Autonomous Technology Group. Another will be the 'vehicle project' which will be responsible for the redundancy in the chassis enabling the vehicle's systems to take over roles of a professional driver while on the road, providing the highest safety. The vehicle project will take care of the automated driving sensor kit integration (camera, lidar, radar), which – together with a very accurate map – is responsible for ensuring that the highly automated truck finds its own way on the road. The operations infrastructure and network to be set up by the Autonomous Technology Group – another key activity – will consist of one main vehicle control centre as well as additional stations at logistics hubs.

#### **Connectivity Challenges**

While companies like to talk about the benefits of connected vehicles challenges remain. Daimler's director of user interaction, Georges Massing, made the admission in an interview with TU-Automotive that connected vehicles will never be completely secure against hacking. He said systemon-chip and connectivity will be the two primary factors in determining the AI development battle's victor but warned against total reliance on cloud computing because "100% coverage" and "100% security" will never be attainable. He



Executives of DB Schenker, MAN Truck & Bus and Fresenius University of Applied Sciences at the launch of the platooning field tests.

also predicted market growth for artificial intelligence that can detect a driver or passenger's current emotional state.

"First of all, you will never have 100% security, regardless of whether it is in the cloud or embedded. A lot of people are already working on this area and it will get better and better. If you have information in the cloud and you cannot have access to that information because you are not connected, then you are in danger. So just imagine, an autonomous driving vehicle in an area without connection and they don't have an update of the map automatically telling them there is a traffic jam in that area or there is an accident, or the road has been closed for the next five hours. So then you just drive the people there and they are stuck. This will be very dangerous."

#### **Growing Technologies**

Massing continued: "The more you have [software] technologies in the vehicle, the risk increases that the car is hackable. However, it also opens up – and no one is talking about this so openly – the issue that the security technology inside the vehicle and outside the vehicle is increasing in tandem. You have to consider those two parameters in parallel also."

Another challenge, intertwined with this, is the growing number of players and technologies. Where it once took five or six companies to create a product, now 20-25 players from across different industries and disciplines need to come together with specialized apps and hardware that need to be integrated. Every additional party adds another layer of complexity and increases the difficulty of creating a high-level product that is secure.

# Smart Bike Helmet Signals Impending Danger

"We're introducing the cyclist as an equally important road user" is Scania's approach to improving road safety for all.

S cania has joined a research group that has developed prototypes for bike helmets that communicate with surrounding traffic and provide users with alerts four to seven seconds in advance of potentially perilous situations.

#### When Vehicles Communicate

Following the rapid technological advances in driver assistance systems aided by sensors, radar and cameras, the auto industry is taking initial steps towards connected vehicle-to-vehicle communications and, by extension, to connected vehicle-to-infrastructure communications. When vehicles communicate and relay data to each other in real time, road safety will be even further enhanced.

But one significant road user has, so far, largely been overlooked – cyclists. "Nearly all attention has been devoted to cars, trucks and buses," says Johan Fagerlönn, Project Manager at Research Institutes of Sweden (RISE). "We're introducing the cyclist as an equally important road user."

The research has been carried out with support from the Sweden's Strategic Vehicle Research and Innovation Programme and, in addition to RISE, includes Scania, POC Sports, Kapsch TrafficCom, Volvo Cars and the Swedish biking interest group, Svensk Cykling.

#### **Auditory Alerts**

Each helmet is equipped with auditory alerts that – based on the gravity of the situation – warn cyclists of imminent danger. The potential crash scenarios are based on actual data from accidents with bikes. The warning can be conveyed as a vibration, from left or right in accordance with the direction of the threat. This can be supplemented with a warning sound and a voice outlining the nature of the threat, such as "car approaching from left".

New safety helmet can make bike riders

such as Stefan Larsson safer on the roads.

Scania, with its ample experience of developing warning signals and sounds, has been highly engaged in evaluating sounds in user tests. In the project, all three warning modes have been evaluated with regard to user acceptance and effectiveness in averting collisions. "The conclusions are similar to all traffic applications, namely that the information must be perceived as relevant by users and that users find false warnings irritating," says Stefan Larsson, Sound Designer at Scania.

#### The Three Most Common Accidents

The assessment of when warnings are activated have been based on available data on accidents involving cyclists. The project particularly focuses on three common accidents: Cyclists and motorised vehicles colliding while travelling in the same direction. This type of accident often leads to severe injuries or fatalities since both vehicles are travelling at relatively high speeds.

The second common accident is straight crossing when cyclists and motorised vehicles collide head on and the third is 'dooring' when drivers fail to observe approaching cyclists that then crash into opening doors.

#### **Two Different Solutions**

Two different prototypes have been developed: one using the 5.9 GHz vehicle-to-vehicle frequency and one with mobile phone cloudbased communications. The two technologies can be considered complementary where less time critical safety-related information can be widely disseminated through a cloud-based solution and the peer-to-peer based 5.9 GHz communications channel can be used for highly dynamic collision avoidance applications.

More research is needed but the project has shown that cyclists can viably be included in the coming connected traffic environments. "Considering the fact that cyclists in many cases are most vulnerable in traffic and have the most to lose, that's important," says Larsson.

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itsubishi Fuso Truck & Bus Corporation (MFTBC) has opened the new Product Center building and Design Center at the Kawasaki Plant (K1). The building encompasses the corporate headquarters, R&D and design functions, and is part of a large-scale modernization at MFTBC. Daimler Trucks has invested EUR74 Million since 2017 into this building, known as Campus Plus. The building offers a modern work environment on 10,000sgm and is home of the new, state-of-the-art Design Center. The Center has 50 experts in design, digital design and engineering working on the major task to define a common design strategy to all future FUSO vehicles - called the FUSO CODE. The team is active on the next Canter and eCanter generation. Another objective is to work on the specific challenges of an e-truck.

"The FUSO brand is an essential and successful member of Daimler Trucks. In 2018, it contributed about onethird of total sales and plays a vital role when it comes to future topics such as electric driving. The new Product Center and Design Center in the Kawasaki Plant manifests that we are continuously investing in the



### New FUSO Product and Design Center Opens in Japan

future of FUSO and Japan," said Martin Daum, board member of Daimler AG responsible for Trucks & Buses.

Up to EUR40 Mio will be invested in 2019 in the FUSO retail network. This investment kicks off Project Mirai, a seven-year initiative. Within this year, seven outlets across Japan, from Hokkaido to Tokyo to Kyushu, are set to be refurbished.

Hartmut Schick, Head of Daimler Trucks Asia: "The Mirai Project underlines our commitment to being number one in customer service in the Japanese commercial vehicles industry. With upgraded facilities, we will be able to offer faster, better service to our customers across Japan."

## **SPECIAL OFFER FROM ASIAN TRUCKER!**

Books dedicated to wheel alignment, more so on wheel alignment for commercial vehicles, are very rare indeed. You will not find them in bookstores. Wong Thiam Boon has poured decades worth of experience into this book and you can now buy it from Asian Trucker for a special price.

If you want to learn more about how to reduce the cost of operating your fleet through correct wheel alignment, then wait no longer and grab a copy of this practical guide book.

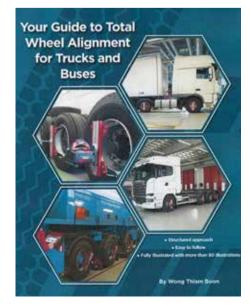
RM 120.00 or SGD 40.00 + Postage Discounts are applicable for bulk orders of five copies or more.

"This practical and resourceful book will be an asset to any fleet operator or workshop that wants to improve the performance of commercial vehicles. It is TB Wong's experience of decades working with wheel alignment systems that shines through and makes this a must-have item for anyone that is serious about their transportation business. The industry had to wait far to long for a resource like this and I am excited to see TB Wong's knowledge now being available to the market."

Stefan Pertz, Editor, Asian Trucker Malaysia Editor, Asian Buses

Available from Asian Trucker. Order via info@asiantrucker.com





#### TECH TALK ASIAN TRUCKER | 24

In the case of the pores of filters, bigger is better does not apply. But when there isn't enough throughput, then the engine of your vehicle will be strangled. We take a closer look at filters made by Hengst to learn more about these crucial parts.



# **Work smarte**

Relying on OE cality.



# **Poring Over What keeps Engines Healthy: Filters**

peak performance and protection of the engine, only fluids and liquids that are free from contaminants should be presented to the power plant. While the filtration material can be produced with the tiniest holes, there is of course still the need to allow the filtered substances to pass through in a sufficient amount to enable to engine to run. Similarly, air that is pumped into the cabin of a bus should be free from pollutants but allowing a sufficient flow of fresh air to be supplied to passengers. Hengst shared some insights with us on how filters work.

#### Air filters let the engine breathe: Purifying the intake air in a highly efficient and reliable way.

The air filter is by far the most important filter both in gasoline and diesel engines. Depending on the power, a commercial vehicle engine sucks in up to 1 500 mł of air an hour with a particle content of up to 50 mg/mł. Quality filters permanently remove foreign particles from the intake air, thereby maintaining the engine performance. The air filter ensures an optimally metered fuel-air mixture, thus guaranteeing the best possible combustion.

