

ISSUE 2  
RM8.00

# ASIAN TRUCKER

[www.asianbuses.com](http://www.asianbuses.com)

BUS SPECIAL



FEATURE

IAA Special

CatchThatBus!

Take a ride with MAN's FC Bayern coach

Cover Story

Volvo Mobility of the future



## Superior Performance... Better Than All The Rest Excel To Be The Best

Because MAN and our football champions are  
Consistently Efficient  
German engineering at its best

Engineering the Future – since 1758.  
MAN Truck & Bus (M) Sdn. Bhd. (224536 - W)  
Lot 4, Jalan Industri 3/2,  
Taman Industri Integrasi Rawang  
48000 Rawang, Selangor Darul Ehsan.

T • 603 - 6092 6977  
F • 603 - 6092 6966  
W • [www.man.com.my](http://www.man.com.my)



MAN is among the greatest in the international arena of commercial-vehicle manufacturing: it is one of the leaders in city bus and touring coach construction, and extremely successful as a truck manufacturer renowned for its competence and innovative ideas.

MAN customers know they can rely on our vast experience and expertise and also for a high degree of safety which only a partner as powerful as MAN can offer.

Above all, our chassis offers excellent quality for first-class body solutions. Our chassis are body-friendly, reliable and have a long service life. They set new standards in terms of comfort, ride dynamics and road safety. They are powerful, achieve low consumption values and are environment-friendly – and impressively economical with it.

In short, we provide solutions of almost infinite possibilities for bus and coach bodies and vehicles of every type of tonnage.

Our football team has made their choice. They choose the best.



# CONTENTS



## 12 COVER STORY

Getting the masses moving: Sustainable transport solutions from Volvo



### 4 EDITOR'S NOTE

#### MARKET UPDATE

- 8 CatchThatBus makes it easy to book tickets
- 10 Exciting events around MIBTC 2015 lined up
- 11 Coltrac launches new Pirelli tyres in Malaysia

#### COVER STORY

- 12 Getting the masses moving: Sustainable transport solutions from Volvo

### 18 NEWS & NOTES

#### IAA SPECIAL

- 21 IAA Bus Special
- 22 Taking it to a whole new level: Volvo Buses
- 23 Scania sets records and heads into new directions with renewable energies

#### FEATURE STORY

- 24 Electric Buses - Increasing popularity with today's generation?



### TYRE TECH

- 28 Why do you need to know about tyre maintenance? It's all about safety and lowering costs!

### TAKE A RIDE

- 30 Hop onto this purpose - built bus to discover Kuala Lumpur in a new way
- 32 FC Bayern Munich scores with MAN coaches

### SAFE ROADS

- 35 Road Safety is priority - Jabatan Keselamatan Jalan Raya (JKJR)

### ON THE GROUND

- 38 Moving the island: Rapid Penang

### TECH TALK

- 40 In the business of starting your truck: Yokohama batteries

### BUS FEATURE

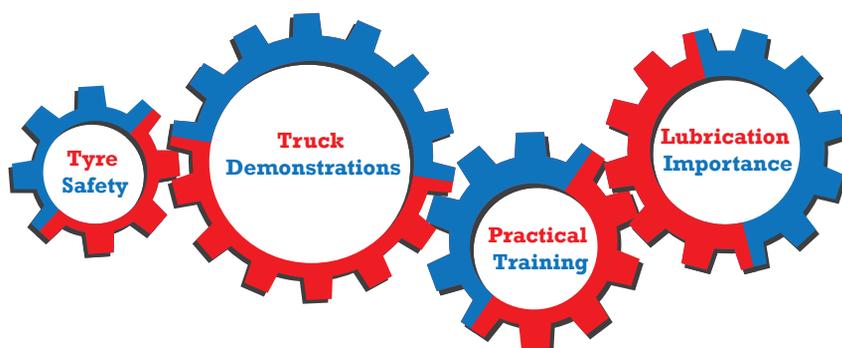
- 42 Vive TH

### 44 CELEBRATE

# Join the first Johor Safe & Responsible Drivers Day!



Join the first Johor Safe & Responsible Driver Day to learn more about how to drive your truck safely and more fuel efficient. This jointly organised event is aimed at truck drivers that want to improve their skills and enhance knowledge. While we are at it, we will network and have some fun.



