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EDITOR'S NOTES ASIAN BUSES | 6



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Sending off 2020

I think we can all agree that this year has been a bizarre, yet spectacular one. Likely, the year 2020 has taken us all by surprise, resulting in some amazing stories we all can tell: some families have been separated while some were stuck in another country for months on end. Isn't it amazing how we have all the means of transportation yet taking making a trip now is near impossible! Companies innovated to individuals joined hands to make a difference.

Showing just how resilient the transport industry is, there are a few things that stand out for me personally. The joint effort of the Shell Rimula team and several partners we roped in to distribute masks was a nice example of how companies and individuals went beyond the call of duty to make a difference. At the outset, it might have been a simple idea, but when faced with constraints of a lockdown, setting up even such a simple supply chain was tricky. Response we received from the participating partners showed gratitude and to some extent the joy of being such a tight knit community where helping each other is second nature. Trying new things has also been very inspiring. Having bounced around some ideas with Dato' Billy Goh, we added the Asian Buses Roadshow as a new format to present content to our readers. From there sprung the motivation to give our website a new look. Which in turn has seen our revamped Service Locator Map and the addition of a job listing page. All these will hopefully give you more information and options to gain access to content we create or to find new business partners. I have learned a lot in the process of creating these new items in our arsenal.

There have been a few stories that also deserve a highlight. A new service was launched where passengers can participate in the longest bus journey in the world. Scania's Ecolution has been catching on and there have been a number of proud owners of their vehicles that have come out to support the initiative. One story, which made it to be a cover story, stays in mind in particular as Kit Loong cleared up some misconceptions about retreaded tires. If there was any question about these products, surely they have been cleared up.

Amidst all the news about "the virus", we might have forgotten all the amazing new products and services that have been introduced. Hyzon has been making waves and TMS is offering a rather fine bus that is going to sweep passengers away with its luxury interior and smooth ride. FUSO is starting to make buses in India and PETRONAS launched an online toolbox.

Ending the year on a high, I am very pleased with the wide range of topics gathered for you in this final issue of 2020. While I am a big fan of pen and paper, I am the last to ignore modern technology. This you will find reflected in the cover story. Technology is also going to be playing a role in transportation as we are now seeing a lot more players offering electricity-powered vehicles. Predictive maintenance, apps and other technological innovations were a staple of our magazines over the past 12 months.

Please explore all the material in this magazine and I look forward to your feedback. Hopefully, I could make a difference with articles, stories and anecdotes that provided a counterbalance to the sometimes depressing news of the mainstream media.

Drive safe, have a great transition into 2021!

Stefan Pertz Editor, Asian Buses

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MARKET UPDATE ASIAN BUSES | 10



New Scania Malaysia Sales and Service Branch now Open in Kuching

The new sales and services branch by Scania Malaysia in Kuching, Sarawak officially opened on 1 November. It is situated at Lot 935, Lorong Demak Laut, 7A Jalan Demak Laut 7, Demak Laut Industrial Park, 93050 Kuching, Sarawak. This is the second sales and services branch after one in Bintulu and part of the expansion plan in the state.

"We have listened to customer feedback and we have responded by investing further in Sarawak into this new premise in Kuching. Our customers will be assured of wider and better services by being at the heart of the state's transportation network," said Marie Sjödin Enström, Managing Director of Scania Southeast Asia. "As we celebrate 50 years in this country next year, being in Kuching means we now have 12 dedicated workshops throughout Malaysia, to meet the country's public and cargo transport needs." said Sjödin Enström.

The new sales and services branch is led by Phang Yee Fong, Regional Manager of East Region. Her team consists of a Solution Sales Executive, a Workshop Manager, Service Technicians and other supporting functions. The team is welltrained and continues to be trained in the latest development of new technology and methods. The three-bay workshop has column lifters, diagnostic tools and other standard equipment to ensure that trucks, buses and coaches that come get the right maintenance quality. Scania's regional Asia Parts Centre is located in Singapore to ensure parts availability throughout Sarawak.

"We have the broadest range of trucks, buses and coaches and services to suit every type of operation," said Phang. "Our customers continue to believe in the fuel efficiency of the New Truck Generation. The XT model serves in the toughest of environment. Coupled with repair and maintenance contracts, roadside assistance, parts, data-driven services – fleet management systems and driver training and coaching as well as Scania Financial Services; our customers continue to benefit from a total solutions approach. This results in greater uptime and total operating economy."

"Congratulations to Scania Malaysia for the opening of the new sales and services centre here in Kuching. Looking forward to the much awaited aftersales support that Scania gives us with the increasing network coverage," said a long-time customer of Scania, Caleb Wong, Director of High Tackle Sdn Bhd. Some of Scania's customers in Sarawak already include Biaramas







Express, PLSH, UITM, Jurukin, Persafe, Institut Pendidikan Guru, Jabatan Pendaftaran Mahkamah Bergerak and Pejabat Pelajaran Daerah.

"I am very pleased that finally Scania has opened in Kuching as per our request. If we schedule our maintenance right, we will be getting maximum uptime for all our coaches consistently," said Lai Sin Kiong, General Manager of Biaramas Express Sdn Bhd. "This is also part of our Scania Ecolution partnership to reduce the CO2 emissions in our operations," said Lai.

Scania's strategic focus is on customer profitability by being at the forefront of sustainable transport solutions. "We continue to explore the possibilities of renewable fuels and electrification in Sarawak. This is a state rich in natural environment and are already used to living in a more sustainable relationship with nature, I look forward to strengthening more sustainability partnerships here, "said Sjödin Enström."





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OVER 24 BRANCHES IN MALAYSIA 24-HOUR RES-Q TEAM WWW.YONMING.COM MARKET UPDATE ASIAN BUSES | 12



Solaris is E-Bus Market Leader in 2020!

Ut of all the manufacturers, Solaris boasts the biggest share of newly registered buses with electric drives in Western Europe in the first three quarters of 2020. In the period in question, 242 state-of-the-art Urbino electric buses rolled out onto the streets of European cities. Solaris has recorded a clear lead over its competitors, thus solidifying its position as an e-mobility leader in public transport in Europe. Over 1 000 battery electric buses were newly registered in the period from January to September 2020. Nearly a quarter of them were produced by Solaris. In the respective period, 242 Urbino electric buses rolled onto the streets of five European countries - France, Spain, Germany, Poland and Italy - with new number plates. To complement the company's achievements perfectly, the Global e-Mobility Leader 2020 prize was awarded to Solaris at the international Global e-Mobility Forum conference on 19 November 2020.

In the first three quarters of 2020, Solaris recorded its highest sales volumes in Poland, Italy and Germany. The presence of Urbino electric buses on the city streets is particularly noticeable in Poland, where as many as 96 percent of the 114 newly registered electric buses bear the Solaris logo. Solaris's share of newly delivered e-buses amounted to 83 percent in the Italian, and 43 percent in the German market. In that period, the largest markets in the EU regarding the number of electric buses registered in the first three quarters of 2020 were Germany, the Netherlands and Poland. Battery electric buses are not the only option in the transition towards e-mobility.

Concurrently, Solaris has been investing in the development of hydrogen vehicles and trolleybuses. Since the launch of the Urbino 12 hydrogen bus in June 2019, the manufacturer has received orders for 57 hydrogen Solaris vehicles. Solaris has also extensive experience with regard to the production of trolleybuses. So far, the company has supplied over 1 600 such vehicles. The share of vehicles with alternative drives in the bus production of Solaris has been growing year by year: in the first three quarters of 2020 it amounted to 43 percent, while in the corresponding period last year it was 39 percent. What is more, the firm has been making further investments to adjust production lines to handle the significant increase in orders for vehicles with alternative drives. In 2019, Solaris delivered to its clients a total of 162 electric buses measuring 8, 9, 12 and 18 metres. In just the first three quarters of 2020, the company took orders for nearly 100 more e-buses. These went to clients in 26 cities in Lithuania, France, Spain, Germany, Poland and Italy.



The last guarter will bring new deliveries so that by the end of the year a new record for the number of produced and delivered modern Solaris buses will have been set with the company strengthening its leader position. "State-of-the-art electric buses fitted with advanced battery solutions and innovative safety systems with comprehensive after sales services are a product that Solaris has developed thanks to both the trust of more and more new customers and to the commitment of its employees. I am proud of the fact that the activities of our company to develop e-mobility have allowed us to take a fresh look at public transport as a sector that influences the guality of life in cities in real terms", said Javier Calleja, CEO of Solaris Bus & Coach sp. z o.o.

In October 2020, during an online launch in a unique setting, the firm unveiled its latest electric vehicle: the Urbino 15 LE electric bus. The vehicle expands the emissions-free portfolio of the company by adding a battery electric bus that will perform outstandingly not only within the confines of a city, but also in intercity transport. The public transport sector, just like any other industry, has been dealing with the consequences of the coronavirus pandemic for nine months now. In these trying times, the residents of European cities can still use public transport that, through the joint efforts of sector representatives, remains the cornerstone of urban mobility. As proven by numerous studies, it is also the safest public space where the number of infections is very low. As early as a few months ago, Solaris presented its additional solutions to make bus rides even safer. 🍠

Yutong Bus CP Stand Out At 2020 China (Macau) International Automobile Exposition

Among 60 exhibitors Yutong Bus CP stood out at the 2020 China (Macau) International Automobile Exposition.



rom October 30 – November 1, the "2020 China (Macau) International Automobile Exposition" organized by Nam Kwong (Group) Co., Ltd., Sinomach and Macau Convention & Exhibition Association was held at the Macao Venetian Jinguang Convention and Exhibition Centre. With the theme of "brand, communication, opportunities", the Exposition attracted 60 exhibitors, fully demonstrating the achievements of the automobile industry and the new trend of energy conservation, environmental protection, culture and innovation.

Electric Models Launched

Yutong, as the leading brand of China's bus industry, launched two full electric bus models at the Exposition, which expressed the theme of "For a better travel". By exhibiting new energy products featured with intellectualization, humanization and quality, Yutong highlighted its concept to attendees of providing better travel for the public.

During the Exposition, the State-owned Assets Supervision and Administration Commission of the State Council, Liaison Office of the Central People's Government in the Hong Kong S.A.R., the Macau government, Nam Kwong (Group), Sinomach and others visited Yutong booth and gave high praise to Yutong's products, enterprise scale, and achievements in the new energy field. Once again, Yutong became the focus of attention. At the same time, "Yutong imprint" was deepened further via quality and strength.

Single & Double Floor

At the Exposition, Yutong exhibited a single-floor full electric bus U10 and a double-floor full electric bus E10DD. U10 is a future-oriented international high-end intelligent networked bus manufactured by Yutong. It not only has a futuristic appearance but has user-friendly and convenient configuration. Moreover, it is equipped with eight intelligent driving assistance technologies, which improve vehicle safety and operating stability. In addition, by vehicle parameter analysis, fault diagnosis, multi-dimensional power consumption data acquisition and more.

The buses' transport capacity can reach up to 15 000 persons/h, which is better than that of other conventional buses, and can satisfy urban public transport travel demand maximally, so as to realize a harmonious unity among people, vehicle and city while providing a one-stop solution.

Stylish Design

E10DD is a high-end double-floor full electric bus manufactured by Yutong. With a stylish, steady, and flexible exterior design, the style of the Yutong bus family is emphasized. The large



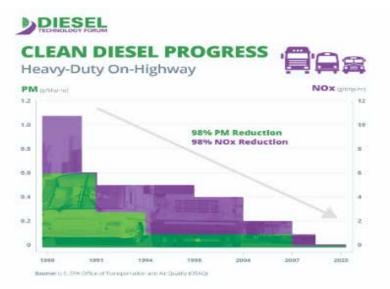
panoramic sunroof, integrated enclosed door, embracing light luxury instrument desk, colorful roof atmosphere lamps, leisure seats and other elements bring more a comfortable, luxurious and highgrade travel experience to passengers. E10DD fits modern urban development needs well.

To date about 140 full electric buses have been put into operation in Macau, among which, more than 100 are Yutong. Also, there are 1 400 other kinds of Yutong vehicles operating in Macau, which account for over 50 percent of the total quantity of about 2 700. Among all newly purchased buses in Macau since 2014, Yutong accounts for over 70 percent. At the same time, to meet actual operation demands of the Macau market, Yutong will specifically develop an extended range bus.