- Modern quality filters achieve efficiencies of almost 100 percent, therefore ensuring effectiveness over the entire maintenance interval
- Thanks to the high pulsation stability, the filters do not let any dust through even under dynamic engine conditions
- Particles introduced via the air can accumulate on the air mass sensor without reliable filtration, thereby impairing performance and increasing wear
- Reduction of intake noise
- A reliable filtration ensures clean engine operation on a lasting basis and extends the service life

#### • Your benefits:

- Protection against engine wear and a longer service life thanks to • tremendous levels of dirt separation
- High fitting precision and stability ensure 100-percent tightness and • permanent functional reliability
- Flame-retardant filter media prevent engine fires due to flying sparks Thanks to a high-quality impregnation, the filter paper remains stable
- under pressure and does not tear even during humid weather Special paper embossing ensures maximum filter stability and prevents the pleats from bundling

### Nothing runs without clean fuel: Fuel filters provide operational reliability of the engine and injection system

Injection systems for modern gasoline and diesel engines respond sensitively to the smallest impurities in the fuel. Studies reveal that



the amount of dirt particles in fuels recommended by the international associations (less than 24 mg/kg) is often exceeded considerably. Failure to replace the fuel filter at the specified intervals can cause the injection systems to become blocked, thus putting the operational reliability at risk.

Dirt particles are removed highly effectively thanks to a filter fineness of  $\ge 2 \ \mu m$  (0.002 mm) which means they cannot find their way into the injection system. The filter separates water from the fuel in modern diesel injection systems in order to prevent corrosion damage in the injection system (e.g. high-pressure pump) Inadequately filtered fuel can lead to failure of the injection system The engine can achieve its optimum performance, while consumption and emission values are reduced as a result of finely filtered fuel

#### Your benefits:

- Hengst fuel filters can withstand pressures peaks of up to 15 bar as a result of precise and high-quality machining
- Optimum filter performance and the highest level of purification thanks to the use of state-of-the-art filter materials such as melt-blown media
- Significantly longer replacement intervals
- The injection units and the engine are protected
- Insensitivity even to aggressive fuels and high injection pressures

### Perfection pure and simple: Oil filters need to be specially sturdy, durable and service-friendly.

Modern combustion engines have to perform ever more efficiently – and should therefore always be lubricated in the best possible way. Depending

on the application, several hundred liters are pumped through the engine circulation system every minute so as to reduce the friction of moving parts, thus preventing the premature wear of pistons, con rods and other similar components. Besides the quality of the lubricant, it is essential for the oil filter to function reliably.

- Dust, metal abrasions and other residues down to the smallest particles of 10  $\mu$ m (0.01 mm) are reliably removed from the lubricating circuit
- The risk of damage and wear to engine components is significantly reduced
- Fuel consumption and emissions are reduced as a result of the oil being cleaner and the lubricant acting more effectively
- Only a high-quality oil filter can withstand temperatures of up to 160°C, while demonstrating a static pressure resistance of up to 20 bar
- With over 120 different filter media, Hengst has the right solution for every application



#### Your benefits:

- Optimum filter performance thanks to high dirt absorption capacity
- Pressure and temperature resistance in all operating situations
- High-quality machining and precise welding of the filter components ensure perfect functioning
- Precise fitting accuracy makes installation easier and guarantees functional reliability
- Damage and wear to engine components is significantly reduced
- Pulsation resistance under extreme operating pressures

### Cabin Air filters: Pure air without exhaust gases, pollen and other impurities: Healthy and hygienic air conditions.

Commonly, in South East Asia, operators are using washable filtermats or inserts. This is because the local bodybuilders are using air conditioning units that are adapted to the local weather conditions. However, this results in filtration being not as efficient as specially designed filters.

Hence, Hengst strongly recommends that you replace the cabin air filter regularly if the air-conditioning is to function without fault on a permanent basis: As a rule of thumb, at least once a year or if you drive extensively, twice a year. A replacement not only ensures the air quality in the vehicle, but also protects the motor of the fresh air fan at the same time, as the air stream can flow freely.



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- Pollen, dust, other allergens and unpleasant odours such as exhaust gases are nearly 100 percent filtered out of the air
- Particles down to 3  $\mu m$  (0.003 mm) are effectively restrained
- The activated carbon layer works similar to a sponge and binds harmful gases in pores that are 10 000 times finer than a human hair
- Fine dust harmful to health inside the vehicle is reduced on a lasting basis

#### Your benefits:

- Maximum efficiencies for healthy air inside the vehicle
- Uniform filtration performance during the entire maintenance interval
- The formation of condensation and a film of dirt on the windshield
- is prevented
- Minimized exposure to odors
- Quick and easy installation thanks to detailed installation instructions

#### Work smarter.

As original equipment manufacturers and development partners with wellknown vehicle and engine manufacturers, Hengst informed us that the company implements the best ideas in the best quality. From the classic filter insert to the sophisticated special application, you will find a full range of service parts of consistently high premium quality. And that pays off for you and your customers.



# **Chuan Lim Construction Group Strengthens Operations with 18 New Scania Tipper Trucks**



Mr Anders Liss, (left) of Scania Singapore, hands Mr Alan Lim Kui Teng, of Chuan Lim Construction, the key to a new generation of tipper trucks to a company that requires a rugged performer.

SINGAPORE – Chuan Lim Construction, a leading earthworks contractor, became the first company to acquire the Scania new generation of trucks in tipper configuration in Singapore. The handover ceremony for 18 tipper trucks took place on May 3, 2019 at Scania's Senoko Drive premises.

#### **More Sustainable**

The New Truck Generation from Scania was launched in Singapore in late October 2018. The modular range of trucks was designed to give owners greater total operating economy and profitability at a smaller carbon footprint. With improved aerodynamics to minimise drag, and improvements to the Euro 6 diesel engine, the new trucks achieve up to 5% fuels savings over the previous generation of trucks.

"Scania is pleased to have answered the very tough requirements of Chuan Lim Construction's operations," said Mr Anders Liss, Country Manager of Scania Singapore. "Our New Truck Generation is a sustainable solution that can be tailored specifically for the unique conditions that the trucks have to work within, all the while helping the business achieve higher levels of safety, profitability and sustainability with fewer emissions."

#### Extra Tough

The acquisition, made through Chuan Lim Construction's subsidiary CLC Machinery, was for 18 tipper trucks featuring the versatile P-series cabs with 410 horsepower engines. Each truck is configured with a heavy-duty 9-tonne front axle and a 30-tonne rear bogie. The P958 chassis consists of a 9.5mm thick main frame reinforced with an inner 8mm-thick frame.





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"We wanted a tipper truck that was built to last in very rugged conditions," said Mr Alan Lim Kui Teng, Managing Director of Chuan Lim Construction. "Scania has delivered an extra-tough and fuelefficient truck that is well supported by after-sales service and the availability of spare parts. Overall, this is a reliable choice for our operations."

#### **New Specifications**

The trucks were tailored with the additional robust XT specification – introduced only from this generation of Scania trucks – for operating in construction sites and rough terrains. The XT specification equips each tipper truck with a 300-kg maximum load fold-out service step and a 40-tonne capacity towing unit, all integrated in a sturdy 4mm steel bumper. It also features a high air intake to supply the engine with clean air in dusty environments, and an extra side inspection step for the driver to check the cargo easily.

Among its safety features, each new truck comes with an advanced emergency braking system based on electronic drum braking technology, a lane departure warning system and a rollover side curtain airbag on the driver's side. For improved safety and driver experience, the cab interior is designed for comfort and functionality and fitted with a Bluetooth-enabled 7-inch infotainment system with reverse camera.

#### **Improved Safety Features**

"As a bonus, we like the new features available in this generation of Scania trucks," said Mr Lim. "The lane departure warning and driver monitoring features can help detect fatigue and distractions and anticipate possible collisions which, combined with the rollover side curtain airbag, enhances safety for our drivers."

To maximise operating economy on the new trucks, Chuan Lim Construction subscribes to Scania's services as a total solution. These include the repair and maintenance package to enhance vehicle uptime, the Fleet Management System to monitor vehicle and driver performance, and the Fleet Care service to optimise the fleet.

#### **Expanded Fleet**

With the latest acquisition, the Chuan Lim Construction group now operates 60 Scania trucks out of a total of 200 tipper trucks in its fleet. The new trucks will be used for earthworks in land transport infrastructure projects in Singapore.

Chuan Lim Construction has 23 years of experience in earthworks and general construction works in Singapore. Its earthworks and related services include land clearing, demolition, rock breaking, mass excavation, deep basement excavation, foundation excavation and backfilling and earth disposal. Its intermediate parent company, Chuan Holdings, was listed on the Stock Exchange of Hong Kong in 2016.

#### PRODUCT LAUNCH ASIAN TRUCKER | 30



The upright exhaust system for four-axle vehicles is now available ex factory. It creates additional installation space for equipment on the side of the chassis, and has a weight advantage over the previous solution.

# The New Arocs has Multimedia Cockpit

In keeping with the times, the new Arocs' various bodyspecific functions can be controlled by the Multimedia Cockpit touchscreen, a tailor-made solution for every vehicle body.