**Venue :**

Truck Nation Malaysia Sdn Bhd Showroom  
Truck Nation Malaysia Sdn Bhd  
PTD 56039, Jalan Kempas Lama,  
81300 Johor Bahru Johor.  
Tel : +607-556 2273 Fax : +607-556 2271  
GPS Coordinates : N 01.56019° / E 103.71375°

**Date :**

Sunday, 2nd November 2014  
Event Duration :  
9.00am – 9.00pm

**RSVP :**

Scha: info@asiantruckerclub.com.my / +60 12 3644 351  
Frankie: +60 16 710 5749 or +60 16 771 5748 Calvin: calvin@trucknation.my / +6013-722 0999

The event is limited to **100** truckers

**Participating companies:**

HOST



CO-HOST



ORGANISER



TYRE SAFETY



LUBRICANTS





[stefan@asiantrucker.com](mailto:stefan@asiantrucker.com)

# Powering the public transport

**A**t a recent conference I was asked what I thought would be the solution to the woes of the public in traffic jam ridden cities like Kuala Lumpur. My answer was that it would take integrated transportation systems, not just one mode of transportation. Most major cities have the same issue: how to move masses quickly and cost effective. We take a closer look at Bus Rapid Transit systems and how to mobilise people for work and leisure using buses.

## Electric!

One of the major shifts we see in the way buses are being propelled is the move away from Diesel engines towards either electromobility or gas. There are several good reasons why one would use these instead of Diesel. One being less impact on the environment as there is less pollution. In addition, there may be less parts needed to propel an electric bus. This again will reduce the impact on the environment as there is less raw material needed to produce parts. If your electric motor is built into the wheel-hub for example, you don't need drive shafts. Lately I visited a Malaysian maker of an electric bus and what I saw was encouraging. With enhanced ranges, these buses may soon be used for long distances too.

## The way we work

Perhaps it is also time to change the way we work? And what does it have to do with buses? Just look at your calendar and check how many appointments you have in a day. When I worked in Singapore or Hong Kong, I didn't have that many meetings in a day. Many things were done via Phone, Fax or Email. Is it really necessary to meet up, driving an hour just for a quick chat? Maybe if we were to be more careful with how we spend our working time, we could take the bus to work and stay in the office for the day, thus reducing the need for private transportation?

## Different buses

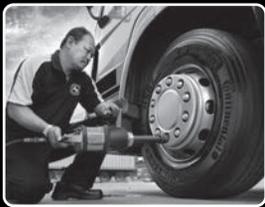
A bus is a bus is a bus? Hardly! I enjoyed working on this issue of the Bus Special as there are many different bus types that we feature. The KL Hop On Hop Off is a unique vehicle. It allows tourists to experience Kuala Lumpur in a unique way while the team buses for football teams have a whole range of gimmicks on board to make for a comfortable ride, while allowing the players to recover from a match or discuss strategy ahead of one.

**Stefan Pertz**  
Editor



# Conti360° Fleet Services.

## YOUR One Stop Solution To Lowest Overall Driving Costs



**ContiFitmentService™**  
Creates the perfect conditions



**ContiFleetCheck™**  
Optimizes your tire costs



**ContiFleetReporting™**  
The analysis that summarizes everything



**ContiCasingManagement™**  
Turns worn tires into cash



**ContiBreakdownService™**  
Back on the road again fast



**ContiBreakdownService™**  
Toll Free: **1800 88 1024\***

24hrs/7 days Breakdown Services  
Applicable to West Malaysia.