Electric Bus Solutions

As the first full electric bus supplier in Macau, Yutong can provide customers with a series of full electric bus solutions, including charging depot layout, charging facility construction etc. Yutong has set up five service stations in Macau to provide customers with 24-hour service. In the future, Yutong will continue strengthening its service ability and service network with the construction of a new energy bus in Macau while improving the parts channel to enhance its service support capability.

From being the first listed large bus company in China to an international mainstream bus supplier, sales volume of Yutong bus has continuously ranked at the top for 17 years in China and 10 years in the world. By virtue of "Made in China" featured with high quality products and "Intelligently made in China" known for leading technology, Yutong has never stopped its pace of innovation.



(chart courtesy of Diesel Technology Forum)

The Future of Diesel Engines

New technology is making the diesel engine more viable in the future's zero carbon world.

Diesel engines will continue improving in the coming years, playing an important role in efforts to further reduce greenhouse gases (GHGs) and atmospheric pollutants, according to a Cummins leader participating in a recent panel discussion on the technology's future.

Initiatives Underway

Dr. Wayne Eckerle, Vice President – Research and Technology, told the audience at the virtual event sponsored by the Diesel Technology Forum that initiatives such as SuperTruck II are already underway to explore increasing the efficiency of modern diesel engines and long-haul tractor-trailers. Potential innovations include advances in waste-heat recovery, engine controls, reducing engine friction, aerodynamic vehicle design and much more.

Over time, Eckerle said there will be a growing connection between the entire vehicle and environmental conditions, including advances in "look ahead" technology that enables in-use adjustments for peak fuel efficiency, which translates into reduced GHGs.

Our Space Program

"It's really our equivalent to the space program," Eckerle said of the

SuperTruck program, a public-private partnership led by the U.S. Department of Energy (DOE) and leading companies in on-highway heavy-duty transportation. "That's how I look at it."

SuperTruck I was launched in 2010 with the goal of improving freight hauling efficiency by 50 percent. It ended up exceeding that goal and many of the initiative's advances are in mass production today. SuperTruck II aims to increase freight hauling efficiency even more.

The Progress of Diesel

The Diesel Technology Forum says diesel technology is significantly cleaner over the past 30 years.

Additional improvements in diesel technology will build on significant advances in emissions control over the past 20 or 30 years. Since about 1990, modern diesel engines have reduced both particulate matter (PM) and oxides of nitrogen (NOx), key contributors to smog, by about 98 percent, according to the Diesel Technology Forum.

New Energy

The forum says it would take 60 of today's clean diesel trucks to equal the emissions of one diesel truck sold in 1988. While diesel could remain the

dominant fuel source for on- and offhighway markets for some time, there will be a point when the technology can't meet the growing demand for zero lifecycle GHGs and zero emissions without some form of electrification, either through battery electric or fuel cell technology or perhaps some new energy source.

Hybrid engines employing those lowcarbon technologies and diesel could be critical on the path to carbon neutrality. Cummins is developing low-carbon technologies in its New Power business segment as part of the company's overall strategy to offer customers a broad portfolio of power solutions, so they can choose what works best for their unique sustainability goals.

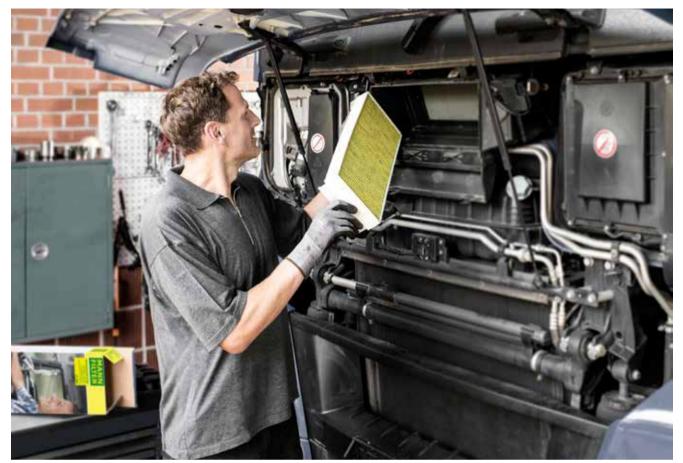
Hydrogen Day

The company held its first Hydrogen Day Nov. 16 to discuss its strategy for the promising low-carbon fuel. Eckerle is optimistic about the future of diesel in part because Cummins has the powerful tools necessary to do great things. "I must say that the big enabler in this whole process is our analytical capability, our ability to model the combustion process," Eckerle said. "We can model the fuel going through the injector into the combustion chamber, combusting it and so forth, and the whole air handling process. It's really a key to us because we have engines in a lot of different applications."

Eckerle appeared on the panel with Carrie Song, Vice President of Renewable Diesel, Neste; and Michael Lefebvre, Worldwide Manager -Marketing, John Deere Power Systems. The Diesel Technology Forum is a not-for-profit organization dedicated to raising awareness about the importance of diesel engines, fuel and technology.



15 | ASIAN BUSES MARKET UPDATE



More Important Now: Clean Air

Greater health and traffic safety: well equipped for the cold season with the new MANN-FILTER FreciousPlus

A fter the warm season with its high pollen levels, now is the time to change the cabin air filter. However, this is something vehicle fleet operators and drivers often overlook when preparing their vehicles for the cold season. "Replacing the cabin air filter for the cold season is very important, because it filters harmful particles and viruses from the outside air taken into the vehicle.

Particularly in fall and winter the cabin air filter needs to deliver peak performance for a clear view and good air quality in the vehicle. After all, hundreds of thousands of liters of air per hour flow into the driver's cab through the filter, air conditioning system or heating system and fan," says Jens Weine, Cabin Air Filter Product Manager at MANN-FILTER. "As well as switching over tires and buying anti-freeze, drivers should also make sure to change the cabin air filter." The current situation with COVID-19 and the fact that airborne transmission is one of the main ways the coronavirus spreads once more highlight the importance of clean ambient air.

MANN-FILTER FreciousPlus: high-performing and reliable

The FreciousPlus cabin air filter improves the air quality thanks to its different layers. In addition to coarse particles like dust and tire dust, it also filters viruses and deleterious particulate matter. It virtually completely adsorbs unpleasant odors and harmful gases like nitrogen oxide and ozone from the airflow. An innovative biofunctional special coating has both an antiallergen and antimicrobial effect and verifiably reduces the growth of microorganisms like mold or bacteria on the filter.

A quick and easy upgrade

MANN-FILTER supplies the FreciousPlus in customary OEM quality. For many vehicles, the filter upgrade is an easy one. When changing the filter the mechanic inserts the more effective FreciousPlus instead of the old cabin air filter, with no additional effort required.

Like wearing a face covering, a cabin air filter does not count as "personal protective equipment". It provides cleaner air in the vehicle interior and thus should be regarded as an additional protective measure. Due to the high mileage in the commercial sector, the cabin air filter should be changed every six months to operate at full efficiency.

- · Protects against harmful gases and stops odors
- Cabin air filter FreciousPlus filters harmful particles and viruses
- Anti-allergenic and antimicrobial protective function
- Filter changes in accordance with the service schedule important for proper purification



Heba Eltarifi is the new Managing Director of Scania Southeast Asia

eba Eltarifi is the new Managing Director of Scania Southeast Asia based in Malaysia. She will assume her role on the 1st of January 2021. This is the year Scania Malaysia celebrates their First 50 Years in the country.

Skilled in strategic business planning and execution, internal and external stakeholder management, operational management, and business and process transformation, she has built high-performing teams and driven a culture of achievement in her previous senior management role as Chief Financial Officer at Scania Australia. Responsible for the Finance, IT Procurement departments in Australia, as well as for commercial operations such as Used Truck Sales and Truck Rental, Eltarifi has enjoyed a wide range of experiences within the business over the past two decades. She holds a Bachelor of Commerce degree, Diploma of FEM Executive Management Program from Stockholm School of Economics and is a Certified Practising Accountant.

Eltarifi brings enthusiasm, proficiency and commitment to the Managing Director role at Scania Southeast Asia. She is married with one child and, in her spare time, enjoys travelling, reading, listening to music and exercising.

"Scania will continue to support the logistics, construction and public service sectors, commuting people and goods every day throughout the region and in this country. We will continue to help our customers achieve the best profitability while reaching their sustainability goals," said Eltarifi. "The timing cannot be any more challenging than the economic impact that our customers are facing throughout the region due to the pandemic. I am confident that my team and I will continue to pull through and come out stronger than ever for them."

Scania Southeast Asia is a business unit with its head office in Malaysia. It supports Malaysia and Singapore markets with dedicated captive sales and services centres and for the markets in Vietnam, Myanmar, Philippines, Brunei and Cambodia; the support is channelled through authorised private dealers.

In Malaysia, Scania started back in 1971 with the first Scania LB110 truck's arrival at Port Klang, delivered to Kontena Nasional. The first locally assembled truck, and the first low-floor city bus were delivered in 1994. Then in 2006, Scania delivered the first PGR-series. The first B-Double in Malaysia arrived in 2012. Scania Credit Malaysia provided the first financial solutions in 2013.

Scania Assistance started the first 24/7 roadside assistance in 2014 and Fleet Management Systems were first introduced in the same year. Scania then got recognised for all its efforts by winning the Sustainable Urban Transport Award in 2017. A record year of vehicle sales, signing the first Scania Ecolution customer, the first school to be spearheaded by "Master Sustainability by Scania" - all in the same year of 2018. Then delivered the first International Truck of the Year, the New Truck Generation in 2019 and the first Scania XT truck in Sarawak in 2020. Recently, Scania Malaysia also announced that its Ecolution partnership customers yielded a significant CO2 reduction equivalent to planting 10 000 trees flourishing for the past one year.

"I will continue Scania's leadership in driving the shift towards a sustainable transport system in the region and also in Malaysia. All of this by continuously putting our customers' profitability and sustainability in the centre of our concern," said Eltarifi. "I am also honoured to be in Malaysia at such a momentous time. I have no doubt that Scania and our customers have built a great foundation in the first 50 years for us to continue to leap forward into the next 50 and beyond."



Tarsus Group strengthens Tyrexpo Series

In addition to hosting the popular Tyrexpo Asia Show 2021 (17th – 19th November) in Singapore, Tarsus Group is extending their portfolio with an additional event commencing in 2022

Tyrexpo Asia 2022 will be held in March 2022 in Thailand between April 28 and 30, 2022 at the Bangkok International Trade and Exhibition Centre (BITEC) in Bangkok and will alternate bi-annually with Tyrexpo Asia in Singapore.

Strong Buyer Interest

More than 60 percent of Tyrexpo Asia's existing exhibitors have expressed interest in this event, including Districash, Stamford Tyres, Middle East Tyre Centre, Service Industries, Globe Tyre, Goodtire Rubber and other international buyers. Tarsus is very confident this new event will be successful because Thailand is regarded as the largest automotive hub in South East Asia. Tyrexpo Asia 2022 will bring together regional emerging markets including Vietnam, Myanmar, Laos and Cambodia to further strengthen this important Asian tyre market.

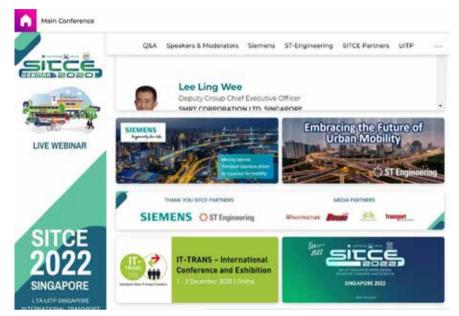
Valuable Opportunity

Alwin Seow, Events Director at Tarsus says, "This unique event is expected to attract at least 240 exhibitors from around the world and we anticipate 6 000 local and international attendees, to present a valuable opportunity for leading and emerging international regional suppliers to promote their services within the tyre, equipment and tools and tyre accessories market sectors.