(Stuttgart) The new Arocs remains true to its virtues, and continues to excel with power, robustness and efficiency. At the same time the Mercedes-Benz Trucks flagship for construction operations offers digital applications for the construction sector. Above all, the Arocs's already existing ability to accommodate to bodybuilders has been improved even further. For example, individual body control functions that are not relevant to safety can be integrated into the Multimedia Cockpit of the new Arocs. This brings a number of advantages for bodybuilders, drivers and transport operators.

#### Virtual Switches act as Supplementary Controls

The Multimedia Cockpit of the new Arocs consisting of two digital displays replaces the classic instrument cluster and supplements the switch control panel in the dashboard. The high-resolution primary colour display behind the steering wheel clearly shows all the vehicle information plus driving and operating statuses. If an implement or mounted body is in operation, this is shown symbolically by indicator lamps in the primary display.

In addition, pop-up windows can give the driver warnings, and up to ten messages can be configured. The pop-ups consist of a symbol and an information text. Potential messages might be "Transmission fault in the vehicle body", "Fault in the trailer coupling", "Body oil temperature too high" or "Body service required".

#### **Every Aspect Covered**

The second display of the Multimedia Cockpit with touchscreen operation is located in the dashboard. For the convenient integration of non-safetyrelated body functions, up to eight individually selectable, virtual switches can be accommodated here. The corresponding symbols can be chosen from a range of more than 130 templates.

Furthermore, it is still possible to assign functions to the classic switches in the control panel directly below the secondary display. Should the number of connectors provided here be insufficient, an additional control panel in the cup holder can be ordered as special equipment.

#### Body Indicator Lamps can be Individually Assigned

Another advantage of technical integration into the Multimedia Cockpit of the new Arocs: in order to represent corresponding symbols desired by the bodybuilder, it is now no longer necessary to disassemble the instrument cluster. The symbols can be very easily configured from a vehicle library by a service partner, using so-called XENTRY diagnosis.

Up to five indicator lamps can be freely selected for the primary display of the Multimedia Cockpit. In this case the lamps show the operating status of the vehicle body – for example whether the body-mounted headlamps are switched on, or the support legs for a crane have been extended.

#### Multimedia Cockpit can Show Images from Four Cameras

If there is no banksman on a construction site, many of the bodies mounted on construction vehicles can only be safely operated from the cab if their radius of action is precisely monitored by cameras. In the new Arocs this does not usually require the installation of additional screens. Instead up to four cameras can transmit their images to the secondary display of the Multimedia Cockpit. The driver can choose between different viewing modes and, for example, only have the fullscreen image shown that is currently of interest.

In a nutshell: in the new Arocs, the vehicle body and the Multimedia Cockpit work hand in hand. Preinstallation solutions that can be customised provide the driver with more information than previously. It is possible to continue using the mechanical switches controlling body functions, or they can be replaced by virtual switches that are conveniently and intuitively controlled. Moreover, this reduces the wiring requirement in the new Arocs, i.e. further wiring to the switch control panel in the dashboard is unnecessary.

#### **More Installation Space**

The ability of the new Arocs to accommodate to bodybuilders with regard to "hardware" has also been further improved. For example, a vertical exhaust system is now available ex factory for all four-axle vehicles. This creates additional installation space for equipment mounted on the side of the frame, e.g. for additional fuel tanks or stowage boxes.

Another advantage of these solutions compared to the previous, side-mounted exhaust system, where only the exhaust pipe itself is upright, is reduced weight. With the new, side-mounted exhaust system, it is possible to realise a spacesaving solution for the standard exhaust.

#### Time and Quality Benefits

Mercedes-Benz Trucks also ensures the versatility of the new Arocs in its wide range of applications by taking the needs of bodybuilders into account during the development of the Arocs. So-called "Qualified Partners" in the bodybuilder segment undertake to maintain certain quality standards in keeping with the Mercedes-Benz brand where The displays in the Multimedia Cockpit show body functions and virtual switches act as supplementary controls.



service is concerned, including the supply of parts and parts documentation. In return they are given access to design data which saves time and improves quality when the desired vehicle body is realised. r



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### New Volvo FH with I-Save Cuts Fuel Costs

You can save on fuel costs with Volvo Trucks new Volvo FH with I-Save.

n order to provide leading fuel efficiency to its customers, Volvo Trucks is introducing Volvo FH with I-Save. By combining the new D13TC engine with updated fuel-saving features, this new solution can cut fuel costs by up to 7% in long-haul operations – without compromising drivability.

#### Made for Long-Haul

Tailor-made for demanding long-haul operations, the new Volvo FH with I-Save is Volvo Trucks' most fuel-efficient truck to date. By combining the new D13TC engine with updated fuel-saving features, it can cut fuel costs by up to 7%.

Demand for transportation across Europe is growing and trucks are covering increasingly longer distances. At the same time, transport operators are faced with rising diesel prices putting pressure on profitability. "Volvo FH with I-Save is our answer to this challenge. It is a complete solution that combines our latest technology to substantially bring down fuel consumption in long-haul operations. And this is without compromising drivability," says Roger Alm, President of Volvo Trucks.

#### State-of-the-Art

At the core of Volvo FH with I-Save is the new, state-of-the-art D13TC – Volvo Trucks' most fuel-efficient long-haul engine to date. It features pistons with a patented wave-shaped interior that improves combustion and increases efficiency by guiding heat and energy to the centre of the cylinders. Excess



energy in the exhaust gases is then used to power the engine through an additional turbine in the exhaust flow, called the Turbo Compound unit.

The D13TC engine produces up to 300 Nm extra torque, which means less acceleration and fuel is needed to keep a steady speed in highway traffic. It is the ideal solution for longhaul customers.

#### **New Features**

Other features of I-Save include new fuel-efficient rear axles, an updated map-based I-See system that analyses and adapts to gradients ahead and gear-shifting includes software optimised for long-haul applications. The combined efficiency gains of all these products and services can result in fuel-cost savings by up to 7% compared to a D13 Euro 6 Step D engine. D13TC Euro 6 step D with the Long Haul Fuel Package (I-Save) vs. D13 eSCR Euro 6 step D without the Long Haul Fuel Package. Actual fuel economy will vary depending on many factors, such as use of cruise control, vehicle specification, vehicle load, actual topography, the driver's driving experience and weather conditions.

"We have tailored every aspect of I-Save to suit long-haul operators, especially those that typically drive more than 120,000 km per year," says Mats Franzén, Powertrain Strategy Director at Volvo Trucks. "The longer they drive, the more they can potentially save. It is a powerful engine which delivers a highly fuel efficient and smooth driving experience."

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Tata Motors officially launched its next-generation range of ULTRA Business Utility Vehicles (BUV), specially designed to meet the changing customer needs in the light commercial vehicle segment in Vietnam. It's a BUV offering an SUV like comfort with truck like performance and the profitability of a Light Commercial Vehicle.

#### **Repeat Success**

"Having successfully launched Tata Super ace in Vietnam," stated Mr Bui Van Huu Chairman, TMT Group, (pictured shaking hands with Mr. Girish Wagh) "we hope to repeat the same success with the Tata ULTRA. We are very excited, and we hope to consolidate our position in the light-duty commercial vehicle space here in Vietnam with the Tata Ultra. TMT Motors aims to become a market leader in Vietnam CV market with Tata Motors products."

Commenting on the launch, Mr. Girish Wagh, President – Commercial Vehicles, Tata Motors said, "The Tata Ultra Business Utility vehicle is a result of extensive feedback from customers and an immersive study into the lives of drivers to better understand their expectations, and is thereby designed to fast-track their businesses with superior all-round performance. Tata Motors is committed to shaping the industry here in Vietnam, with the latest global technologies, giving the Vietnamese customer competitive business advantages with the trusted credentials of the Tata Motors brand."

#### **Superior Performance**

This range comes with superior performance, a comfortable worldclass cabin, heavy-duty aggregates and multiple load-body configurations, offering customers the advantage of increased productivity and longer life. It will cater to payloads ranging from 4 to 11 tonnes with engine capacities from 85 HP to 180 HP.

Be it for large captive users, transporters or owner-drivers, the Tata ULTRA offers the lowest overall cost of ownership, superior safety, unique style and offers multiple features, setting new performance benchmarks in the light commercial vehicle segment.

#### **Ultra Performance**

The ULTRA offers faster turnaround time and enhanced profitability for any goods carrying business, making it an ideal workhorse for movement of materials across distances.



### Tata Motors launches new 'ULTRA' Business Utility Vehicle in Vietnam

Tata Motors products has already been successfully launched in Vietnam and with the introduction of the ULTRA they plan to build on this success.

The driveline of Tata ULTRA 814 has Tata's proven engine technology – TATA NEW GENERATION 3L COMMON RAIL ENGINE Euro 4, with an output of 140 HP, designed to ensure maximum uptime and reducing maintenance costs. A new-generation transmission with aluminum casing – the G-550 six-speed gear-box comes with overdrive, cable-shift mechanism (a first-of-its-kind in its segment in Vietnam) and axle technology and reduced weight, offering superior performance and greater fuel efficiency for varied payloads. The straight frame modular chassis available in 3920 mm can be customized for multi-purpose loads providing flexibility for businesses and a versatility to adapt to multiple applications. It has a factory fitted heating, ventilation and air conditioning system.