\*Terms & conditions apply

Continental Tyre PJ Malaysia Sdn. Bhd. (4296-K)  
(formerly known as Continental Sime Tyre PJ Sdn. Bhd.)  
3rd Floor, 2 Jalan Tandang, 46050 Petaling Jaya  
Selangor, Malaysia  
Tel : +603 7787 8888

[www.continental-truck-tyres.com/my](http://www.continental-truck-tyres.com/my)

**Continental**   
The Future in Motion

# The Drivers.

**ASIAN**  
**TRUCKER**

## **EDITORIAL**

### **Editor**

Stefan Pertz

### **Writer**

Fajar

## **Graphic Designer**

Eng Chuan

## **Photographers**

Floyd Cowan  
Eng Chuan

## **Contributors**

Floyd Cowan  
Devindran Ramanathan

## **Advertising**

Nicole Fong  
Nicole@asiantrucker.com

Rizal Khalid  
rizal.khalid@asiantrucker.com

## **SINGAPORE**

Floyd Cowan  
Floyd@asiantrucker.com

## **THAILAND**

Songyot Kamontavikun  
Songyot@asiantrucker.com

## **CIRCULATION, CONTRIBUTIONS and SUBSCRIPTION**

info@asiantrucker.com  
WEBSITE and E-NEWSLETTER  
www.asiantrucker.com

## **PUBLISHED BY**

ADAIKALARAJ MEDIA GROUP SDN BHD  
The Penthouse, No 1-3A, Jalan PJU 8/3,  
Damansara Perdana, 47820 Petaling Jaya,  
Selangor, Malaysia  
www.amg.com.my

## **ARTICLES**

Asian Trucker is a registered trademark of Asian Trucker Media Sdn Bhd. All articles submitted for publication become the property of the publisher. The editor reserves the right to adjust any article to confirm with the magazine format.

Asian Trucker is a quarterly publication. The publisher will not be responsible for any copyright violation of articles that have been approved by contributing writers. The publisher accepts no responsibility for unsolicited manuscripts, illustrations or photographs.

## **PRINTED IN MALAYSIA**

Percetakan Osacar Sdn Bhd  
(Co.Registration : 63461-W)  
Lot 37659, No 11, Jalan 4/37A,  
Taman Bukit Maluri Industrial Area  
Kepong, 52100 Kuala Lumpur

## **Distributed by**

MPH Distributors Sdn Bhd ( 5048-A)  
Ground Floor Warehouse, Bangunan TH  
No 5, Jalan Bersatu Section 13/4  
46200 Petaling Jaya  
Selangor Darul Ehsan Malaysia

Boost your business with a listing on our new website.  
Find businesses or sell your truck, upload your events or images to the gallery.  
Visit our new website [www.asiantrucker.com](http://www.asiantrucker.com) to put your company on speed.

South East Asia's largest exhibition specifically for commercial vehicles | Now 40% bigger!



www.mibtc.com.my

Open for Registration  
开放登记



# The 2nd Malaysia International Bus, Truck & Components Expo 2015

## 第二届馬來西亞国际巴士, 货车及组件展览

### The 2nd Malaysia International Bus, Truck & Components Expo 2015 [ MIBTC 2015 ]

caters specifically to the needs of the regional trucking, logistics and bus industries, serving as an exclusive platform that gathers all the best from leading manufacturers, equipment suppliers and service providers.

It is the only international-scale business-to-business trade exhibition in Malaysia focusing on the commercial vehicle market and its supporting industries.

Participation is open to manufacturers, buyers, and operators who are interested in selling, promoting and marketing their products at international level.

It's held at the **Malaysia International Exhibition & Convention Centre [ MIECC ]** in Kuala Lumpur, Malaysia on **14 - 16 MAY 2015**.

### 2015年第二届馬來西亞国际巴士, 货车及组件展览 [ MIBTC 2015 ]

是专为迎合区域运输, 物流, 巴士, 货车和组件行业需求而主办的贸易展览. 此展览集聚了所有业界领先制造商, 设备供应商和服务供应商, 将为业者提供一个独特的商业平台以建立新的或加强现有的业务关系.