"We have already received very encouraging comments from prospective exhibitors such as 'The new event in Bangkok will be great because we have branches there' and 'This would be our first time in Bangkok and I expect the show will help us expand our business activities in Thailand and surrounding countries'." **B**

Unstoppable Public Transport: Update at SITCE

Technical innovations have not been put on hold, people still need to commute and industry players require updates: the LTA-UITP Singapore International Transport Congress and Exhibition delivered on the promise, although in a different format.



he LTA-UITP Singapore International Transport Congress and Exhibition (SITCE) has established itself as one of the key platforms for urban mobility stakeholders to come together and help redefine the public transport landscape of tomorrow.

We may have missed the chance to do this face-to-face for 2020, but participants joined the online event and helped to make the SITCE Webinar a success, as the stepping stone to SITCE 2022.

Rebuilding Trust

Part of the panel during the SITCE Webinar was Chew Men Leong, Singapore Technologies Engineering Ltd. He spoke about how operators had to re-build the trust to win back passengers to use buses. "While this is certainly a crisis and needs to be dealt with accordingly, it is also an opportunity to improve user experience," he said in his segment during the discussion.

One trend he observed was the travel pattern has changed to be more spread out. With this, operators needed to re-think their capacity as peak hours were no longer what they used to be. While adjusting to the new travel patterns, operators also had to ensure that the new rules and regulations were adhered to. As commuters would typically use a mix of vehicles, each operator has to do their part so that there is no break in the chain of contact tracing and usage of masks etc. "Such linkage, ensuring that a commuter is safe from start to end of a journey is needed to instil trust," he commented.

The rapid deployment of technology has also been a huge opportunity according to Chew. Data analysis of how people move about can be useful to fine-tune transport offerings. In addition, contactless payment systems can be linked to contact tracing and "While the added steps may be perceived as inconvenient can actually help to improve the user experience."

Trying in Trying Times

Innovations have always driven the public transport sector. However, with the current pandemic, acceptance by the users may have just spiked too. Chua Chong Kong, Land Transport Authority shared insights in his segment. "We use TRICEPS to depict our approach to innovations. Within this, E and P stands for Excellence and Progressive, and R is symbolising Realistic." (Note: TRICPES stands for Teamwork, Resilience, Integrity, Caring, Excellence, Progressive and Safety) According to him, LTS has been pushing for boundaries in everything they do, citing the bus contracting model applied in Singapore.

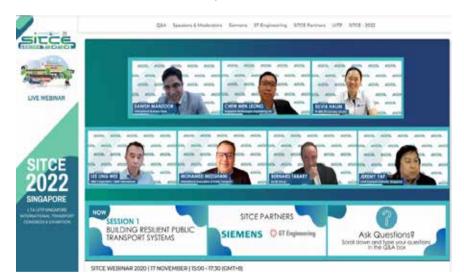
Echoing this was Jeffrey Sim of SBS Transit Ltd who elaborated on the use of technology. "We use monitoring of bus captains in order to ensure that the routes are serviced on time." In addition, harsh breaking and fatigue is being monitored. Other systems are detecting pedestrians in order to improve safety during the operations. According to Sim, data analytics has enabled SBS Transit to optimise their offering. "We have even been able to identify suspicious characters using CCTV coupled with other devices." The pandemic has further accelerated the use and acceptance of technology. When looking at public transport during the pandemic, one also needs to look at the component makers that are supplying to the body builders and system integrators. Michel Obdia, Siemens Mobility (Asia Pacifci) was also discussing how they are "daring to try." When evaluating the impact of the pandemic, Obadia said that Siemens has a lot of experience in dealing with drastic impacts. This stems from their approach to climate change, which is another event that has a huge impact on the industry, requiring companies to adapt their thinking.

First and foremost, he said, one has to be there for clients, be ready to service them. Secondly, one has to care about the health and safety for customers. Being able to access resources globally, this was done with ease. The third step for Siemens was to adapt the product portfolio. Lastly, while applying new ways, the company is looking ahead to the time when the global economy is getting back to "normal" and addressing the needs of the customers with products required then.

Learnings from the Pandemic

As with any new situation, this year also offered numerous insights into how public transportation works. Mohamed Mezghani, Secretary General, International Association of Public Transport (UITP), Belgium shared the following:

- Public Transport is an essential service. Essential workers cannot and have not stopped to commute between home and work and public transport is getting them there, while other businesses may have needed to be closed.
- The implications of dealing with an event of global proportions could not be anticipated and therefore, the public transport sector has been caught unprepared.
- Feedback from the industry has been that public transport is an undervalued service and that there has not been sufficient funding to support the industry financially and institutionally.
- Public transport vehicles have been labelled as unsafe when it comes to preventing the spread of a disease, however, scientific studies have shown that the risk is negligible. On the contrary, regular disinfection, cleaning and ventilation make it actually safe.





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As a side-effect of the pandemic, the lockdowns have made clear just how much space is taken up by private transportation. In order to better utilise urban spaces, the clear direction is to push ahead with public transport. "Mass and public transport remains the backbone of communities, supported by ondemand solutions. This allows public to re-claim spaces for better use."

UITP - A high-level Platform for Local and Regional Leaders

Public transport is at a turning point. In order to meet rising mobility and urban challenges, UITP and United Cities and Local Governments (UCLG) have joined forces to launch a highlevel platform for local and regional leaders to collaborate in building more accessible, efficient and liveable cities.

Local and regional leaders have long been aware of our great responsibility to create better cities and to improve the lives of the people who live in them. The New Urban Agenda, the 2030 Agenda and the 17 Sustainable Development Goals (SDGs) are an opportunity for to demonstrate that it is in cities, regions and territories where development, equality, prosperity and sustainability must become tangible throughout different sectors. for example mobility.

The Mobility Champions Community is the first global platform of city leaders taking concrete action and collaborating to transform urban mobility.

It is a common agreement between Mayors, Ministers and other public sector leaders, together with private stakeholders, to share their insights and good practices on creating and implementing ambitious urban mobility projects.

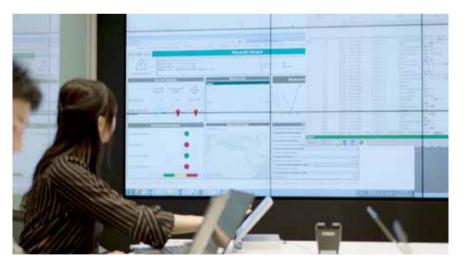
The Mobility Champions Community builds on the capacity and handson experience of UCLG and UITP Members. UCLG and UITP support the Mobility Champions Community by adopting a holistic approach linking urban mobility with digital, social, environmental and economic aspects and ideas.



High-tech in Transportation

The widespread availability of the internet with ever increasing bandwidth has opened up myriads of new opportunities in the transport industry. We take a closer look at some solutions that would help operators with their daily jobs and to increase profitability.

Itsubishi Fuso Truck and Bus Corporation (MFTBC) recently announced improvements in quality management processes through the application of cognitive search solutions combining natural language processing techniques and machine learning. This initiative comes as a further push within MFTBC to support customer uptime by leveraging big data.



Cloud Based Analysis

Cognitive search allows for the indexing of large bodies of information and helps clarify interpretations of data through clustering and comparison. MFTBC has taken advantage of this technology to better respond to quality reports from customers. Before the upgrade, all reports received through dealers had been manually read, analyzed and matched to other known quality issues to identify trends, as well as ascertain the scale and severity of reported cases. While this step relied heavily on the expertise of each individual overseeing the task, the process now integrates a cognitive search based analysis of texts from quality reports and searches for potentially related issues in a cloudbased library of past and running scenarios to aid the responsible employees.

Analyzing and Building

Natural language processing capabilities, which improve the "comprehension" of data through linguistic analytics, were added to boost search accuracy. As a further step to boost the precision of analyses, machine learning was also integrated to continuously refine the relevancy of suggested information. To construct the system, MFTBC quality management team started by creating a detailed library of past cases to extract important information out of the quality reports. The system now continuously builds upon this library by analyzing quality reports submitted through an online portal by dealers in English or Japanese. The process is currently compatible with all KD and BU FUSO vehicles produced in Japan and Tramagal (Portugal), including those distributed in international markets.

Response Time Reduced

Since the implementation of these technologies started January of this year, the lead time for reports processing has been reduced by 30 percent. This means that the feedback to customers can be completed more quickly compared to last year, minimizing the potential for extended downtime scenarios. As a customer-interfacing initiative, the new system complements the real-time vehicle monitoring and telediagnosis features supplied by the Truckonnect telematics platform. The use of cognitive search in quality management at MFTBC is also part of a larger digitalization movement within operations at the Kawasaki headquarters. Digitalization has been a major pillar of process improvement in a wide variety of work areas, ranging from the production line to supplier relations.

Broadcaster on Board

Another good example on how technology can be used to improve operations in transport is Scania. The Swede has been promoting their Fleet Management System (FMS) for a number of years now. While based on the Global Positioning System that many others use as well to track their vehicles, any FMS goes beyond just putting a symbol on an electronic map. Ian Tan, Business Development Director, Scania Southeast Asia elaborated on the workings of their own FMS.



"In broad strokes, the Scania Fleet Management System allows operators to receive essential data/reports on vehicle and driver performances so that together with Scania can analyse and discover insights for further actions like Scania Fleet Care, Scania Maintenance, Scania Driver Training & Coaching." According to him, all of this in order to achieve better operating cost, better fuel economy and better CO2 emissions reduction. All of these are part of what the company calls Scania Data-Driven Services.

Future-Ready

With an eye on future trends, new vehicles designed with connectivity, electrification and automation in mind. The shift towards a more sustainable transport system requires a well-designed bus that is prepared for the future, even today. Scania Fleet Management System existed before in the previous generation though.

Every Scania made is full of smart technology, advanced sensors and wireless connectivity. "We have hundreds of thousands of constantly connected vehicles and engines in use all over the world today – providing data that doesn't only improve our engineering, but lets us create and offer operators Scania Data Driven services which can provide you with direct business value," Tan elaborated. Anything from lowering fuel consumption to reducing wear and maintenance needs, all the way to automating tedious administrative work. No matter if you operate a mixed or Scania fleet. "Simply put – we focus on the data, so operators can keep their focus on running their business." These Scania Data-Driven Services aim to provide just that. Core metrics that give operators high level overviews of their fleet perspective on a per vehicle basis, and streamlined functionality to make sure. For those operators that run a third-party fleet management system, Scania can also provide connectivity to their fleet data to help that system understand their Scania vehicles.

Know More

As a user of a bus you may ask why is data, beyond fuel consumption, so important for operators? Surely, fuel makes up the biggest portion of cost, but the more operators know, the more they understand. The fundamental prerequisite of smart decision making is the availability of the essential information and data itself. Not just for fuel consumption, but also for reduction of CO2 emissions, reduction of wear and tear and maintenance needs.

Getting from information to insights requires a level of analysis. Part of this is something operators can contextualise in the operation of their business, but smart algorithms built by expert engineers and logistics experts within Scania can really show them how to create or add business value based on their vehicle and driving data. Working with transportation operations for more than a century has helped Scania uncover what is core to both the day-to-day and the long term perspective. All presented simply, so the data doesn't get in the way of running their operations – but rather enhances it.

With reliable insights, there's definitely a lot operators can do themselves to make their operation run more efficiently. There are however core aspects where Scania can promise that we can help them leverage those insights into much higher business value. Tan stated that "Our knowledge and experience doesn't just span over more than a century of logistics and transport operations, it's also based on real-life vehicle data from literally hundreds of millions of driving hours. Combined, that gives us a uniquely qualified perspective to help operators get the



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most out of their operation." For example, even with their very best drivers, Scania is able to optimise how they use their Scania vehicles to maximise fuel efficiency, reduce wear and maintenance needs and make sure the business potential of every Scania vehicle you have is taken to its fullest. Both on a short and long-term scale. All with the help of the FMS and the omnipresent internet.

Scania is driving the shift with our customers towards a more sustainable transport system. "We can achieve that by thinking about solutions – not just trucks/buses/coaches, but sustainable transport solutions. This holistic approach makes sustainability and profitability go hand-in-hand."