#### **Ultra Comfort & StyleB**

Besides the mechanics of the vehicle, the uniqueness of the Tata ULTRA is that its cockpit is both functional and attractive. Designed by a leading European design house, Bertone, the walkthrough cabin with a width of 2.2m is best in class offering comfort, safety and style. Three way adjustable mechanically suspended seats enhance driver comfort, the ergonomically designed dash mounted gear lever reduces driver fatigue; panoramic windscreen offers better line of sight and the ample storage space, HVAC and music system are additional features.

The smartly designed instrument cluster offers features such as fuel economy indicator, ideal gearshift indicator, water in-Fuel Indicator, etc. The vehicle also offers the provisions for the fitment of various accessories including Global Positioning System (GPS) tracking for tracking vehicles.

#### **Ultra Safety**

The Ultra meets Europe's top safety norms and is equipped with a full air brake system, ABS and power steering that facilitates improved driver control and precision. The clear lens headlamps, LED integrated tail lamps offer superior visibility. The trucks get three years or 200,000kms driveline warranty – whichever is earlier.

The TATA Ultra 814 is built for Vietnam conditions, which means it will surpass user expectations. Exceptional total cost of ownership and running costs, unique styling, best in class comfort and versatility makes Ultra the perfect BUV. *T* 

SUSTAINABILITY ASIAN TRUCKER



### Daimler Buses Contributes to Responsible Local Public Transport

Daimler Buses contributing to efficient mobility and reducing traffic impact in urban areas and assist towns making the switch to electromobility.

n improved environment, dynamic growth and quality of life – these were the predominant topics at the Global Public Transport Summit (GPTS) from 9 to 12 June in Stockholm. A clear vision for the future and further development of local public transport were at the heart of the UITP Global Public Transport Summit. Daimler's bus segment contributes to this vision in many ways, with one of the aims of Daimler Buses to shape and develop the future of global (bus) mobility in a responsible way.

#### **Efficient Sustainable Urban Mobility**

As a bus pioneer, Daimler Buses stands traditionally for the safety, efficiency and comfort of urban and long-distances buses and coaches. Furthermore, Daimler Buses keeps an eye on sustainability: the buses from the Mercedes-Benz and Setra brands are an indispensable part of local public transport and play an important role worldwide in reducing the impact of traffic, pollution, and nitrous oxide emissions on our roads.

The aim of Daimler Buses is to enable more efficient mobility in urban areas and help reduce the strain caused by traffic, particularly in urban areas. Products from Daimler Buses are not only environmentally friendly, they also enable mobility for a large number of people.

#### Climate Protection and Clean Air

With this background, Daimler Buses pursues the aim of reducing the CO2 emissions of its city buses and overland coaches weighing over 18 tonnes in real use (Tank to Wheel) by 20% by 2020 in Europe. A further aim is to reduce the nitrogen oxide emissions of buses in real operations by 75% by 2030.

In order to lower CO2 emissions even further, Daimler Buses focuses on buses with low-emission and emission-free drive. One example of this is the Mercedes-Benz Citaro hybrid, which was awarded the Sustainability Award 2019. Besides efficiency and sustainability, the jury looked at criteria like safety, comfort, noise emissions, re-usability of components, environmental conservation, and efficiency.

#### **Emission Free**

Since the launch in 2018 of the allelectric Mercedes-Benz eCitaro, Daimler Buses has been able to offer a locally emission free urban bus for environmentally friendly public



transport in cities and urban areas. The battery-electric eCitaro is already in series production. Products like the eCitaro provide a substantial contribution towards clean air in urban areas.

To assess the environmental compatibility of a vehicle, Daimler Buses looks at the emissions and resource consumption over the entire life cycle. This is done by means of a life-cycle assessment, which covers the main environmental impacts – from raw material extraction to production and use through to recycling. In 2018, Daimler Buses examined the fully electric Mercedes-Benz eCitaro city bus for the first time as part of a life-cycle study. For the assessment of the eCitaro, two ways of producing electricity during use were analysed. The eCitaro was more efficient in environmental terms than the conventional Citaro city bus with a diesel engine – depending on the method of electricity production used – by 38% (for the European electricity mix) or by 86% (for hydro-electric power).

#### **Daimler Buses eMobility System**

The eCitaro is part of the overall eMobility system from Daimler Buses. The eMobility Consulting Team advises customers about different operational possibilities, accompanying them in their switch to e-mobility. Aspects like route length, passenger numbers, energy requirements, range calculation and charging management are considered. EcoTraining courses are also offered for bus customers and their drivers, to encourage environmentally friendly driving. All these elements demonstrate the contribution made by Daimler Buses on the topic of "The Art of Public Transport" at this year's UITP summit.

#### ASIAN TRUCKER SUSTAINABILITY

#### **Intelligent Mobility**

A fundamental part of tomorrow's mobility solutions, and of increasing importance, is Bus Rapid Transit (BRT), a sustainable mobility concept currently in use in over 160 cities around the world. Mercedes-Benz buses are in use in 41 of these cities. The features of these systems are above all separate bus lanes, special stops and priority at junctions, enabling passengers to reach their destinations swiftly and in comfort and safety.

Daimler Buses has a holistic approach in the field of Bus Rapid Transit. For the introduction of BRT systems, Daimler offers authorities vehicles and advice and financing services. Together with different partners, and in close cooperation with municipal authorities, Daimler accompanies the development and planning of BRT systems. These are already showing impressively high eco-friendliness, short planning and manufacture times, and low investment costs.

#### Safety Always Has Right of Way

Another main focus by Daimler Buses is on safety. With modern driver assistance systems and vehicle protection systems, the bus segment of Daimler aims to considerably improve road safety, with the final aim of being accident-free mobility. With this aspiration, the business area contributes towards achieving the European Union's target of reducing the number of road deaths to almost zero by 2050.

Examples of standard safety and assistance systems are the emergency braking assistance system Active Brake Assist 4 which not only automatically initiates full braking in the case of stationary and moving obstacles, but which also warns the driver of a possible collision with pedestrians and at the same time initiates partial braking. Preventive Brake Assist, the brake assistant for regular-service urban buses, warns of collisions with moving pedestrians or stationary or moving objects and automatically initiates partial braking in the event of the risk of a collision. Sideguard Assist, the first radar-based turning assistant for buses to detect people, supports the driver in critical situations when turning right.



### Bridgestone Continues Advancing Sustainability and Transparency

Policy, training, supplier acknowledgements and third-party assessments underscore company's commitment and progress toward sustainable procurement practices.

**B** ridgestone Group has announced steady progress in implementing its Global Sustainable Procurement Policy – which aims to create thriving and sustainable supply chains – and ultimately ensure alignment with the company's use of '100 percent sustainable materials' by 2050 and beyond. The Group defines sustainable materials as materials that come from resources with a guaranteed continual supply, that can be used as part of the business over the long-term, and finally that have a low environmental and social impact over the lifecycle from procurement to disposal.

#### **Need to Improve**

Through a 2018 partnership with EcoVadis, a leading provider of sustainability, risk and performance ratings for global supply chains, Bridgestone is assessing suppliers' current sustainability practices, as well as the possible support needed to improve performance.

Together with EcoVadis, the company is monitoring and rating the environmental, social and ethical performance of Bridgestone's suppliers to help identify and evaluate qualified suppliers, promote best practices, and serve as a communication and improvement tool for the industry overall.

"We stand behind our commitment to sustainable procurement practices and have reinforced our efforts over the past year to understand how our suppliers are performing against our expectations for ethical, environmental, social and quality standards," said Christine Karbowiak, Chief Administrative Officer, Chief Risk Officer. "Real improvements in sustainability come when we work

with collaborative partners across the supply chain. In addition to our work with EcoVadis, another great example is our participation as a founding member of the Global Platform for Sustainable Natural Rubber (GPSNR) – an independent platform that will lead improvements in the socio-economic and environmental performance of the natural rubber value chain."

#### **Third Party Assessments**

Intensive new efforts by Bridgestone have been underway in all regions globally since the release of the Company's policy in February 2018. To date, acknowledgement of the policy has been completed by 98 percent (~1,600) of the company's Tier 1 tire material suppliers and the majority are in the process of completing third-party assessments with EcoVadis. Additionally, the company has trained hundreds of procurement, legal, technical and customer-facing teammates, among others across the enterprise.

"Bridgestone is a great example of an organization that is leading in sustainability by increasing their focus on responsible procurement practices," said Pierre-Francois Thaler, Co-CEO of EcoVadis. "Proactive collaboration with suppliers is the best way to improve performance across all corporate social responsibility indicators and drive positive change in the communities from which they source. This partnership will help Bridgestone build on their existing efforts and make a real, lasting impact."

#### **Our Way to Serve**

Bridgestone's Global Sustainable Procurement Policy reflects the Company's commitment to creating a thriving and sustainable supply chain, including natural rubber. Guided by the Group's global commitment to corporate social responsibility, Our Way to Serve, the policy sets expectations for business partners and suppliers to operate with Respect of Human Rights, Environmental Standards and Product Quality while including additional requirements for Land Conservation and Rights, Point of Origin Traceability and Resilience.