它是马来西亚唯一专注于巴士, 货车, 商用车, 区域运输, 物流和组件行业市场的国际大型贸易展览会.

欢迎制造商, 采购商以及亦于销售, 宣传和将产品推向国际的运营商登记参加这个国际贸易展览.

这为期三天的展览活动将于2015年5月14日至16日, 于吉隆坡, 马来西亚绿野国际会展中心 [ MIECC ] 举行.

**14 - 16 MAY 2015**

**Mines International Exhibition & Convention Center [MIECC]**

**Seri Kembangan, Selangor, Malaysia**

**马来西亚绿野国际会展中心, 吉隆坡, 马来西亚 [MIECC]**

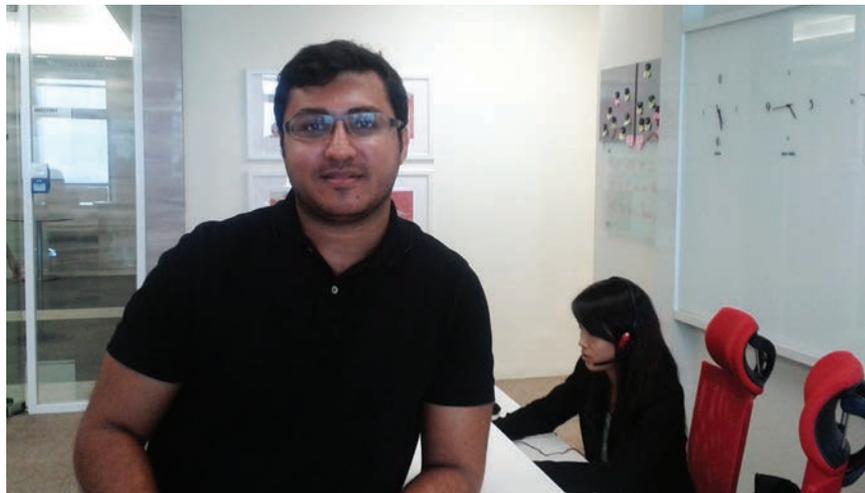
Also hosting



Organised by



# CatchThatBus makes it easy to book tickets



*This locally developed platform takes the stress out of ticket purchases and let's you catch a bus with your mobile device.*

Malaysians use coaches a lot to travel across the country. One of the inconveniences however is the selection of the right ticket and the need of having to go to the bus terminal to purchase the actual ticket. "CatchThatBus" is a locally developed application that lets you buy your ticket online via PC or mobile device. We met with Viren Doshi, CEO of Catch That Bus Sd Bhd to find out more about this clever tool.

## Why so difficult?

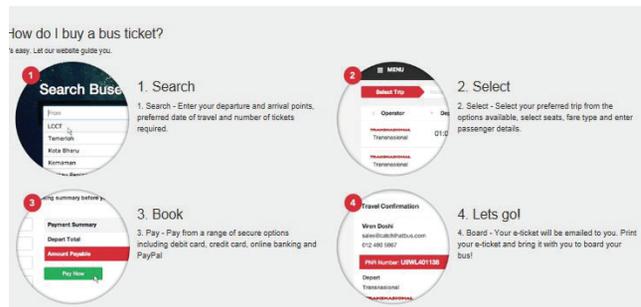
Motivated by his wish to start his own business and inspiration from his travels, Doshi looked at the Malaysian travel market and found that there is room for improvement when it comes to journey management on coaches. "Why does it have to be so complicated? This was the base line for the development of our system" Doshi explains. He has seen similar systems abroad and found that there is a gap in the Malaysian market. He further said "Do you really have to inconvenience your passengers by making an extra trip to the terminal to obtain the actual ticket? We don't think so". From this notion sprang the idea for CatchThatBus and the application was developed from scratch and launched in 2012. Meanwhile, several reputable operators have joined the platform, offering their tickets via this system on [www.catchthatbus.com](http://www.catchthatbus.com).