Tech Preventing Accidents

There are many aspects of route and journey planning. Ironically, the very instruments that enable the use of technology are also culprits when it comes to accidents involving commercial vehicles. Fatigue management is another crucial discipline concerning fleet managers. To put things into perspective: If a driver falls asleep for just four seconds driving at 100km/h, the vehicle will travel an entire football field without the driver in control. Around 1 350 000 people die on the world's roads every year. Drivers who text are 23 times more likely to have a crash.



To address these issues, Seeing Machines has developed a system that can assist fleet managers with distraction and fatigue detection. This is an Australian company with more than 15 years of research and development, commercial application and proven expertise in intelligent face and eye tracking technology that enable machines to see, understand and assist people. Their core intellectual property brings to life a range of technology applications that make vehicles smarter, with the intelligence to protect, enable and respond. Today, Seeing Machines deploys technology in a number of cutting edge applications such as commercial road transport, mining, automotive, and aviation.

Are your Drivers Fatigued?

Fatigue is a major cause of crash fatalities globally with micro-sleeps and drowsy driving impairing a driver's ability to concentrate on the road ahead. At the same time, distracted driving has become a serious problem with the emergence of mobile phones and other technology.

Fatigue can happen at any time of the day or night. All day, every day. In fact, there are indications that some of the biggest risks actually present in the first couple of hours of shift or after a break. Unfortunately, many drivers do not recognise when they begin to show signs of fatigue and are often surprised to learn that they have experienced a microsleep event.

Safety is NOT a Cost

Business efficiency and profit are some of the essential requirements for success, but operating a profitable commercial transport or logistics business requires more. Commercial vehicle drivers are fundamental to this success and safety must be a key consideration. Even the most experienced drivers are not immune to fatigue and distraction and these two factors can have dire consequences, posing large risks to their personal safety and your business.

Guardian, by Seeing Machines, supplied by Guardian SEA in this region, plays a pivotal role in protecting drivers and can assist you in preventing fatigue and distracted driving from happening in your vehicles. Guardian delivers an intelligent driver safety solution that uses in-cab sensors to monitor the driver's levels of fatigue and distraction, in real time. With 24/7 monitoring and analytics services, this is a complete safety solution for commercial vehicles. The in-cab sensor monitors signs of fatigue or distraction, warns drivers through a set of alerts, providing protection in real-time. At the same time, managers are notified about fatigue related events and can take immediate action to manage the situation and keep their driver safe, straight away. And the results prove their approach to be right: Guardian has been scientifically proven to reduce fatigue events by more than 90 percent.

How it Works

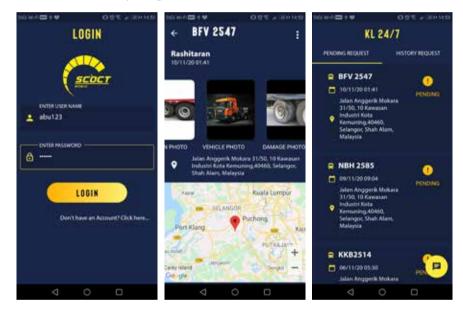
In case driver fatigue or distraction has been detected different types of alerts are given to the driver. Guardian tracks eye, face and head position to determine whether the driver is fatigued or distracted. If there are signs of fatigue or distraction detected, the system activates in-cab alerts. One is seat vibration and additionally, audio alerts are activated to warn the driver. When a fatigue or distraction event takes place the data and a video capture of the event are sent to the Guardian Centre, where they are reviewed and verified by dedicated analysts. Within minutes of a fatigue event being verified, the Guardian Centre analysts will contact the fleet's nominated manager according to their preferred intervention plan, so that they can manage the risk to their employee and their vehicle.

The fleet manager can therefore immediately act upon the notification and determine the best course of action – taking a break, ending the shift. Through training, based on the data gathered, ongoing changed behaviour, driver coaching and improved processes can be implemented by the operator. Guardian captures duration of the event, speed of the vehicle at the time, distance travelled during the event, which alarms were activated, GPS location, video footage of the driver together with footage captured by the forwardfacing camera (if installed).

It's important to note that Guardian is NOT a CCTV. Video footage is only communicated to the Guardian Centre if a fatigue or distracted driving event is detected. Guardian is connected to over 23,000 vehicles around the world. It has detected over 7.7 million distraction events and in the last 12 months alone, has intervened in over 160 000 fatigue events.

Connection between Road and Data

Managing tyres right can make or break a transport business. To assist operators in their quest to keep the rubber on the road for as long as possible, Kit Loong Commercial Trye Group has also launched a number of services that utilise the internet, cloud computing and hi-tech.



Their KL24/7 is Malaysia's largest outdoor tyre rescue operation. With over 100 customers and attending over 800 breakdowns per year across Peninsula Malaysia, Kit Loong Commercial Tyre Group (Kit Loong) have developed a network that operators can trust when the worst happens, and tyres fail on the open road. The backbone of this network is modern technology in the shape of web-based applications.

"We understand the nature of our customer's businesses and that time is essential. This has led us to look at the service and try to understand how we can better save time for their fleets. We have rebranded and are expanding the service to better suit this objective," Michael Hutt, Group Marketing Manager, Kit Loong Commercial Tyre Group, told us.

Things using Internet to Come

The company is pleased to announce their progress in developing a mobile application that will streamline the process of alerting them to a tyre failure as well as the back-end process of approvals, POs and payment. Kit Loong uses the technology to offer clients assurance in the process as well as expanding on their commitment to the safest operating standards.

The SC3OCT Mobile application is split into two areas, the first being the SC3OCT Mobile 'SOS' app. It will allow bus drivers to simply press one button to alert Kit Loong to the breakdown, including the location of the incident,

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the identity of the driver with contact details and the make/model and registration of the vehicle. Drivers will also be able to upload photos of both the damage and their location, if it's a more difficult to reach location. Once submitted, the driver will be updated on the progress. The app will then directly alert the nearest available KL24/7 rescue truck, who will be dispatched to the breakdown site via GPS location sharing. "This will allow Kit Loong to respond quicker and more efficiently," Hutt added.

Connection All

Additionally, while this is happening, the second part of the app, the 'Person in Charge' (PIC) app, will alert the company-designated PIC to the SOS call. Depending on Kit Loong's customer's internal policies, POs or work orders may need to be approved. This, again, can be done with the touch of a button, connecting with Kit Loong's customer service and finance teams for seamless acceptance of the job, less paperwork and live chat function. The PIC app can display all jobs, from completed to in-progress, giving clear status on each.

While attending the job, the KL24/7 rescue team will document details of the issues and any fixes applied or changes made to tyres. This becomes a digital job sheet, sent to the company PIC after the work is completed. These records are tracked and can form the basis of monthly, quarterly or annual reports on frequency of breakdown/causes of breakdown. Our team will use these to identify critical areas of improvement and feed this back to customers to implement or recommend the use of our new Mobile Service Provider offer (SC3OCT Mobile MSP), to assist in rectifying any common issues.

"We are aiming to make more and more of the process digital, in line with our commitment to our TTM, big data system, KLConnect. If a client is using the app and KLConnect, all data will be fed back into their system, giving them much better visibility and control over any ongoing concerns," he summed this up.

The SC3OCT Mobile app is currently in beta testing and will launch to all SC3OCT Mobile KL24/7 clients in January 2021. Alongside SC3OCT



Mobile KL24/7 Outdoor Rescue, the company is introducing three new 'mobile' service areas:

SC3OCT Mobile MSP

Taking a number of buses to a dealer for fitting or simple maintenance issues can often take hours. Two or three buses can be out of action for half a day at busy times. The is idea here was to rectify this situation. SC3OCT Mobile MSP (Mobile Service Provider), will now be available for booking at client sites for fitting, repairs, maintenance and other tyrerelated services. The service is fully certified for ISO and all products are MS Certified (Standards Malaysia), taking away the headache of delays. Book a time slot and they will do the work. The additional benefit of this service is that it is also available 24 hours a day, 7 days a week. Kit Loong's crew can work during natural downtimes of customer's fleet and can work wherever your buses are. "We have also invested in mobile alignment and balancing equipment, so we will additionally be able to conduct this at customer sites from December 2020," Hutt further explained.

SC3OCT Mobile Assist

Every once in a while, a fleet needs a 'tyre health check'. Kit Loong will bring an expert team to site, conduct a full, digital, VWIR (Vehicle Wheel Inspection Report) and present back recommendations on any issues as well as the required fixes. Which can then be carried out with the SC3OCT Mobile team. Customers will be left with a complete picture of your current tyre situation and how to improve it for increased longevity of their tyre investment.

SC3OCT Mobile Focus

Most people know SC3OCT as a contract tyre management system for larger fleets. Now, the creators want to bring this level of control and dedication to small and mid-sized fleets. Mobile Focus is full-service mobile tyre management by annual contract, giving customers the flexibility of a mobile network and contracts fit for their size, alongside the industry-leading quality of SC3OCT services.

Alongside the introduction of SC3OCT Mobile's new offers the company are also investing heavily in both improvement and expansion of the service. The current plan is to double the size of their fleet in 2021. "We are also upgrading our fleet to be able to offer bespoke and detailed services to specific sectors." For example, Kit Loong will be working heavily with ready mix concrete plants over the next few months to offer a bespoke service catering to their specific needs. Both the fleet and the Kit Loong expert team are being 'upgraded' to meet the everchanging needs of our clients in a market that is developing at pace.

Online Parts Business

Diesel Technic is one of the largest suppliers of automotive parts and accessories and was founded in Germany in 1972. Distribution partners in more than 140 countries value the experience and expertise of Diesel Technic as a reliable full-service partner for the wholesale trade. The Diesel Technic Group includes, in addition to the headquarters in Germany, distribution companies in France, The Netherlands, Spain, Dubai, Brazil and China. Worldwide, the Diesel Technic Group employs more than 500 people from 28 countries.

For quite some time already the Diesel Technic Group has recognised the chances that are offered by the digital world and found various ways how to increase and optimise its communication with its customers by using these new opportunities.

The Partner Portal Provides Product Know-how

Diesel Technic's customers receive detailed product information in the Partner Portal: It is the company's future-oriented information and eCommerce procurement platform. The Partner Portal provides efficient access to the comprehensive supply of more than 41 000 automotive parts and accessories. Here, the whole ranges of the product brands DT Spare Parts and SIEGEL Automotive can be found.

For the users of the Partner Portal, the platform offers several benefits. Firstly, the users enjoy the advantage of a 24/7 access to the complete range of products and information. Besides, they are able to choose between several options for product search and decoding. If needed, the Partner Portal users also receive support in explicit parts identification. Another helpful feature is the display of accessory products as well as the information about product availability from regional warehouse. In addition, users have the possibility



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to download assembly instructions and Product Portraits. These Product Portraits give detailed information about specific products. Moreover, they also contain practical hints and tips for the correct handling and assembly of the products.

The HelpDesk for Technical Support

Since 2020, Diesel Technic's customers can contact the company's HelpDesk in the case of technical questions. On this platform, the Parts Specialists – Diesel Technic's team of workshop professionals – offer technical support with regard to the products and services of the two product brands DT Spare Parts and SIEGEL Automotive.

Social Media for Companionship in the Workshop

Furthermore, the Parts Specialists team and the product brands are also represented on social media like Instagram, Facebook and YouTube. these channels, the Parts On Specialists publish new workshop videos with practical advises for the viewers. Apart from this, followers have the chance to participate in different raffles where they can win great prices - often in combination with the Premium Shop which rewards the customers' loyalty. Hereby, participants can choose from a wide range of attractive premiums.

Next to this opportunity, followers are also kept up to date with respect to new and special products that are also presented on social media like the so-called Product Highlights or SIEGEL Smileys.

Digital catalogues with high applicability

Further product information is given through the digital catalogues for DT Spare Parts and SIEGEL Automotive. These product catalogues can be used universally on all devices and combine the simple use of printed catalogues with the advantages of digital media, including the search of article number, reference number or full-text search with direct links to the article detail page on the Partner Portal, e.g. for product enquiries. An intuitive operation as well as a quick overview of the product range is guaranteed by the structured design in numerous languages.