In 2019, Bridgestone is focusing on reviewing assessment findings, addressing immediate concerns and developing the go-forward strategy toward industry best practices for supply chain sustainability and transparency. **T**  The new Mercedes-Benz Actros has Sideguard Assist, MirrorCam, and pedestrian detection.

# Sideguard Assist and Mirrorcam Provide Greater Safety

Whether drivers are turning or changing lanes – all of the relevant warnings are visible to them immediately.

(Stuttgart) Thanks to its innovative assistance systems, the new Actros has made another huge jump forward with regards to safety. However, the engineers working on the Actros have not just achieved this progress with new systems such as Active Drive Assist, but also by improving existing systems. The best example is Sideguard Assist. This system has been available since 2016 and minimises the probability of dangerous accidents on the co-driver's side when the vehicle turns right. It has now been revised and improved.

#### Warnings in the MirrorCam

Until now the warnings issued by Sideguard Assist were shown in the form of an LED light on the A-pillar in the cab's interior. In the new Actros, Sideguard Assist uses the MirrorCam display to warn drivers visually when the system detects an object in the monitored zone on the co-driver's side. The system can warn drivers in good time about cyclists or pedestrians they may not have seen. MirrorCam and Sideguard Assist work hand-in-hand – overloading the driver with information is thus avoided and all relevant warnings are located in a single location.

In line with the launch of the Actros, Sideguard Assist can now support the driver under certain conditions when turning to the left: on trucks with a frame overhang of more than 1.5m behind the last rear axle, there is a risk that the right-hand rear corner of the vehicle may veer out when turning to the left. This can result in a collision between the overhang and road users. The Sideguard Assist can warn the driver of the possibility of such a collision.

#### **Greater Safety for Weakest Road Users**

If an object is detected in the monitored zone on the co-driver's side, the driver is given a visual warning in the form of a triangular warning symbol which lights up in the MirrorCam display on the co-driver's side. If there is risk of collision, an additional visual and acoustic warning is issued: the display then flashes red repeatedly and after two seconds, it lights up red permanently. At the same time a warning tone sounds on the co-driver's side. The core of Sideguard Assist is made up of two short-range radar sensors on the frame on the co-driver's side in front of the truck's rear axle. The system is designed to monitor the entire length of the vehicle plus two metres to the front and two metres to the rear. It works for both solo vehicles and vehicle combinations up to 18.75 m in length. Daimler Trucks & Buses is currently the only manufacturer offering this type of safety assistance system fully integrated into the vehicle architecture.

Better Aerodynamics, Greater Safety The new Actros is the first series production truck to be equipped with the new MirrorCam. Instead of the usual main and wide-angle mirrors, this system works with digital cameras and displays. The cameras are secured on the right and left on the roof frame. The images from the camera are transmitted to two displays which are mounted on the A-pillars in the cab. A side effect that increases safety: the driver has an unhindered view at an angle past the A-pillars thus increasing the driver's field of vision. Furthermore, drivers sometimes drive with mirrors that are incorrectly positioned so a 'blind spot' is created on the co-driver's side in which pedestrians and cyclists can be overlooked. When using MirrorCam the problem of incorrectly positioned mirrors no longer exists because the cameras automatically adopt the correct position and the display always shows the same complete image from every perspective.

MirrorCam assists the driver in other situations: in bends, for example, the camera image pivots so that the driver can always see the end of the trailer. A special wide-angle mode assists the driver when manoeuvring or reversing. And when overtaking or moving back in on trunk roads, the driver can better assess the thanks traffic behind to the distance guidelines on the displays. MirrorCam not only improves safety, but the truck's aerodynamics thanks to the streamlined design of the cameras. This helps to reduce fuel consumption. **7** 



# Volvo Trucks Singapore Delivers Volvo FH16 to Asiagroup

As the first company to purchase the Volvo FH in Singapore, Asiagroup has shown its confidence in the vehicle by ordering four more units.

or a small city state such as Singapore, it is not typical to have much demand for a powerful long haul truck like the Volvo FH16. Unless of course, it is being used to meet the extreme demands for mega infrastructure projects.

#### **Powerful Trucks**

Standing out with its bold assertive exterior design and quality finishing, four units of the new Volvo FH16s are scheduled to be delivered between July and September to Asiagroup Leasing Pte Ltd. With its 750hp and 3,500Nm of torque, these new trucks are the most powerful trucks commercially available in Singapore.

The fleet of four Volvo FHs, wrapped in vibrant Asiagroup yellow and blue corporate colours, were delivered personally by Roger Alm, President of Volvo Trucks, together with Elisabeth Larsson, Vice President of Volvo Trucks Southeast Asia and Japan, and Joseph Heng, General Manager of Volvo Trucks Singapore at the office of Asiagroup. Also present at the delivery ceremony were Marco Bonaveglio, Regional Sales Director and Ken Tan, Regional Aftersales Director.

#### **Outstanding Performance**

Powered by Volvo's D16K Euro VI engine, the FH16s come with I-shift crawler gearboxes and sleeper cab. They are the most powerful "6x4" trucks/tractor commercially available. The fleet with a 3.2m wheelbase also features the patented Volvo Engine Brake (VEB+) which combines the Volvo Compression Brake and

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the Exhaust Pressure Governor resulting in an outstanding braking performance and Electronic Brake System (EBS) package which helps ensure better brake efficiency and increases stability between the tractor and trailer.

"The Volvo FH16 has been used for the very heaviest and most demanding of all transport operations around the world. It is a prestigious and high performing truck for the customer who is looking for something truly out of the ordinary. I believe our performance specifications and strong aftersales support are the main reasons why Asiagroup chose Volvo Trucks to expand their current fleet," stated Joseph Heng.

#### **Navigating Challenges**

To overcome the demands for heavier and higher lifts where the narrow roads in Singapore could prove to be a navigating challenge, Volvo FH16 is well positioned as a powerful prime mover for transporting overweight and oversized cargo.

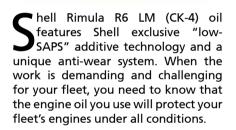
"This Joseph continued, repurchase of our Volvo FH16s shows a renewed confidence to our aftermarket services. We have listened to our customers' feedback and focused on improving the operations at our dealership to maximise uptime for our customers through extending our service hours till 10:00pm on weekdays and increasing our mobile service / recovery support team to five vans. Step by step, we believe we have the right approach to being our customers' best business partners."

#### **First Purchase**

Back in 2013, Asiagroup bought the first ever Volvo FH in Singapore.

Asiagroup Leasing is a diversified equipment and project services company that specialises in heavy lifting and haulage solutions, including crane renting. Founded in Singapore, the company has a regional presence with operations in Malaysia and Myanmar. **T**  TECHNOLOGY ASIAN TRUCKER | 40





#### **Punishing Work**

You could have a chat with Douglas Ng, Business Executive at Huationg Contractor Pte Ltd on a new engine oil they have been using for about a year and a half. He will relate his first-hand experience of using Rimula. "We demand a lot of our vehicles, on road or off. The work is very punishing. Shell Rimula R6 LM (CK-4) helps reduce wear and tear of our fleet's engines."

#### **Product Test**

In September 1983, Douglas' father started operations as Sin Choon Contractor Pte Ltd. The company quickly expanded its business and was soon providing civil engineering and earthworks services. With continued success they expanded into other countries in Southeast Asia

Now a publicly-listed company, Huationg Contractor has 220 heavy duty trucks, 90 to 100 smaller vehicles and another 500 construction vehicles such as compactors, excavators, and concrete pumps. Today, with 900 employees, they work on many



## Shell Rimula Synthetic Oil Delivers Results

While Shell Rimula fully synthetic engine oil seems more costly than regular mineral-based engine oils, Huationg Contractor's Douglas Ng said it is well worth the price, writes Floyd Cowan.

construction projects with government agencies and private companies. Onsite work can be very demanding on Huationg's fleet. It is hot, it is humid, and it is gritty work. Dust gets everywhere.

The time pressure and machinery stress put on lubricants is severe. When representatives from Shell came calling with their new Rimula fully synthetic oil, Douglas wasn't immediately convinced that this product would benefit his fleet. The price difference between synthetic engine oils and mineral-based engine oils was significant. Douglas said he wasn't interested. But Shell had confidence in their product and offered Huationg to try out Shell Rimula for a few months.

#### **Immediate Benefits**

When Douglas saw that his trucks could run for 55,000 km before they required an oil change, he began to change his mind. With mineral-based lubricants, they did an oil change every 15,000 km.

Filters also didn't require changing as often when using Rimula engine oils. "The cost savings on filters are about 40 - 45%, which is no small thing," Douglas said.

The benefits are not only cost savings. "Feedback from the drivers told us that they didn't see any loss of power with the new engine oil. The trucks run as good or better than with mineral-based engine oils. There are fewer breakdowns. The injectors also require less maintenance and the entire engine works better," he added.

#### **Great Value**

"We get better fuel mileage with the trucks," Douglas said. "It is about a five percent improvement, which may not sound like much, but when you factor that in for an entire fleet, it becomes very significant.

Rimula has proven that it is worth its price. It is not just that it pays for itself, it also saves us money, and in this very competitive industry it can be a difference maker."

Huationg trucks work for 20 hours a day, so uptime is hugely important. "We have much more uptime now that we are using Rimula," Douglas said. "Downtime means we are not working and not making money, so reducing service time is huge to us. Our uptime is longer because the trucks don't need the oil to be changed as often, and they have fewer mechanical problems."