## Getting it rolling

Essentially, CatchThatBus is acting as a ticketing agent. Just like a travel agent would do, only that there is no brick and mortar shop. "This was challenging at first, because people needed to understand that there is still a lot of work and effort involved in running our application even though there are no people or any outlets". Right now, all transactions are done electronically and the future plans include QR codes to be used to board the buses and to be totally paperless when it comes to the tickets and managing the flow of passengers.

As any other agent, CatchThatBus would be paid a commission. "What is crucial is to be working with operators that are taking good care of their own system and fleet. Since we are the

ones selling the ticket, we will also be the ones that receive the complaints. There have been several operators wanting to join our network, but we turned them down as we did not find them suitable" Doshi states. His system will either integrate into the ticketing system that an operator already has or there will be a connection provided to the operator if they don't have a system. From there, the booking works exactly like when you book a flight ticket online. It is therefore important that any other agent or the operator's staff books any seat sold right away to avoid double bookings. In case a booking isn't completed within 15 minutes, the seat will be released. **F**



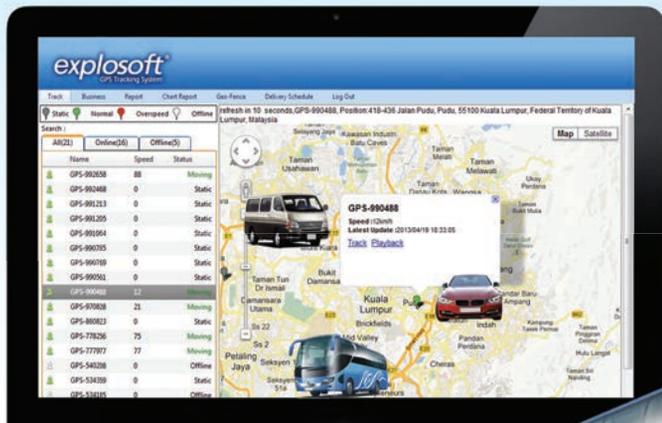
## GPS Recorder with Real-Time Tracking

### Intelligent Systems for Monitoring, Analysis and Control

Monitor and tracking on website / smart phone device.



GPS软件可用于  
iPhone, IOS和Android  
智能手机。



Other reports:  
还有其它报告

Vehicle Usage Report, Geo-Fence Report By Place, Geo-Fence Report By Vehicle  
Mileage Details Report, Planned Mileage Report, Stay Detail Report, Idling Overview  
Road Plan Report, Speed Chart Report, Overspeed Chart Report etc.

### GPS Features

- GPS+GSM+GPRS network
- Real-time tracking and upload location information
- ACC detection and upload vehicle status
- Access location information via SMS or GPRS(TCP)
- Built-in CPU, eliminating breakdown automatically
- Built-in high sensitive GPS chipset
- Relay for tele-cut off fuel/power
- Built-in ON/OFF power, wide input voltage range
- External MIC for voice monitoring
- Three LED indicators for displaying working status
- Built-in GSM&GPS antenna
- Built-in acceleration sensor for vibration alarm
- Built-in 450mAh battery for alarm when power supply is disconnected unexpectedly
- External SOS button for emergency alarm
- Check location via platform

FREE Demo at : [www.gps.net.my](http://www.gps.net.my)

explosoft® International Sdn.Bhd. (618452-M)

No. 87-3, Jalan Metro Perdana Barat 1, Taman Usahawan 52100 Kepong, Kuala Lumpur, Malaysia.  
Tel : +603-6250 8080 Fax : +603-6730 8402 Customer Care Line : 1700 801 801 Email: info@explosoft.cc

# Exciting events around MIBTC 2015 lined up



*Exhibitors and visitors alike can look forward to an exciting event that will have some new fringe events added to the second Malaysia International Bus, Truck and Component Expo.*

**W**ith the exhibition space filled with booths from top brands showcasing their products and services, delegates can look forward to an exciting show in May 2015. “We will not stand still in our aim to innovate, to make the exhibition bigger and more exciting” says Stefan Pertz, Organiser of MIBTC. While some fringe events make a comeback, others are added.