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Volvo Buses and ComfortDelGro Engineering celebrate 20 years of Partnership in Singapore

Reflecting on 20 years of successful partnership between Volvo Buses Singapore and ComfortDelGro Engineering, the sole authorised distributor of Volvo Bus parts and services in Singapore.

Volvo Buses first entered the Singaporean market in 1979 with the introduction of 100 Volvo B57 single-deck buses. That was the beginning of a successful journey for Volvo Buses in Singapore with many notable milestones along the way. Following the success of the B57, a new B10M model was introduced bringing air-conditioned comfort to bus transport for the first time in tropical Singapore and raised the bar for the industry.

Combining the Best of Two Groups

Starting with a small but agile team of four, Volvo Buses Singapore aimed to provide products specifically designed to meet the needs of local operators with reliable performance and locally based, world class support from their dedicated team.

As supporting an ever-growing fleet became a greater task over time, Volvo Buses Singapore entered a partnership with ComfortDelGro Engineering (CDGE). The partnership was officially formed on July 1st, 2 000, and marked the start of a journey of shared focus – a focus on outstanding uptime, reliable parts and services support, and ultimately local bus manufacturing in Singapore.

With over 40 years' experience in the automotive industry, CDGE is the leading one-stop vehicle maintenance and repair workshop in Singapore. The company services over 10 000 private passenger cars, 5 000 commercial vehicles, from vans to prime movers, annually at its six workshops across the island. CDGE provides a comprehensive range of automotive services including servicing, diagnostics and repairs, engine and component overhauls, accident repairs & insurance claims, and 24-hour vehicle recovery service.

Today, CDGE remains the sole distributor for Volvo Bus parts and services in Singapore. A team of Volvo certified technicians and dedicated bus servicing bays at CDGE's Braddell workshop, located in central Singapore, provides the aftersales care, ensuring that almost 2 000 Volvo Buses are on Singapore's roads every day.

"We are glad to celebrate two decades of friendship with Volvo Buses. It has been a fruitful partnership and we have grown together from strength to strength, as we worked in tandem towards improving our offerings throughout the year. We look forward to many more successful years ahead," said Mr Ang Soo Hock, Chief Executive Officer of CDGE.

Offering state-of-art products and services

In addition to spare parts and services, the partnership between Volvo Buses Singapore and CDGE has delivered a number of innovative products over the years – some that were produced together in CDGE's Defu bus building facility.

One such product was the Volvo B9TL double deck bus, which is currently still the single most common model of transit bus in Singapore. At the time of introduction, these new double deck models provided Singaporeans with a zero-step entrance, a manual wheelchair ramp and other wheelchair-friendly features.

Over time, passenger amenities such as Singapore's first wheelchair accessible bus were accompanied by new vehicle technologies delivering cleaner and quieter buses as the Volvo B9TL bus assembled by CDGE

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kept pace with emission changes and new safety features – all designed to improve the passenger, driver and operator experience.

Shared Values

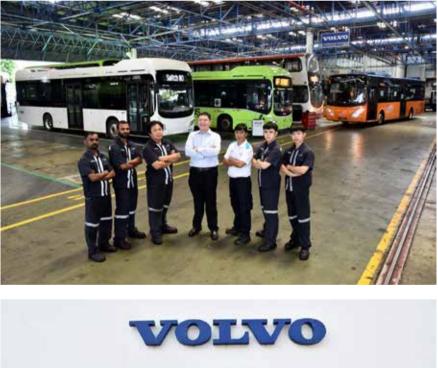
As Singapore's bus and coach industry continued to change, the values of Quality, Safety and Environmental Care remained guiding principles for Volvo Buses and CDGE, with both companies having a proud history rooted in innovation. Be it the introduction of hybrid vehicles in Singapore or the recent autonomous bus trials at NTU, Volvo has demonstrated a long-term commitment to Singapore throughout the past 40 years. Another advanced industry leading innovation was Volvo's recent delivery to ComfortDelGro Bus, four units of the premium Volvo B8R fitted with a Driver Support System, which comes with a built-in Collision Warning and Emergency Brake (CWEB) feature, as well as Lane-Keeping Assist function. The partnership of Volvo Buses and CDGE enhances the capability of both companies to meet the needs of the community and consistently deliver on the shared values together.

Far from standing still after 20 years, CDGE continues to innovate with Volvo Buses in every area of the business. One such example is the recently launched CDGE App, Singapore's first end-to-end workshop mobile application made available in October 2020. From booking an appointment to tracking the status of the vehicle repair in realtime, receiving repair quotations and "shopping" for vehicle care related products, the App has it all. The realtime repair status tracking feature, which is currently on pilot run at its centre in Braddell, will be extended to the rest of CDGE's branches by the end of February 2021. The App also provides servicing records of a vehicle for up to two years, giving operators even more convenience.

"Vehicle repair is a very manual process but the communication with our customers doesn't have to be. We felt that by leveraging on technology, we would be able to improve the customer experience, make work processes more efficient and our people more productive," said Mr Ang Soo Hock, CEO of CDGE.

"At Volvo Buses, we fully support the launch of this customer service app by CDGE," commented Mr. Mats Nilsson, Director of Volvo Buses Asia Pacific Region Central, "We have a locally based, specialised technical service support team committed to support CDGE and our Volvo Buses customers in Singapore for the past 20 years and for the years to come. We have the most experienced technicians supporting our bus customers since the first day we entered this market. We also have young talents in our team, bringing new ideas, advanced technologies and latest innovations to support our customers."

The 20 successful years of association is something both organisations are very proud of and Volvo Buses looks forward to more success together with our long trusted and supportive partner, CDGE.





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Bluewake Technologies Helps You Through the Night

Bluewake Technologies pushes back the limits of fatigue management performance by exploiting the benefits of light on alertness, promoting increased productivity without compromising the safety of individuals.

This patented solution stimulates alertness at night and facilitates rest during day by promoting improved alertness, energy and attention levels, thereby contributing to lower risk of accidents. It is particularly aimed at night workers and anyone who needs to be alert at night, against the natural sleep cycle. Bluewake Technologies' solutions are the result of the research work of Dr. Marc Hébert, Ph. D. at the neuroscience CERVO research centre of Laval University, in Quebec City, CANADA.

In North America, reduced alertness associated with fatigue on the road is annually responsible for:

- 100 000 accidents;
- 35 000 deaths;
- 71 000 injured and
- 12.5 billion dollars in monetary losses.

In a recent survey, the National Sleep Foundation found that 60 percent of adult drivers (about 168 million people) say they have driven a vehicle despite feeling drowsy in the 12 months preceding the survey.

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More than a third of people (around 103 million people) report having fallen asleep while driving.

- 7.4 percent of the North American workforce are assigned to night shifts;
- Night work involves 60 percent more risk of an accident;
- 32 percent to 36 percent of night workers report falling asleep at work;
- 30-40 percent lower level of productivity at night.

Bluewake can help alleviate some of the burdens experienced by night workers and contributing to more productive individuals and their well-being.

How science can help

The science of neurophotonics teaches us that the natural variation of the light composition throughout the day, specifically the presence/absence of blue light, affects the state of the biological clock, the main driver of our level of alertness. It has been demonstrated that the smart modulation of artificial exposure to blue light can induce improvement in the level of alertness at night similarly to natural light.

Research shows that night shifts is a significant burden on the worker's health. The night worker lives in reverse of the natural cycle known as the circadian cycle, which causes significant issues in terms of fatigue accumulation, stress and overall wellness.

The benefits of the proposed solutions include improved alertness and energy levels at night, contributing to reducing stress and improving sleep during day. We believe that these hat these improvements will impact the number of sick leave and workplace accidents, two factors that offer significant economic, social and operational benefits for both employers and employees.

The Bluewake is designed to produce wavelengths of light known to stimulate alertness. The Bluewake is easy to install and fully automated after activation. Although the level of alertness at night is strongly influenced by natural fatigue factors (quality / duration of sleep, illnesses, physical condition, etc.), the night

shift worker, even when well rested, continues to be faced with a higher risk of reduced alertness induced by the natural sleep cycle, which slows down the body at night and circumstantial factors (reduced light levels and the nature of the activity performed).

The Bluewake is designed for people who are active at night, whether for leisure or for work. It reproduces the natural signal required to stimulate alertness and, as a result, contributing to lower risk of errors and accidents

Warning

Bluewake Technologies does not aim to replace sound fatigue management practices and a balanced lifestyle, but rather offers complementary solutions that contribute to lowering the risk of accidents associated with reduced alertness, particularly in absence of natural light, while driving and/or at work. Individuals using this solutions retain the full responsibility of staving abreast of their level of drowsiness, the state of their faculties and their abilities to perform any activity while using the Bluewake and refrain from any activity when those capacities are found insufficient.

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.

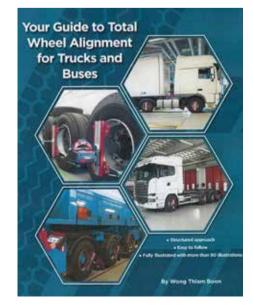
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"This practical and resourceful book will be an asset to any fleet operator or workshop that wants to improve the performance of commercial vehicles. It is TB Wong's experience of decades working with wheel alignment systems that shines through and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

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THOUGHT LEADERS ASIAN BUSES | 30



Emmanuel Jupet Shares His Vison and Ambition Moving Forward

Many buses may currently be underutilised. However, there is still a lot of movements in the industry. Asian Buses gets to the bottom of in this exclusive interview with a new arrival to the region in the form of Volvo Buses Region Asia Pacific North's new Managing Director.

aking over the responsibilities for a region containing some of the most important markets in the middle of a pandemic is not an easy task. However, bringing with him a wealth of experiences, Emmanuel Jupet looks ahead to making his mark, as he is someone who likes to make a difference, as we learnt from him in the conversation. Being responsible for Hong Kong, Taiwan, Philippines, South Korea, and Mainland China, he shares to us his vision and ambition in the new role as well as the enormous opportunities he sees in Asia.

Moving from market to market, Jupet has seen a lot of differences as well as similarities. When talking about trucks and buses, he shared that the two segments have some key factors in common. The first undoubtable



common focus comes before anything else is safety. A double deck bus would carry up to 135 passengers and keep them safe should be at the heart of any deliberation. "At Volvo Group, safety is in our DNA and it is a core value for the Volvo Brand. I would emphasise that it is not just buses. It is the same for Trucks. It does not matter how many people are sitting inside the vehicle. Even if there is just one driver in a truck, safety is the upmost important commitment from the Volvo Group." As Volvo is synonymous with safety, this approach hardly comes as a surprise.



"And as you know that safety, quality and environmental care are the core values of the Volvo Group, it remains the same for all the products we offer, buses, trucks or other commercial vehicles and in everything that we do."

Another important aspect for both buses and trucks uptime. "The environment is a Business to Business setting with professional buyers. Uptime is a deciding factor for our customers, both in the Buses and the Trucks segment," concluded Jupet. Noting that uptime is an important aspect, the question is: what about cost? "Operating cost is for sure on top of the customers' agenda, and uptime affects operation cost. At Volvo, we fully understand the importance of the operating cost, and we always strive to be the best business partner of our customers. That is exactly why both in the buses and trucks segments, we talk about TCO – total cost of ownership," as Jupet explained. Commercial vehicles typically have a life cycle of 10 - 15 year and if it is a Volvo, it could run up to 20 years. "We strive to be the best business partner of our customers throughout the life cycle of the vehicle, and our relationship with our customers will not stop at the point of handing over the keys."

Besides the shared common areas in the buses and trucks business, Jupet does see differences as well. In the bus business, the volume is relatively lower, and typically, tenders dominate the purchasing process. Jupet elaborated to us the bus business is very challenging in terms of engineering and manufacturing,

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for the reason that the products are more tailor-made and requirements are more diverse and more customized, while for him this challenge could also be very exciting especially considering Jupet came from a engineering background.