#### Knowledge Exchange

Shell doesn't only provide the engine oil, it also follows up with aftersales service. "I've been impressed with the exchange of knowledge from Shell with our mechanics, drivers and management. Shell engineers have gone to the work site to test the condition of the engine oil. They were getting firsthand information right on the job site. When we've had problems, they have been very prompt to respond. The technical services such as LubeAnalyst, LubeAdvisor and LubeCoach have been excellent."

#### **Lower Emissions**

Protecting the performance of your exhaust emissions control systems is not only important to ensure that your vehicles comply with legislative requirements, but also to ensure efficient operations. For example, blocked diesel particulate filters (DPF) can increase fuel consumption. Shell Rimula R6 LM (CK-4) is formulated with reduced levels of ash and sulphur to help maintain the efficiency of the latest vehicle technologies.

Exceeding the requirements for limiting the sulphated ash, sulphur and phosphorous content generated in the engine during combustion, Shell Rimula R6 LM (CK-4) has been tested and proven to provide protection to your vehicles' engines

The benefits of using Shell Rimula R6 LM (CK-4) can be seen throughout the 800-vehicle fleet, from the tipper trucks, the vans and the construction equipment. Huationg is constantly renewing its fleet to become Euro VI compliant, and Shell Rimula is best suited to keep pace with their newer low-emission vehicles.

#### Should you use Shell Rimula R6 LM (CK-4) ?

Shell Rimula R6 LM (CK-4) is suitable for use in many on-highway heavyduty applications. Meeting the requirements of many US, European and Japanese engine makers, it is particularly suited for a wide range



of trucking and public transportation applications in modern low-emission vehicles, especially in fleets with mixed brands of engines and ages of vehicles.

Shell Rimula R6 LM (CK-4) exceeds the performance requirements of industry specifications such as API CK-4, ACEA E6 and E7 and is particularly recommended for vehicles fitted with diesel particulate filters (DPFs).

#### **Specifications and approvals** SAE Viscosity Grade: 10W-40

ACEA E6,E9,E7; API CK-4,CJ-4; Caterpillar ECF-3, ECF-2; Cummins CES 20086, 20081; DAF Meets ACEA E6; Deutz DQC IV-10 LA; Detroit Fluids Specification 93K222; JASO DH-2; Mack EO-S 4.5, EO-O Premium Plus; MAN EO-S 4.5, EO-O Premium Plus; MAN M 3477, M 3271-1; MB-Approval 228.51; MTU Category 3.1; Renault Trucks RLD-4, RLD-3; Volvo VDS-4.5, VDS-4; Iveco NG2- Meets the requirements

The product specifications listed above may vary from time to time and may not all be available for sale in Singapore. To obtain a specific recommendation for your vehicle from our Singapore product portfolio, please use our free online oil recommendation tool, Shell LubesChat on Shell Singapore website or consult your local Shell Technical Helpdesk.

For more information on Shell Rimula R6 LM (CK-4) visit: https:// www.shell.com.sg/motorists/oilslubricants/rimula-truck-heavy-dutyengine-oil.html for more information on Shell Rimula R6 LM (CK-4) **7** 

## SHELL RIMULA R6 LM (CK-4)

Shell Rimula top-tier, heavy-duty engine oils are made from a combination of our synthetic base oil technology and Adaptive Additive technology. We call this Dynamic Protection Plus Technology.

#### HOW SHELL RIMULA R6 LM DELIVERS SAVINGS HELPING CUSTOMERS ALL OVER THE WORLD

Globally, Shell Rimula R6 LM has a proven track record of savings success: Over US\$3,600,000 total recorded savings for 49 customers.

#### Excellent Diesel Particulate Filter (DPF) Protection

Reduces vehicle downtime by reducing the amount of ash accumulation; it demonstrated up to 56% reduction in ash accumulation compared with high ash oil.

#### **Superior Oxidation Control**

Demonstrated low oil thickening due to outstanding oxidation control in the most severe oxidation engine test in the industry.

#### Exceptional Piston Cleanliness

Provides outstanding piston cleanliness and sludge control. This has been proven in stringent engine tests such as Caterpillar 1N (CK-4) and OM 501 LA (MB 228.51). It demonstrated no top land heavy carbon and 80% less top groove deposits in the pistons, showcasing 33% improved cleanliness.

#### Strong Resistance to Deposit Build-Up

Excellent deposit control in the severe Caterpillar C13 engine test.

#### **Excellent wear protection**

Better engine wear protection, 53% up to better oxidation control. The unique Dynamic Protection Plus formulation protects engines against oil-starvation and wear on low temperature start-up (40% faster than conventional 15W-40 oils). In addition, this formulation ensures that the oil keeps flowing through the filter, even when loaded with soot and contaminants (75% better than requirements). This provides excellent wear protection in a range of engines.

AUTONOMOUS VEHICLES ASIAN TRUCKER | 42



# Launch of World's First Full Size Autonomous Electric Bus

NTU Singapore and Volvo have unveiled the world's first full size, autonomous electric bus while two more Volvo Electric buses will soon begin trials at the NTU Smart Campus.

n March 5, 2019 Nanyang Technological University, Singapore (NTU Singapore) and Volvo Buses launched the world's first full size, autonomous electric bus. The single-deck Volvo Electric bus is 12m long and has a full capacity of close to 80 passengers. At the launch at NTU Singapore passengers on a trial run of the bus included dignitaries from the Land Transport Authority (LTA), NTU Singapore, Volvo Buses, HE Mr Niclas Kvarnström, Sweden's Ambassador to Singapore, various development partners and the media.

#### **Key Milestone Reached**

This is a key milestone in NTU and Volvo's development programme under the university's partnership with the LTA to develop and conduct autonomous vehicle bus trials for fixed route and scheduled services, which was announced in October 2016.

"This fully autonomous electric bus will play a role in shaping the future of public transportation that is safe, efficient, reliable and comfortable for all commuters," stated NTU President Professor Subra Suresh. "It will soon be tested on the NTU Smart Campus, which has been home to a number of innovations as a living testbed for technologies that impact the human condition and the quality of life.

#### **Close Partnership**

"This research project not only involves cutting-edge science, technology and AI, but is also an excellent example of close partnership among academia, industry and government agencies in translating basic research into products and services for the benefit of Singapore and beyond. And we have a top team of local and international partners in this multidisciplinary collaboration."

The electric bus has 36 seats and provides a quiet operation with zero emissions. It also requires 80 percent less energy than an equivalent sized diesel bus.

#### **Game Changer**

HÍkan Agnevall, President Volvo Buses, said, "We are very proud to be showcasing our electric bus featuring autonomous driving technology. It represents a key milestone for the industry and is an important step

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towards our vision for a cleaner, safer and smarter city. The journey towards full autonomy is undoubtedly a complex one, and our valued partnership with the NTU and LTA is critical in realizing this vision, as is our commitment to applying a safety-first approach."

"As this bus is electric," Pres Agnevall pointed out, "it makes no noise. And it is pollution free so it will be able to drive right into buildings to provide a high level of service. This will change the way we build buildings." He also noted that the science that is being developed at NTU Singapore will also be applicable to other industries.

#### **Challenges & Opportunities**

The complexity of this development is evident in the number of sensors used in the bus. Some of them were developed by the Volvo Bus team working in Sweden while others were developed at NTU Singapore. Pres Agnevall explained that the two layers must be able to talk to each other and so a team was formed to integrate the software. Responding to a question from the media he said, "The integration was not a problem, but a great opportunity to have the two teams to work together and to make it happen. We learn a great from such situations."

The Volvo 7900 Electric bus is equipped with numerous sensors and navigation controls managed by a comprehensive artificial intelligence (AI) system. Ensuring maximum safety and reliability, the AI system is protected with industry-leading cybersecurity measures to prevent unwanted cyber intrusions.

#### Testing at NTU

Testing the sensors in Singapore provides the opportunity to work in different conditions such as high heat and humidity as well as heavy downpours that could possibly impede the work of the sensors. The Volvo bus is the first of two that has undergone preliminary rounds of rigorous testing at the Centre of Excellence for Testing and Research of Autonomous vehicles at NTU (CETRAN).

Plans are in place to test the buses at NTU and to subsequently extend the route beyond the NTU campus.

This is Volvo's first fully autonomous and full sized electric bus in public transportation anywhere in the world. For this trial of a full-size single deck bus, Volvo has chosen NTU Singapore as its global partner. The NTU and Volvo partnership is part of the collaboration between the University and LTA under NTU's living lab platform. The platform assesses technology maturity and road-worthiness, including the certification of technologies for deployment on public roads.

#### **On Road Trials**

"The launch of the autonomous bus for on-road trials," noted Lam Wee Shann, Chief Innovation and Technology Officer, LTA, "marks an important milestone in the joint project between LTA and NTU Singapore to develop autonomous buses for fixed routes and scheduled services. It is in line with Singapore's vision of deploying autonomous vehicles to improve accessibility and connectivity for commuters. We will continue to work closely with NTU to facilitate the safe and robust testing of the autonomous vehicles."