### Scania Driver Competition - MIBTC Edition

If you have a valid driving licence for trucks you may head on down to the open air car park space to test your skills in this instalment of Scania’s signature competition. Scania prime movers wait for you and once you have strapped in, you may “knock the cones”. Each day, Scania will honour the best driver in an awards ceremony on their stand. This competition is open to drivers all any brand truck.

In addition, Scania will bring back their Driver’s Lounge. This time it will be located on the Mezzanine floor overlooking the halls.

### RC Truck Racing

Some delegates could not get enough of these and we are bringing them back for your entertainment and viewing. Drivers of these model trucks will battle it out on the purpose built track. While the trucks may be smaller than the prime movers use in the Scania Driver Competition, they are certainly as nimble. For those without a licence, this may be a challenge to take to see their abilities behind a truck’s steering wheel.

### Best Booth Design Award

Many exhibitors put a lot of effort into the design of their booth. We will honour this with a “Best Booth Design Award”. The voting will be done by the visitors of MIBTC 2015. The winning booth design



will be honoured with a cash prize, so you may want to get your agency to spruce things up a bit!

### Media Round Tables

Important issues need to be tabled for everyone in the industry to know about them. Each of the three days we will tackle an important topic and discuss them. For this we will invite media and podcasts allow everyone to learn what has transpired. Each of the three Media Round Tables is looking for a sponsor. If you would like to have your name associated with one of the topics, please get in touch with us. **F**



**Event Dates**

Title: Malaysia International Bus, Truck and Components Expo 2015, MIBTC 2015

Venue: MIECC, The Mines

Date: 14 - 16 May 2015

# Coltrac launches new Pirelli tyres in Malaysia



**P**irelli together with their Truck & Bus Sole Distributor for Malaysia, Coltrac Sdn Bhd launched the latest generation of truck and bus Tyre which is FR01 II and TR01 II at the recently concluded MAI - LAFARGE Automotive & Logistic Safety Exhibition 2014. These tyres are meant for regional application. Pirelli and Coltrac Sdn Bhd took the opportunity to introduce to Lafarge Malaysia's official transporters across Malaysia the latest generation of Pirelli tyres, namely the FR01 II and TR01 II. These had been launched earlier in other countries across Asia Pacific and now in Malaysia. Malaysia is the first ASEAN country in which this latest generation Pirelli truck and bus Tyre is launched.

Pirelli & C SpA, well known as the Italian tire giant, has made significant investment to make China its largest global manufacturing centre in Pirelli. According Gregorio Borgo, CEO of Pirelli Asia Pacific, the expansion is necessary to keep pace with the huge potential market for its tires. This stems from China's surging demand for luxury and sports-utility vehicles. Gergorio

Borgo continues to say that "By 2014, Pirelli manufacturing base in Yanzhou, Shandong province, which is the only one in Asia-Pacific, will become the biggest in the world for Pirelli".

PIRELLI expects an average annual growth of 16 percent in Asia Pacific over the next three years as the Italian tire maker seeks to strengthen its leadership in the premium segment which include truck tires. The region, where sales rose 14.5 percent to nearly 500 million Euros (US\$692 million) in 2013, or 8 percent of its global total, is already Pirelli's fastest growing market. By 2016, Asia Pacific sales could reach 770 million Euros, according to regional CEO Carlo Costa Ardissone.

These new tires focus on two key features, which are Safety and Durability.