Having lived in several countries before heading the APAC North region, Jupet had the privilege to identify ways of transferring knowledge from previous experiences. One concept he is critical about is the notion that a market would be unique. Jupet states that, fundamentally, the needs of the industry are mostly identical around the world. "The needs of our customers are very much identical. However, we also need to adjust the approach with local understanding." For instance, in Europe, the business is greatly driven by the idea of TCO. In Asia, besides TCO, relationships and the initial price of the vehicle may be equally important. He identified "speed" is also an important aspect of doing business in Asia and to tackle this, the solution is to have expertise on the local operation to better understand the culture, the language and the way of running business in the market. As the cultures mix. Volvo is to inject the corporate values, which is one of Jupet's vision. "We want to make sure and provide the best transport solution. It is important for us to deliver what we commit and communicate at the same time to meet the local expectations and requirements."

Bus Rapid Transport systems (BRT) are a hallmark of the Swedish brand. The benefits of such systems were highlighted in a conference held by Volvo last year in Kuala Lumpur. "Volvo has been a pioneer in this field. It is a sufficient system, but it is also easy to see that the implementation may not be for every city." Putting things into perspective, medium sized cities may be benefitting the most from BRT. "There are currently BRT projects underway in South East Asia." The nature of the BRT solution depends on multiple factors and will have tremendous impacts on how people move around. So Jupet opines: "Transportation is also based on city development and government policy."

Hong Kong is making use of mini buses and the system of the red and green buses has been hugely successful in moving commuters. This has not been the first time that Jupet is immersed in a market where mini buses play a crucial role. Consequently, he has been confronted with the question why Volvo would not enter into this market as well. One would argue that this would allow the company to cover the entire spectrum of the transportation system. However, as time and time again, the strategy has been to be in the premium, heavy duty segment, there is no ambition to veer off the path the company has taken so far. "We decided that we want to keep a clear focus and that we do not want to be everything for everyone," he said. As known, Volvo is leading in innovation, and clearly that is the direction that the company has been moving towards.

While the market may not see a Volvo mini bus, the pride of their bus segment is the progress they have made in the sphere of electrification. Jupet, with a lot of excitement, said that the "Buses are taking the lead when it comes to electrification." The electrified drive train has been introduced into buses over 10 years ago in the shape of the hybrids. Fully electric buses have been introduced in 2017. While these have not been widely available in Asia, this is going to change and more and more electric buses are making their way to Asia. "Hong Kong will remain a Diesel territory for a while though". Hong Kong is a very demanding market. The distance driven daily may not be an issue as such, however, the climate, the passenger capacity and the layout of the city are very unique and requires special consideration, adding on-route charging (opportunity charging) may not be feasible as the space is very limited. The future improvement of battery energy density shall open new opportunities for cities like Hong Kong.

In the context of the current pandemic, the industry was impacted with a drastic and rapid change in demand for transportation. The idea of staff working from home naturally has a huge effect on the public transport industry. What the long-term effect will be after the pandemic is uncertain; however, we

know that things will be shaken up a bit. Jupe evaluates this critically and shares that the shift from private vehicles to public transport will have a bigger impact. There will always be a need for people to meet in person. Many cities have no more space to add roads to accommodate the increasing numbers of cars driven by individuals, let alone the environmental impact. He himself has decided to ditch the car and to depend on public transport, which in Hong Kong is the benchmark for megacities. "What we need is not more transportation, but smarter ones. At Volvo Buses, we have a vision of the zero city, which means zero accidents, zero noise and zero emission," Jupet concluded.

> Emmanuel Jupet (49), Managing Director, Region APAC North, Volvo Buses Asia Pacific, Volvo Bus Hong Kong Ltd has been with the Volvo Group for 24 years. An engineer by trade, he has made it his mission to make sure that the products he is working with are making a difference to the society.

> "I have been fortunate to have been involved in many roles within the Volvo group. In my previous postings I would be responsible for different aspects of both, the truck and bus segments." Starting out in purchasing, he also gained experience in the engineering, marketing, business development and sales. Parallel to developing his business skills, he also honed interpersonal skills and multi-national culture experiences while working in countries like France, India, China and Sweden before heading to Hong Kong in August 2020.

> "Both buses and trucks have important roles to play in the society. To me, that matters. One of the proudest moments in this challenging year is that the Volvo Group was awarded as one of the World's Best Workplaces 2020."

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Prototype Tires for Electric Buses Tested at the Contidrom

A utomakers and commercial vehicle manufacturers are not alone in having to change their processes in response to electric mobility. Tire manufacturers too need to come up with new development concepts to accommodate this new form of propulsion. One particularly demanding field in technological terms is the development of tires for electric urban buses. In response, Continental and VDL Bus & Coach, a leading manufacturer of electric buses, have pooled their expertise and jointly developed initial prototype tires. These are currently being tested at Continental's Contidrom proving grounds.

VDL Bus & Coach launched its first electric Citea urban bus back in 2013. Since then, electric buses from VDL have covered more than 75 million kilometers in a variety of European cities, saving emissions of 11 million metric tons of CO2.

Special Requirements for Electric Urban Buses

"As with all electric vehicles, these bus tires are exposed to higher torque when moving off and accelerating," explains Ben Hudson, Automotive Engineer at Continental Truck Tires. But as he goes on to say, with tires for electric urban buses there are other considerations involved, above and beyond those experienced in previous EV projects: "In downtown traffic in particular, vehicles need to run very quietly, so that the comfort offered by quiet electric drive isn't diminished by loud road-tire noise." In addition, the deceleration of electric buses in urban traffic is a key factor in the energy recovery or 'recuperation' process. Here, the electric motor acts as a generator and, driven by the deceleration of the bus, produces energy to charge the battery. This leads to a marked increase in the vehicle's range. Compared to conventional brake management systems, this process of recuperation puts added strain on the drive axle tires.

Technically Demanding Trade-offs

Consequently, tires for electric buses have to cope with tougher requirements than their counterparts for buses with combustion engines. "At the same time, they need to deliver the same mileage and meet the same safety standards as bus tires for conventional drive systems," explains Ben Hudson. The trade-offs between mileage, braking and handling performance, are technically demanding. "We are up against new requirements here," he adds,





"but obviously we're not going to accept any compromises in terms of robustness or braking performance. Safety takes top priority for us."

The Search for the Best Possible Solution

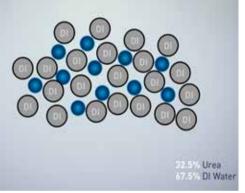
Right now, the tires on the VDL vehicles at the Contidrom are still running on tires built by the Prototyping department in Hanover-Stöcken with hand-carved tread patterns. As a rule, the tire development cycle from initial prototype to volume production takes three to five years. For the e-bus tires the aim is to shorten that cycle. "When developing this concept tire, we're not restricted by what has gone before in previous generations of tires," says Ben Hudson. "That gives us the freedom to try out entirely new concepts and ideas. If these prove successful, we'll put them into practice very quickly and feed them into the development of the next line of tires." This, he says, can lead to significantly shorter development cycles, meaning that Continental can react faster to market requirements. And in the search for the best possible solution, time is a key factor: Given the rapid pace of progress in the electric mobility segment, demand for suitable tires is growing fast.



Using an approved DEF is as important to the engine as using a proper diesel for the engine. Non approved DEF might result in not meeting required emission level



contaminants. Steel drum reacts with the solution resulting in rust impurities. Cool and ventilated storage is required for optimal shelf life



Getting AdBlue Right

Some may say it is just another fluid that a truck needs to carry for the engine to operate at its optimal level. But is AdBlue really just as simple as that?

iesel exhaust fluid (DEF; also known as AUS 32 and marketed as AdBlue) is a liquid used to reduce the amount of air pollution created by a diesel engine. Specifically, DEF is an aqueous urea solution made with 32.5 percent urea and 67.5 percent deionized water. DEF is consumed in selective catalytic reduction (SCR) that lowers the concentration of nitrogen oxides (NOx) in the diesel exhaust emissions from a diesel engine.

Regulated DEF to meet emission regulation

DEF is widely claimed as a simple mixture of urea and water. It is often assumed as less vital when it comes to specifications and handling compared to other engine fluids like fuel and engine oil.

Hengst, a German partner for OEMs shared insights with Asian Trucker on this. "The claim that DEF is a simple mixture is not true. It is equally crucial for DEF to be formulated and handled properly to ensure that in particular EURO6 emission standards are met," said Frank Maergner, Sales Director Asia Pacific, Hengst Asia Pacific Pte. Ltd. To ensure this, Hengst uses only deionized (DI) water according to him.



AdBlue in Focus

- Deionized water is used to ensure that the mixture adopts the full property of reducing the agent urea.
- Tap water contains minerals and those will affect the pollutionreducing properties. Therefore, an accurate composition of urea and DI water is crucial.
- The standard proportion for optimal NOx reductionis 32.5 percent urea and 67.5 percent DI water
- A less than required proportion of urea will result in failure to meet the required emission reduction.
- Vehicles with built-in NOx sensor will derate engine if emission reduction level is not achieved.

Correct Storage

- Do not use steel storage containers as they react with DEF to form rust.
- Use HDPE (Polyethylene) containers instead, which allows you to store DEF for up to 18 months.
- Do not store DEF in direct sunlight and keep the temperature below 30 degrees.
- DEF needs to be kept clear of all contaminants.
- A cool and ventilated storage is required for optimal shelf life.

Maergner urged those with exhaust aftertreatment systems "Using an approved DEF is as important to the engine as using a proper diesel for the engine. Non approved DEF might result in not meeting required emission levels."

Users of DEF should insist on quality products which are VDA (Verband der Automobilindustrie / German Association of the Automotive Industry) approved. One such DEF is Hengst AdBlue, which is available in 10L, 20L, 210L, 1 000L containers.



SUBSCRIPTION FORM

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EcoLife 2 for MAN City and Intercity Buses Hits the Road

They are now a standard feature of MAN city and intercity buses: convenient torque converter automatic gearboxes that provide maximum relief for the driver. And now, with the launch of the EcoLife 2, a new and even more efficient generation is heading out on the road.

They have long been part of the standard repertoire of the vast majority of city buses, are becoming increasingly popular in the intercity bus segment and, since 2017, have even been a hit in the coach segment: highly efficient torque converter automatic gearboxes that relieve the driver of as much of the strenuous work as possible, optimally preserve the highly sophisticated drive technology and also optimally reduce fuel consumption depending on the application.

The new gearboxes will be available for all models of the new MAN Lion's City that feature the 9-litre diesel engines of the new D15 series with its power stages from 280 hp (206 kW) to 360 hp (265 kW), or the 280 hp (206 kW) and 320 hp (235 kW), 9.5-litre E18 natural gas engine, which has also been newly developed. Both variants are, of course, equipped with MAN EfficientHybrid including stop/start function. The intercity bus "MAN Lion's Intercity", which is now also available with the new D15 engine and its three power stages from 280 hp (206 kW) to 360 hp (265 kW) in addition to the tried-and-tested 290 hp (213 kW) D08 engine, can also be equipped with the new gearbox, thus offering a total of four gearbox alternatives. As a matter of course, the MAN Lion's Chassis RR8/9 and RC2/3 (with D15 and D08 engines in each case) for city and intercity bus applications will also be equipped with the new gearbox variant.

The gearbox can be optimally adapted to the different engine variants on account of the gearbox control unit's ability to adapt selectively to variable idling speeds and engine maps. The MAN Lion's Coach, NEOPLAN Tourliner and NEOPLAN Cityliner coaches as well as the RR2/3/4/5 chassis (D26 engine) will follow suit in the near future in the form of the EcoLife 2 Coach variant with input torques of up to 2 500 Newton metres. Consequently, they will also benefit from these new developments.

Lighter, more robust, easier to service

There is only one development trend when it comes to modern components of a highly efficient driveline: lighter, more robust and more intelligent. The engineers stuck to this approach when developing the new EcoLife 2 gearbox. Despite the installation dimensions and mounting brackets being largely identical, it was possible to make the unit eight kilograms lighter. For the most part, this was achieved by

removing the separate retarder cooling system and integrating it into the overall cooling system. The clutch disc packs are now cooled as required, which makes the clutch much more robust. A friction-optimised sealing concept is also used. The engineers paid particular attention to a component that is largely responsible for vibration control at low speeds and reduced noise: the torsion damper of the hydrodynamic torque converter. This consists of a spring set. which facilitates rotation between the crankshaft and gearbox input shaft due to its coil springs positioned in windows, and a friction device. The twisting angle has been increased from 8.9 to 14.3 degrees and the pre-load torque has been eliminated. This, together with the inclusion of the forged cover design of the damper used in the highly stressed EfficientHybrid versions, MAN has made it possible to reduce stiffness and simultaneously increase robustness and, as a result, reliability. The converter itself has also been fitted with a new circuit cover, which ensures that all gearbox variants have stop/start capability. In terms of fuel consumption and noise emissions, significant gains can be made on account of the resulting downsizing and downspeeding of idling speeds in particular (up to 550 rpm).