The bus is undergoing rigorous tests at CETRAN. Jointly set up by NTU, LTA and JTC, CETRAN is a centre dedicated to research and testing of autonomous vehicles. It replicates various elements of Singapore's urban road condition, such as traffic signals, multiple bus stops and pedestrian crossings, and tropical conditions such as driving through heavy rain and partially flooded roads. Operated by NTU scientists, CETRAN is located on the NTU Smart Campus in the Jurong Innovation District.

#### AUTONOMOUS VEHICLES ASIAN TRUCKER | 44

### Advanced sensors and AI technology

The bus comes with a Volvo Autonomous Research Platform software that is connected to key controls such as its navigation system, as well as multiple sensors. This includes light detection and ranging sensors (LIDARS), stereo-vision cameras that capture images in 3D, and an advanced global navigation satellite system that uses real-time kinematics. This is like any global positioning system (GPS), but uses multiple data sources to give pinpoint location accuracy of up to one centimetre.

The system is also hooked up to an "inertial management unit", which acts like a two-in-one gyroscope and accelerometer, measuring the lateral and angular rate of the bus. This will improve its navigation when going over uneven terrain and around sharp bends, ensuring a smoother ride.

#### **Comprehensive AI**

These sensors and GPS platforms will be managed by a comprehensive AI system that was developed by NTU researchers. It not only operates the various sensors and GPS systems on the bus, but also enables it to navigate autonomously through dense traffic and tropical weather conditions.

The AI system is protected with industry-leading cybersecurity and firewall measures to prevent unwanted intrusions for maximum safety and reliability.

#### **Multi-industry Collaboration**

As part of the public trials, Singapore's public transport operator SMRT will play a key role in determining the roadworthiness of autonomous vehicles on public roads. While plans are in place to test the first bus on the NTU campus, a second autonomous 12m Volvo 7900 Electric bus will undergo tests at a bus depot managed by SMRT. This will provide a real-world environment to assess the vehicle's ability to autonomously navigate into vehicle washing bays and park safely at charging areas.

"SMRT is pleased to support the research and development of these eco-friendly autonomous electric buses. As part of the Autonomous Electric Bus trial, we will leverage on



our expertise in operations and maintenance of buses and work closely with our partners to test the command and control system required to operate a fleet of autonomous vehicles. This will help us to stay future-ready with the latest urban mobility solutions to enhance the accessibility and connectivity of our public transport network," stated Mr Tan Kian Heong, Managing Director, Buses & Roads Services and Senior Vice President, Human Resources SMRT.

#### **Fast Charging**

Another partner, ABB, a pioneering technology leader in digital industries and world leader in fast-charging infrastructure for electric vehicles, will develop a smart fast-charging solution. Based on the OppCharge concept, ABB's HVC 300P fast charge system is ideally suited for autonomous charging in bus depots as well as in running traffic.

Offering a charge power of 300kW via a pantograph mounted on the infrastructure, the fast chargers will recharge a battery in just three to six minutes. This will enable charging during the layover times at the end of the bus route, without impacting normal operations.

Tarak Mehta, President of Electrification Products division, said: "ABB is committed to pioneering technological innovations for a sustainable future. We are extremely excited to collaborate on such a landmark project which marks a positive step toward the electrification of public transport across the region and beyond."

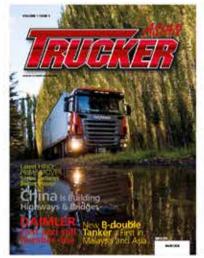
#### **Pushing the Boundaries**

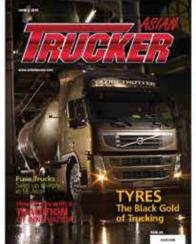
Prof Suresh said, "At NTU Singapore and through this collaboration with Volvo Buses we have pushed the boundaries of innovation which has allowed us to make it a success in such a short period time."

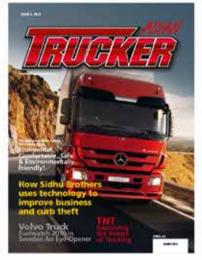
"The work done through this collaboration between NTU Singapore, Volvo Buses and are many important partners will result in cleaner, smarter and safer cities," claimed Pres Agnevall. "We are convinced that an electric bus system will have an important role to play in reducing congestion, noise and emissions. Automated electric cars won't solve congestion problems on their own. We need to travel together into the future."



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## Goldbell Opens Largest Multi-Storey Heavy Vehicle Aftersales Facility in Singapore



(Singapore) Goldbell Group has opened Goldbell Tuas Service Centre, the largest integrated multi-story heavy vehicle aftersales centre in Singapore. Incorporating the latest automation technology to raise productivity by 33% without any workforce increase, a key highlight of the new S\$35 million facility is a dynamic living lab, which will develop new future mobility concepts and innovations.

Dedicated to helping customers minimise vehicle downtime, the centre delivers a service turnaround time of only three hours – close to half the time it used to take to complete routine maintenance services. It offers a full range of repair work under one roof, an added time-saving convenience that eliminates the need of having to go to different locations for spray painting, body and components repair etc. The Service Centre houses Goldbell's dynamic living lab where new concepts, technologies and business ideas will be tested and developed. This will be done collaboratively with partners.

An integrated hub for sales, service and spare parts, the 7-storey 400,000sqft facility is the first multi-storey service centre in Singapore able to carry out heavy vehicle servicing on the higher floors, an operation which is generally done only on the ground floor. Complementing the service bays is the fully automated parts retrieval system featuring six new Autonomous Parts Transporters that will halve the time it takes for spare parts to be sent to the shop floor. It has a new Parts Barcode System and Parts Carousel System to optimise building height utilisation, improve efficiency in parts withdrawal and inventory accuracy.

The new Goldbell Tuas Service Centre is located at 8 Tuas Ave 18 Singapore 638892.

## MAN Adds to Heavy-Duty Line Up

AN has added the TGX 33.640 6x4 BLS to its product range for a gross combination weight of 180 tonnes. Heavy-duty and high-capacity transport requires extremely high performance. Customers demand peak values for performance and torque, continuous braking power, payloads,



fifth-wheel coupling load and traction as well as reliability and efficiency. The driver also needs maximum comfort. MAN offers a comprehensive product portfolio with industryspecific equipment for heavy-duty transport. The lightweight chassis and lightweight 6-cylinder in-line engines from MAN offer high fifth-wheel coupling loads and high payloads. The 640 hp MAN D38 engine and the fouraxle TGX 41.640 semitrailer tractor are the top of the range, offering a gross combination weight of 250 tonnes.

MAN equips the semitrailer tractor ex works to meet the requirements of its heavy-duty transport task. The XLX and XXL cabs are available. Stainless steel storage boxes are fitted on the heavy-duty tower mounted behind it. The hydraulic system, which is primarily used to operate the semitrailer while driving, has a capacity of 30 litres/minute at 250 bar and a load sensing system that controls the oil flow as required.

### **IVECO Appoints New Business Director for SE Asia**

(Bangkok) Michelangelo Amelia has been appointed IVECO Business Director for South East Asia. He takes over from K. Koray Kursunoglu who has been assigned the role of Head of High Growth Markets Asia, Africa and Middle East (AMEA) for IVECO. Mr Amelia joined CNH Industrial in 2014 as Business Director and Brand Leader for IVECO's sister brand FPT Industrial in China and SE Asia. In addition to his new responsibility for IVECO, he is also in charge of the commercial operations for CNH Industrial's powertrain business in South East Asia.

Mr Amelia brings more than 20-years experience gained across the Asia Pacific region. Prior to joining CNH Industrial, he held senior management positions in the powertrain and automotive industry, in financial institutions and in manufacturing. He holds a Master's Degree in Accounting and Financial Control for Large Companies and a Bachelor's Degree in Economics. In his role as Business Director Mr Amelia will support IVECO's business operations in the region with the aim of strengthening the brand's presence in the markets.

"I see a lot of opportunities to further grow the IVECO brand in South East Asia. This is a fast-growing and challenging region where the demand for trucks, buses and



vans continues to rise. At IVECO, we are determined to participate in this growth together with our partners." Mr Amelia will be based in Bangkok with responsibility for Thailand, Malaysia, Indonesia, Papua New Guinea, Vietnam, Philippines, Taiwan, South Korea, Japan, Singapore, New Caledonia, French Polynesia, Myanmar, Laos and Cambodia.



## **SCANIA GOES ON SAFARI**

(Kenya) The Scania L-series cab was designed for the urban jungle, but it's now being put to a surprising new use. Scania trucks are used to carry many different types of goods, but in one corner of East Africa, the cargo is of a very different – and even more valuable – nature.

Kenya's national park, Amini Usiamini, has taken delivery of two Scania L-series trucks, to transport food, security and DNA testing equipment for the upkeep of the wildlife. Despite being designed for urban applications, the reserve didn't hesitate to choose it. "We think the L-series look good, and that's important of course. But first and foremost, we chose them because they are more practical when we are carrying out our transports in the reserve," says

Head Warden Kumcheka Mtu. "Often when we are driving in the reserve, we come across animals that stand in the way of the transports. With the L-cab's lower entry, it is easier to get out of the truck to give the animals a friendly nudge out of the way."