**SAFETY: 10% better road holding on dry and wet road**

**DURABILITY: 20% more mileage in ensuring longer lasting for FR01 II and 10% more mileage in ensuring**

**longer lasting for TR01 II**

**DURABILITY: 10% better resistance to tread tyres FR01 II and 20% better resistance to tread tyres for TR01 II**

**DURABILITY: 10% on casing durability for better retreadability both for FR01 II TR01 II**

The new tread compound formula and the high content of silica ensure high mileage and resistance to the stress typical of tires intended for mixed use, even on moderately abrasive surfaces. Performance in dry and wet conditions is improved whilst maintaining high safety levels for the entire life of the tyre. Groove and siping geometry is designed for steering precision and progressiveness combined with great road holding on a variety of surfaces.

"With the launch of the new tire, we aim to work closely with Coltrac Sdn Bhd to establish Pirelli Truck & Bus Tire in the Malaysia market with the right Area Distributor" a statement from Pirelli read. 

# Getting the masses moving: **Sustainable transport solutions from Volvo**



*Volvo is ramping up its bus business in South East Asia and especially in Malaysia as the needs for sustainable transport solutions in larger urban areas are increasing.*



**B**uses have been praised many times as the solution to traffic woes in big cities. It may not be as easy as just plopping a transportation hub into the city centre, but with clever solutions, mobility within large urban spaces and across countries and nations is in reach. The integration of buses can be seen as a way of easing the traffic burden and with electric buses even the level of noise pollution can be reduced dramatically. Currently, the bus segment of Volvo has a turnover of 2.5 Billion Euro alone.

#### **Volvo ready for Malaysia**

We recently learned that Volvo is gearing up to play a much bigger role in the bus market in Malaysia. Some 100 buses from Rapid KL undergoing refurbishment and upgrading program, which is just one of many activities that are leading up to the organisation ramping up its business in the country. In order to build the buses sold with the Volvo badge, Truckquip has been signed up as an official partner. Truckquip is tasked with the assembly of three Volvo models and the work started in August. The chassis assembled are going to be the B7R and B11 R with 290 to 430 horsepower. The buses are mainly used for factory, tour bus and coach / long haul coach applications.

The importance of the region is also reflected in a recent move of Volvo to move the Bus Asia Pacific Headquarters from Australia to Singapore. This will allow for closer proximity to the markets and will enable Volvo to react much faster and accurately to the needs of the South East Asian bus segment. In line with the move, additional people have been brought on board, such as a Director of Technical, After Market Director and Commercial Development Director. In Malaysia, Muralli Muthusubramaniam has been appointed as the Country Manager Malaysia Volvo Buses. Dealers are being run through a training program to ensure they are aligned with the business growth Volvo is aiming at when it comes to knowledge about buses.

Håkan Agnevall is President for Volvo Bus Corporation within the Volvo Group visited Malaysia as the company "Is ready to take the next steps in the region. In addition, the signing of the agreement with Truckquip was another important event that took place during this visit".

### What Volvo provides

According to Agnevall there are three key offerings for the Malaysia Volvo is bringing to the table, all related to Bus Rapid Transit (BRT). For buses, Volvo focuses on three core approaches, being BRT, electro-mobility and safety.

Coined BRT, one would really look at an integrated transport solution. In order to address the transportation needs of large urban areas, special buses are needed in conjunction with designated bus lanes. Buses may come in the shape of articulated buses, able to move over 100 people. Beyond that, there needs to be platforms and ticketing systems. While it may sound costly to have separate bus lanes, the BRTs implemented in other large cities have proven time and time again that the buses are not only the perfect way to integrate with trams and trains, but BRTs are also the most cost effective transport solution. While BRT systems need to be adopted to the specific requirements of each city, the basic principles remain unchanged and this is where Volvo's vehicles come in.

The most visible trend right now is the shift towards electro-mobility, utilising new drivelines. This is mainly motivated by cities councils not wanting to reduce pollution and private households looking at ways to reduce fuel cost. To date, Volvo has already delivered over 3 000 units of hybrid buses worldwide under three different brand names, including Volvo. "We see a very strong trend emerging. And this trend is a global one. The biggest push can be seen in Europe, where this push is motivated by the European legislation" said Agnevall at the press briefing in Kuala Lumpur. Many countries and cities in South America are changing their legislation in order to reduce pollution and to clean up city spaces. Extensive testing is currently being carried out in Singapore.