Lower speeds, improved retarder output

The centrepiece of the new gearbox, however, is the new gearshift logic, which



stands out due to its intelligent features. Thanks to the modern software controller that is integrated into the gearbox, the gearbox control system is designed for a very long service life and boasts impressive power reserves for future applications. Generally speaking, the refined gearshift logic is based on a new gradation of the six gears. The overall transmission ratio spread of the gears in the modified gear set has increased from 5 469 to 5 727. In particular, the two overdrive stages five and six are designed to be significantly longer than before, which, in conjunction with the two possible axle ratios of i = 4.56 and 5.67, leads to a significant reduction in revolutions at high speeds (around 1 400 rpm at 100 km/h for the Lion's Intercity with D15 engine) and helps to prevent fluctuation between fourth and fifth gear at city driving speed. By reducing the gear ratio difference from first to second gear, the opposite effect is utilised. In this way, the gear change can be made earlier when setting off or later when slowing down – this protects the engine as it does not need to be brought up to speed to such a great extent.

The intelligent, further refined TopoDyn Life control system also ensures that topography, vehicle weight and all other driving resistances are recorded intelligently in real time and factored into the complex gearshift strategy. Another benefit is provided by the re-engineered retarder with its optimised deceleration performance. Instead of being deactivated in second gear as was previously the case, it is now deactivated in first gear just above the idling speed. Similarly, the converter lockup clutch, which is essential for this type of gearbox, is not opened until that point. As such, the coasting phase with no fuel delivery, which ends at this point, can be maintained until shortly before standstill and is therefore extended by around two seconds. In municipal buses with MAN EfficientHybrid, the important recuperation phases that see valuable deceleration energy fed into the energy-storing Ultracaps, are also extended in the process – a clear efficiency advantage.

The EfficientRoll function, also known as the "rolling" or "gliding" function is another new feature of the EcoLife 2 coach variant. This function is used, for example, on intercity routes or on the motorway to make use of the existing momentum on a downhill gradient to cap the frictional connection between the engine and the gearbox, thus achieving the greatest possible fuel saving. To this end, the converterclutch unit is opened automatically without any input from the driver. The converter keeps the engine slightly above idling speed, so the fuel supply is not cut off entirely. For some time now, a similar system has been provided by the automated 12-speed gearbox of the new generation MAN TipMatic Coach in conjunction with its EfficientCruise gearshift strategy. Improved service ensures low total cost of

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ownership (TCO) Service is an extremely important topic for customers – and not without reason.

In the new EcoLife 2 gearbox, it is possible to reduce drag and churning losses by optimising the quantity of lubricating oil, not least by integrating the retarder into the primary cooling circuit. The dual cooling system provides reliable protection against overheating, making it possible for the first time ever to individually extend the oil-change intervals of 180 000 kilometres at the customer's request, subject to the deployment profile and use of the vehicle. For this purpose, the essential digital trend data of the gearbox is exported and analysed by MAN Service. All of the measures relating to increased serviceability contribute to keeping the TCO as low as possible. What's more, it has also been possible to improve the longevity of the gearbox as well as its reliability over the entire service life by implementing all optimisation measures, such as using components with a greater level of robustness.

Customer benefits of EcoLife 2 at a glance:

- Lower fuel consumption compared to previous gearboxes due to reduced drag losses, modified gear set with greater transmission ratio spread and longer final transmission ratios.
- Consistent reduction of engine speeds on account of new gear ratios, improved TopoDyn Life gearshift control and improved torsion damper with reduced noise levels.
- Optimised retarder operation by means of continuous actuation in coasting mode right through to standstill with no fuel delivery.
- Improved gearshift quality in all driving situations provides relief for the driver and increases both the driving comfort and the durability of the driveline.
- Greater reliability and serviceability as a result of improved component robustness with oil-change intervals that can be extended beyond the previously applicable 180,000 kilometres on a case-by-case basis.
- Optimisation of the automatic stop/start system for city buses with significant extension of the recuperation phases in MAN EfficientHybrid variants.

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Marie Sjödin Enström Makes History in Malaysia

After five and a half years it is time to reflect on what has been a turbulent and eventful time before Marie Sjödin Enström hands over the Scania office to her successor.

The departure and handover of Scania's business in Malaysia and Singapore might have been delayed for Marie, however it only added another layer of excitement and experience as the situation required new thinking in order to stay on top of the game. In this exclusive interview we met with the outgoing Managing Director of Scania Southeast Asia to find out how the past 66 months have shaped perceptions, the industry and experiences.

Better than Expected

For many, the perception of a new country is formed mainly from afar, with little on the ground local experience. For Marie this was no different. Having only visited Kuala Lumpur once before she took up the position, "Like most new MD's we come with a perception of the country needing more development. Upon arrival, like many MD's we realise that Malaysia is more developed in some areas, more open-minded in other areas compared to where we come from. Of course, there are many gaps to work on but this is where Scania comes in – to help build the country towards a sustainable transport system." What I have seen is a developed nation with solid infrastructure, good legal framework and good quality in many aspects." In addition, she praises the



opportunities available here and in the neighbouring countries. "We have room to grow, room for innovation and personal development. Whereas in Europe, there is perhaps less room to manoeuvre, here we can still develop and see potential."

Marie went on to make her mark on the business and in driving change in the Malaysian market. "When I arrived here, the notion of sustainability was not something that was widely recognized. However, sustainability is something that has been at the heart of Scania for a long time and it became a mission to further enhance the understanding of this concept while being here." Looking back now, Marie is proud to say that she will be leaving Malaysia knowing that sustainability, in many forms and e.g. Scania's Ecolution, has seen a massive increase in support and attention.

To be Continued

"While I can say that Scania, as a team and brand, have come a long way in the past five plus years, there is still a lot to be done. My successor will have many challenges and opportunities." Noting that Scania is focused a lot on the development of engines powered by alternative fuels, Marie points out that the brand is still not able to deliver the full potential to its customers as Malaysia has yet to move to higher emission standard requirements, such as EURO V or EURO VI. Referring to the same effort of upping the ante

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in Australia, she acknowledges that it also took long of lobbying to see change. "There are always ways and we have to find ways of continuously offering value to customers buying our products." Marie reflects that currently the government will have other urgent priorities and that the voice of the industry may not be heard as loud as it should, amidst the efforts to combat a pandemic and to rebuild the economy.

Local Flavour

Having experienced a transition between countries, Marie is certain that she will be missing the food, the weather and the people. Marie would argue that any brand is driven by the need to sell and that this is something that do not change when transferring to another country "Sales. That is the same everywhere as a fundamental requirement for the business," she states. What makes a new posting exciting are the other factors that one may find present. "For instance, we have an amazing team at the Swedish Embassy and Business Sweden and their passion to bring Swedish culture to Malaysia transcends to our day-today operations.

"One of the highlights during my time here was clearly the launch of our New Truck Generation. By that I don't mean just the launch event, but the build-up, the training and preparation which made it a hugely exciting exercise." Although not such a bombastic event, the recent opening of the Kuching branch was another highlight as was also the opening of a new workshop in Port Klang. "Seeing that such an event would draw the attention of a minister, who came and was clearly excited about the development, was extraordinary." Marie also said that the closeness and access to government departments and important decision makers has been something she surely would not experience back home. With the excitement of driving the truck as part of the opening ceremony of MCVE 2019 and a family like feeling within the business and private community, she sums up her time here as simply "amazing".

Un-ticked Boxes

While the tour of duty might be an overall success, Marie also critically says that some things have been left hanging, due to several reasons. While admittedly, things don't happen overnight, the fact that there hasn't been a bigger number of women taking up management posts in the industry has been a frustration.

Putting it Here

When looking back, Marie recognises that she has greatly benefitted from her time in Malaysia and in her own words, there needs to be a continuation. "In a couple of days, I will be handing over to a new Managing Director of Scania South East Asia. The one thing I can advise is that one should not be afraid to try new things." Referring to the many opportunities that the region presents, it would be a mistake if one were not trying to transfer ideas and to continue to drive development".

"Don't hold back, keep on driving change," is her motto. To be successful with this direction, one should understand cultural differences and adjust to the way the local economy is functioning. Only with that in mind, she says, will one be able to move forward.

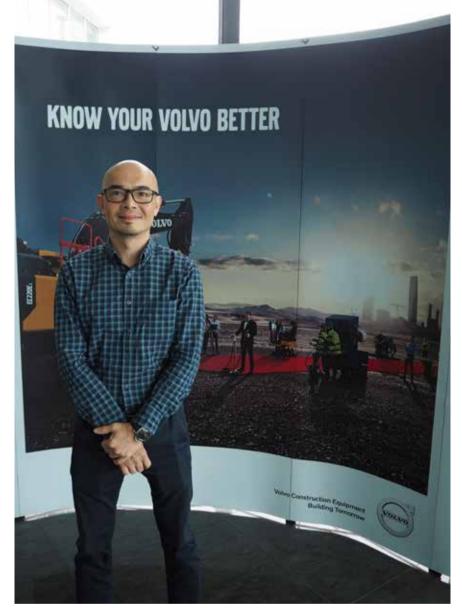
Missing Out

Marie says that she has given it her best shot for over five years, and achieving the goals she had set for herself and the team has taken a lot of energy and hard work. Given the hectic schedule, she has however also ensured that she would also look around and get glimpses of the nature of the different countries she has visited: "The pursuit of these goals should not come at any price, even if that means that some will take a bit longer."

Her message to the industry as a whole is one that inspires: "I hope that others also realise how much more we can all accomplish here in Malaysia and in the neighbouring countries. There is so much potential that is yet to be exploited." Much to her regret, Marie will not oversee the 50th Anniversary of Scania in Malaysia, but she vows to continue to make history back home in Sweden.



BUSINESS DRIVER ASIAN BUSES | 40



Volvo Finance - The Numbers Game

Nowadays, finance packages are integral parts of the sales agreement when buying a commercial vehicle. We looked at how Volvo Trucks Malaysia approaches this issue in order to make it a selling point for the brand.

Commercial vehicles are a big investment. And even if one could pay full and in cash, it is usually business smart to finance the new asset. In this exclusive interview we learn from Steven Kwok, Business Development Director, Volvo Financial Services about what it takes to integrate the financing into the product offering so that customers have one less hassle to deal with.

In his own words, Volvo Financial Service provides financial solutions to customers in order to make the purchase of a vehicle a one-stop experience. "We make it easy for customers to own a Volvo vehicle. This is not comparable with

the hire purchase agreement that we all know from buying a personal car though." One difference that Kwok points out is that there might be the option to finance a Volvo Commercial Vehicle without a down payment. "We aim at enabling our customers to own our vehicles in an easy way." As such, Volvo Financial Service is not revenue generating as such, but a support function that makes it easier for the sales force to close the deal.

The way this works is that Volvo Financial Services would be in constant contact with financiers, i.e. banks and financial institutions, to secure the loans. What Volvo provides is the banks to work with the brand to roll out the ownership programs that Kwok devises. Ultimately, the financing comes from the financial institutions whereby Volvo Financial Services is not just an intermediary, but a key driver of the finance programs offered to customers.

Since the financing is part of the offer to a client, Kwok will be involved in the sales process from day one. "This is to ensure that we offer the right financing solution to the customer right away." Another difference to the common hire purchase is the tenure of the financing, which Kwok cites to be typically around five years. In addition, the financing would also include the trailers or any application build onto the chassis. This way, the client would only have to sign for one agreement, coving the truck as a complete unit, rather than having to have a separate financing package for the trailers for example.