There are species a little troublesome to deal with. Giraffes have been known to stampede in panic and hold up transports at the sight of a truck. But Mtu and his fellow wardens have got this covered; literally. "We were inspired by Scania's use of masking tape to disguise its new generation trucks during testing," says the Head Warden. "In this case, we adapted the wrap to give the truck a zebrastyle camouflage. This has the effect of making the animals think that it's one of their neighbours in the reserve."

Until now, the use of Scania trucks on wildlife reserves was something that sales colleagues had overlooked, but with the success of the introduction at Amini Usiamini, a potential new market opportunity has opened. "It's an exciting and imaginative usage of our trucks," says Johannah Vild, Sales Manager, Special Projects. "I hope it can lead to further sales. I'm certainly game to try," she smiles. **T** 

# First batch of Shacman H3000 vehicles arrive in Tajikistan



(Tajikistan) In April 2019 in Tajikistan's capital Dushanbe, the first batch of SHACMAN H3000 trucks were delivered to end users by the Tajikistan Office of SHACMAN. In recent years, SHACMAN has seized the opportunity of Tajikistan's logistics market development, visited customers of logistics and transportation industry many times, and upgraded SHACMAN products systematically through market research and analysis, combined with the individual needs of regional customers, and obtained good market feedback. H3000 series products are highly praised by local customers for their novel

appearance, strong bearing capacity and comfortable driving abilities.

The H3000 trucks are equipped with Weichai WP10 engine, FAST 12 speed gearbox and Hande 16-ton bridge. The industry's best power assembly ensures power performance and reduces fuel consumption. The use of telescopic axle shift mechanism increases cab sealing, and the three-stage boarding pedal is more ergonomic. The cab of the H3000 adopts hydraulic suspension, hydraulic seat and widened sleeper, which greatly improves ride comfort.

In order to allow customers to better understand the SHACMAN H3000 it was introduced in all areas at the vehicle delivery site, and the reliability, safety, fuel consumption, product upgrade and after-sales service of the product were explained in detail. Through this transportation event, customers gained a deeper understanding of H3000 products, allowing SHACMAN to lay a solid foundation for further marketing, and greatly enhanced brand awareness and product diversification.

## Cummins and Isuzu Enter into Power-Source Partnership Agreement

ummins Inc. and Isuzu Motors Ltd have entered into the Isuzu Cummins Powertrain Partnership agreement that formalizes a business structure for the two companies to evaluate and carry out opportunities to jointly develop and bring new diesel and diesel-based powertrains to global markets. Through this partnership, Isuzu and Cummins share the commitment to leverage both companies' technical strengths to develop market-leading architectures for customers around the world. Cummins and Isuzu committed to form an alliance board and to assign a team from each company to continue exploration of potential opportunities in product technology development, procurement and manufacturing.

"As Cummins celebrates 100 years of innovation, we continue to look for opportunities to build global relationships with companies that share our values in the manner we do business," said Tom Linebarger, CEO Cummins Inc. "This partnership is a terrific opportunity for both companies to leverage our respective strengths and create new opportunities to grow and broaden the product portfolio we bring to customers."

Masanori Katayama, President and Representative Director - Isuzu Motors added: "Isuzu and Cummins recognize the advanced diesel engine is, and will continue to be, an



important power choice for global customers in commercial vehicle and industrial applications. This is especially true in developed countries where power sources are used for high-intensity operations, as well as in emerging countries where social infrastructure conditions are severe,"

# Educational Support Activities at a Vocational School for Auto Mechanics in the Philippines

n February 27, 2019 the graduation ceremony for the 15th class of students and the closing ceremony for current students took place at the Tacloban auto mechanic vocational school in the Philippines. All 18 graduates received NC4 qualification, the highest qualification in the country, and will be employed by Isuzu distributors. Including this class, there have been 266 graduates, of which 32 are active overseas. As of October 2018, there were a total of three graduates working in Japan, of which two are employed at ISUZU MOTOR SYUTOKEN CO., LTD., and one who is employed at the Education Department of ISUZU MOTORS LIMITED.

At the ceremony, Senior Counsellor Ida made a farewell address to the graduates, in which he spoke of his desire for the graduates to use the basic knowledge that they have learned at the school as their greatest asset, and to press on with the confidence that they will be second to none. Isuzu will continue to support this project.

Furthermore, the graduates represented the Philippines in the I-1 Grand Prix, adding a second



victory to their internationally-recognized achievements. I-1 Grand Prix is the Isuzu World Service Technical Competition. In this competition Isuzu's most talented service staff and mechanics gather from all over the world to improve the service level in each country by competing against each other's knowledge and technical abilities in country and regional tournaments to find the World No.1.

### China's Commercial Telematics Market Evolving, Nearing \$5 Billion in System Revenues by 2024

(Oyster Bay, New York) Massive e-commerce increases, hundreds of billions of investments in transportation infrastructure and stringent emissions standards for heavy-duty vehicles are propelling up to a 22% CAGR from 2019-2024 for China's commercial vehicle telematics market per ABI Research, a market-foresight advisory firm providing strategic guidance on the most compelling transformative technologies.

"China's logistics market accounts for nearly 15% of the country's GDP and was expected to produce over one million heavy-duty and over 200,000 medium-duty commercial vehicles last year," says Susan Beardslee, Principal Analyst at ABI Research. "The market is developing from conventional 'track and trace' solutions to increasing use of connected technology and factory-fit solutions. Coverage includes Beijing-based G7 Technologies a leading commercial telematics provider, with customers including Amazon China, JD.com and FedEx Express, and with at least \$510 million in funding, including Tencent. Award-winning supplier 666GPS is the country's largest GPS manufacturer including more advanced custom solutions. Shenzhen-based Meitrack serves a wide number of industries with multiple solutions including integration with Mobileye. Shenzhen Huabao Electronic Technology supports both domestic and international markets, with some distribution via Alibaba as well as other aftermarket and OEM solutions.

Developing a market presence in China can be a challenge. There are detailed and lengthy provisions to apply as a foreign-funded enterprise. "Although economic opportunities for the Chinese market are substantial and growing, suppliers wanting to enter must plan for a long-term investment approach, carefully evaluating local partners and considering multimarket agreements and advanced technologies," Beardslee concluded.



Susan Beardslee

These findings are from ABI Research's Commercial Vehicle Telematics Influencers China application in analysis report. This report is part of the company's Intelligent Transportation ጼ eFreight research service, which includes research, data, and Executive Foresights.



# **Doing Your Part**

Stefen Pertz asks whether citizens should be a part of the law enforcement structure or if they should just mind their own business.

emocracies and modern countries are characterised by the separation of legislative, judiciary and the executive. One body will amend and create laws and rules. one is to judge those that have broken them and the last one is to implement and execute the laws. Professionals are working in all three and we trust them that they are capable of handling the responsibilities they have been tasked with. However, many a time, especially the executive branch, looks for help from the public.

#### **Reporting Offences**

Governments may ask the public to support the executive in doing their job by means of public service announcements and making channels available for Citizen Khan to report issues. For example, members of the public are encouraged to report vehicles parked illegally or to submit videos of drivers breaking the rules. With modern technology, this is very easy, and these reports can be made without a lot of hassle and may be more importantly, anonymous, which can protect the person reporting an offence.

But should we do so? Shall we, as a member of the general public, really get involved in executing the laws and act as an auxiliary police force? Don't we pay professionals to do this job and are we not trusting governments to carry out their duties as we elect them?

#### A Duty

Part of me says that we not only could help, but that it is our duty to do so. To me, the issue is about road safety. If you can help make the roads safer, then why not? I adhere to rules as they are meant to facilitate us living together, respecting each other's space and rights. This construct only works if we all play by the rules. Maybe it is that peer pressure and the knowledge that others may report an offence will make more people think twice about breaking the law. The alternative would be that we will have enforcement officers at every corner and all over the place. Naturally, that is a burden for the taxpayer and I frankly don't like the idea of a police state.

At the same time, I am saying it is not my job to police others. That is what the authorities are there for. I am minding my business and I ensure that my behaviour is as expected. What others do is not really my concern and if there are rules being broken, then it is those that get paid for the job to handle it. Interfering may get me into trouble. You never know what sort of people you may meet and before you know it, my family might be in danger too.

#### Where Do You Stand?

Each of us can, and must decide, which of these two options we want to choose. I for one am very vocal when it comes to people parking where they shouldn't. For instance, people blocking lots reserved for people with disabilities. Whatever their opinion, people should make a choice where they stand on this.

One thing I am "demanding" is that governments support their chosen path. If the government is asking the general public to become auxiliary police, then first and foremost, the reports made must result in action. And these actions need to be communicated. I have reported unsafe working conditions around commercial vehicles to the respective authorities and months later I haven't heard from anyone, nor have the conditions changed. So, why would I make another effort? Should the government decide, however, that this is best left to the professionals, then sufficient staff needs to be deployed and they need to be empowered to act swiftly when it comes to wrong doings.

#### **Common Sense**

Ironically, if we were all to simply adhere to the rules and maybe apply a bit of common sense, then we wouldn't need a discussion about who's job it might be to report an offence. We could simply accept a middle ground that may inconvenience us at times but ensures we all live together in a relatively conflict-free environment whereby we utilise a minimum of the executive branch.

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