If someone might be deterred by the notion that financing is all about numbers, Kwok can offer insights to the contrary. According to him, it is very important to build strong relationships with finance partners and to have an understanding of the risks involved. "This is a captive market and one needs to understand the dynamics of that more than the impact of the interest rates for example," he elaborates. One may think that the interest rate might be the deciding factor, however, from experience Kwok can tell that customers may base their purchase decisions on other factors instead.



Get the Bosses to Drive

meet a lot of very successful operators. Some have been in the transportation business for many years or even several decades. They have built businesses and brands that customers associate with quality service, and the fact that they make good money speaks for their acumen. The one thing that irks me though is that many don't have a licence and do not now how to operate a commercial vehicle.

Why does that matter?

To fully understand a product, I would argue, we have to have tried it. Go to an electronics store and see how people pick up their new laptop. They open and close it, move their fingers over the mouse pad and play around with some of the apps. When transport companies pick their next addition to the fleet however, the most we may see is that a boss climbs into a cab, sits behind the wheel and gives a thumbs up for a friend with a camera. Which does not give a full impression of how the vehicle will operate and function, how it might be better (or not suitable) for a specific mission. There is a philosophy that basically says that the ultimate user of any product should be involved in the decision-making process.

Understand or Not?

If someone was to come to me to complain that the autocorrect of Word is causing trouble when writing articles, I would know. Because I too am a user of said product. Imagine a driver comes to you and talks about how downshifting at a hill is difficult or how a retarder may not be performing well enough. Would you understand this? I don't mean if you can deconstruct the sentence and hear what the driver is saying, but if you can comprehend where the problem is, the cause and the effect on the driver and his behaviour on the road. I see YouTube videos of truckers who use manual 18 gearboxes. Frankly, I have no idea how to use one, although I think I have a good comprehension of the technology behind it.

Don't be Fooled!

Let's just say that you do involve your drivers in a decision when it comes to purchasing their vehicles. Now, seeing how you have no practical experience, how would you know they aren't selling you some nonsense? For all you know, the driver is just fixated on a specific brand and would not know which vehicle is really the best for you. The same applies for your dealings with the sales personnel who are trying hard to get you to sign the line that is dotted. The more you know, the better you understand the actual job, the better your decision will be and the better you can run your business. If a transporter can demonstrate the s/he knows in ins and outs, not just on a spreadsheet, but behind the wheel, respect will be earned along with extra dollars.

Know the Job, Improve the Business

Besides a better understanding of the requirements, being able to drive a commercial vehicle will give you an edge: with a better understanding of all aspects of the business, it is easier to identify ways to improve it. In addition, I would think that other drivers are going to be more motivated when they see that the boss is "one of us". Imagine the reaction of your customers if you, as the boss of the company, show up. Does that not communicate that you truly care for your clients? Having a valid driving licence can also be a great outlet for stress. Should the office ever be too claustrophobic, you can just deliver some goods and go on a road trip.

Before you ask: yes, I have a licence for trucks up to 7.5 tons and I enjoy taking a ride whenever I can.

Daimler Buses: a Greater Exchange of Air With Active Filters Increases Safety in Buses



n its fight against Covid-19 and for the protection of bus occupants, Daimler Buses is relying on a high fresh air content, a fast exchange of air and antiviral high-performance particle filters in its vehicles. The effectiveness of these protective measures has also been confirmed by the research report issued by the Hermann Rietschel Institute at the Technical University of Berlin in a study.

Ventilation via the vehicle floor

The fully automatic air conditioning systems, installed as standard in the buses, make a considerable contribution towards increasing the safety of the occupants in Mercedes-Benz and Setra buses. This is because they reduce the risk of infection onboard by exchanging air fast.

Thanks to ventilation via the footwells, air is continuously exchanged in highfloor vehicles and high-deck touring coaches and in turn this protects occupants from an increased concentration of aerosols.

Critical aerosol values are not reached

New active filters significantly increase the efficiency of the air conditioning systems in the Mercedes-Benz and Setra buses. These multi-layer, progressively designed high-performance particle filters additionally feature an anti-viral functional layer which filters the finest aerosols. Proof of these anti-viral

characteristics in accordance with ISO 18184 are provided by physical tests and micro-biological examinations.

The new active filters are used for the roof-mounted air conditioning systems, for the air filters and also for the front climate control boxes. With these features up to 99 percent of aerosols are filtered out.

Range for the fresh air supply can be extended

Upon request from the customer, the maximum fresh air content of the air conditioning systems in the Mercedes-Benz Tourismo, Setra ComfortClass 500, TopClass 500 and S 531 DT double-decker coach series as well as in all inter-city vehicles can be increased by as much as 33 or 40 percent by additionally extending the outside temperature range for maximum fresh air supply upwards and downwards.

An even greater fresh air supply in the Setra TopClass

In the Setra touring coaches of the TopClass series, fresh air is filtered via additional roof boxes for the integrated air conditioning system above the La Linea design elements. As a result, in these vehicles the air can by exchanged every minute or up to every three minutes.

On the Setra S 531 DT double-decker bus, the extract air is controlled in the upper deck via two ventilation boxes and the steps from the lower deck. In the lower deck the bus is ventilated using grills in the cockpit and floor. In all city and low-entry vehicles the doors open regularly at bus stops to provide additional ventilation.

Busworld Southeast Asia is Rescheduled to August 2021

Due to the continuous instability in the light of the COVID-19 pandemic, Busworld and GEM Indonesia decided to reschedule the 2nd edition of Busworld Southeast Asia. The security of exhibitors and visitors are the organizer's primary concern.

After consultation with the Indonesia Ministry of Transportation, Askarindo Ipomi and the Busworld exhibitors, the new dates of Busworld Southeast Asia 2021 are set for 25 to 27 August 2021. Indonesia will start its vaccination campaign in Januari 2021, therefore end of August will be the ideal timing to organise the exhibition and support the relaunch of the bus and coach industry in Indonesia and it neighbouring countries.

Meanwhile, Busworld Southeast Asia will continue to bring bus and coach updates to its network by hosting more Busworld Southeast Asia webinars until the live show will be held in August 2021. Vincent Dewaele, CEO of Busworld International confirmed once again: "Bus people stand stonger together! We will overcome the covid-19 crisis, together. Busworld has an important role to play in this recovery. Let's get ready for the relaunch."

ABB Accelerates E-mobility Innovation with New Global R&D Center

esigned to spur further innovations in e-mobility, the \$10 million, 3,600 m2 facility is based on the Delft University of Technology campus, in the Netherlands and will drive ABB's future portfolio development, as well as R&D projects for EVs. In 2020 the University was ranked among the top 15 engineering and technology universities in the world.

Along with an investment of \$30 million into a global Center of Excellence and production site for EV charging infrastructure, due to open next year in Italy, the facility in Delft underlines ABB's plans to grow investments in sustaining its technology leadership.

The complex, which will house up to 120 specialists, marks the return of ABB's EV charging business to the home of its conception. Indeed, the students who founded Epyon (the EV charging start-up acquired by ABB in 2011), were former students from Delft University of Technology.

Ensuring the seamless connection between vehicles, charging stations, charging networks, and the grid,

together with the software systems that support them is a key focus for ABB. The E-mobility Innovation Lab has been fitted with the latest technology to ensure that ABB chargers are compatible with all types of vehicle. Simulators have been built exactly for this purpose, with 95 percent of all tests to be conducted with a digital copy of vehicles.

To test how vehicles perform in very hot or cold weather, ABB has developed special environmental testing rooms, where solutions will be subjected to extreme conditions, including temperatures from -40 to +100 degrees Celsius and high humidity. The atrium is large enough for manufacturers to drive their cars, buses or trucks into the warm and controlled environment to conduct testing, which will help advance charging for the rapidly growing electric-heavy vehicle segment.

As part of ABB's commitment to support a lowcarbon society, it was vital to not only create a building that can advance progress in sustainable mobility, but also to create a facility that will minimize its environmental impact.

Shell Malaysia Wins the Prince Michael International Road Safety Award 2020

Shell Malaysia's road safety programme for tertiary students, #ShellSelamatSampai Varsity Challenge, which empowers youth to critically think and use science, technology, engineering and mathematics (STEM) to solve issues pertinent to road safety, was awarded the Prince Michael International Road Safety Award recently. The Prince Michael International Road Safety Awards recognises outstanding achievement and innovation in the UK and across the world since 1987.

Shell Malaysia embarked on road safety advocacy in 1957, refreshed its programme, #ShellSelamatSampai in 2016 and introduced the Varsity Challenge in 2017. As part of the programme's requirement, student teams must conduct baseline studies on the current road safety issues in the country to strengthen their proposition before creating an innovative solution to address the road safety issues.

Shell Varsity Challenge creates a platform for youth to actively participate in mitigating road safety issues within their universities and surrounding communities. It aims to create road safety innovation projects that would contribute towards achieving zero road related crashes.

The judges who reviewed Shell Malaysia's winning initiative said, 'The innovative approaches taken to attract students to take part and the subsequent level of engagement are impressive'.

Over the last three years, the Shell Varsity Challenge has gained participation from 25 universities throughout Malaysia, with 60 positively impacted road safety innovation project prototypes being introduced. One of the prototypes is an innovation called 'Change Lane Alert Assist' to alert other drivers against potential head-on collisions. It was successfully built, tested and installed onto one of the participating university team's busses. The device provided an additional 30 percent improvement to the driver's front view visibility and the university recorded a 10 percent reduction in road accidents within campus.



Innovative Robo-Taxi with ZF Technology

uture mobility will encompass ridehailing solutions and robo-taxis to move people comfortably and safely through the megacities of the globe. A pioneer in the robotaxi business is the independent Amazon subsidiary Zoox that develops personal transportation solutions. ZF is proud to be a partner of the Zoox ecosystem and to contribute to the success of this autonomously and electrically driving robo-taxi. ZF will provide occupant safety systems and chassis modules for the new Zoox robo-taxi.

The autonomous vehicle is designed for safe transportation of up to four passengers. Nevertheless, there might be situations in which the safety components cannot avoid an accident. In this case, innovative 7F technologies can help with mitigating crash consequences for the occupants. These solutions include airbags mounted in the roof and in the seats. The challenge is the innovative camp-fire seating position which means that two passengers will be forward-looking and two passengers backward-looking. The usual occupant safety systems are optimized for forward-looking occupants.

The safety concept for this robo-taxi has been specifically developed for these new seating positions. The chassis is another key module, as it is the basis for a comfortable ride. It is critical to providing a positive rider experience. The precise integration of high-quality chassis components ensures that this happens. For many years, ZF has been working on solutions for the Next Generation Mobility, including autonomous and electrically powered forms of mobility such as people or cargo movers.

Karen Tan Appointed General Manager Volvo Buses Malaysia

olvo Buses is pleased to announce, effective from November 1st 2020, Karen Tan appointed as the new General Manager for Volvo Buses Malaysia.

Having nearly 20 years of automotive industry experience, Karen has worked with several companies including Naza Motors, Proton and Frost & Sullivan prior to joining Volvo Malaysia in 2011. Over the past nine years with Volvo Trucks, Karen helmed various positions including retail network development, Uptime Center, strategic planning and project management. Her most recent role was as Vice President of Marketing and Business Development for Volvo Trucks Malaysia. She was part of Volvo Trucks' management team since 2016.

In this new role, Karen will lead the Malaysia bus team to grow the business in both city buses and coach segment, including the services sales.

"We are extremely excited to welcome Karen to the Volvo Buses team. Her considerable experience in and involvement with various industry stakeholders will be a great value and essential to strengthen our presence in the Malaysia market and support to the customers," says Mats Nilsson, Director of Volvo Buses Region Asia Pacific Central.

"I am very happy to be given this opportunity and I look forward to working with our esteemed business partners in Malaysia, in both government and private sectors. Customer satisfaction remains our priority, and we are committed to provide the best product offerings and services solutions to our customers and to the public transportation in Malaysia. With the strong customer-centric mindset from the Malaysia bus team, we will continuously offer the best premium ownership experience to our customers", shared Karen.

The new appointment reinforces Volvo Buses strong focus on the Malaysia market and strive to improve the market positioning for Volvo Buses through delivering high quality, safe and sustainable transport solutions with a team of dedicated and passionate industry experts.

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