### Future trends

Although Agnevall admitted that the move towards using hybrid and full electric buses is in an early stage, it is the way forward. In order to provide a cleaner city, Bogota is using some 200 Volvo Hybrid Buses. China has issued policies and is offering subsidies for the latest technology and Volvo estimates that in the very near future some 60 % all new buses in China will be equipped with an electric drive of some sort. The use of hybrid buses can reduce fuel consumption by up to 39%.

Naturally, "Safety" is a key component of all the buses that Volvo builds. For buses, disk brakes, integrated retarders and ESP (Electronic Safety Program) which comes as a standard for the coach segment. Safety has been a core value of Volvo since 1927. Agnevall draws the conclusion that "Eventually, we will see the combination of the BRT and electro mobility to create electric BRTs". This is further supported by a global trend of increasing fuel prices, which is leading to operators looking at alternative ways to propel their vehicles.

### Bus as solution

For Volvo, the provision of the chassis is not enough. As Agnevall points out, the job of a bus operator is a tough one and they need any help that they can get in order to be profitable. This of course starts with a chassis that offers outstanding fuel economy and safety. Added to that are fleet management systems and traffic management systems. In order to keep the buses moving, service centres are crucial and the availability of spare parts is another aspect of enabling operators to run effective fleets. To complete the offering, driver training is also provided.



## General types of electric buses

### 1) Hybrid bus

A Hybrid, or dual-mode bus is a bus that can run independently on power from two different sources, typically electricity from overhead lines or batteries, alternated with conventional fossil fuel, which is generally diesel fuel.

In contrast to other hybrid buses, dual-mode buses can run forever exclusively on their electric power source (wires).

Volvo's solution is based on a concept known as I-SAM (Integrated Starter, Alternator and Motor). Unlike a conventional series hybrid system, a powertrain based on a parallel hybrid system can be used as a pure conventional diesel powered system or as an electric powertrain system – or in mixed mode. This flexibility ensures the highest possible system efficiency irrespective of driving condition, and much improved fuel efficiency compared to series hybrid systems.

### 2) Full electric bus

A battery electric vehicle (BEV) is a type of electric vehicle (EV) that uses chemical energy stored in rechargeable battery packs. BEVs use electric motors and motor controllers instead of internal combustion engines (ICEs) for propulsion.

A battery-only electric vehicle or all-electric vehicle derives all its power from its battery packs and thus has no internal combustion engine, fuel cell, or fuel tank.

Future developments for electric buses includes the use of inductive charging under the street, to avoid overhead wiring. A pad under each bus stop and at each stop light along the way would be used. In addition, the use of solar panels is being tested.

## The major problem of the electric bus - Range anxiety

"Range anxiety", a term coined to describe the fear of being stranded as a major reason why all-electric cars have not sold better to this point, can also be applied to electric buses. Due to the much larger mass of a bus than a car, electric buses have an effective range much lower than an electric car has - as little as thirty miles. Since most buses are out on the road for twelve hours and 200 kilometres or more per day, it is clear that without some ability to recharge en route electric buses will not be able to be deployed in the nation's bus systems.

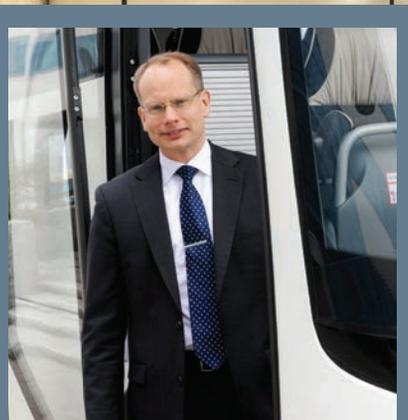


### City Mobility Program

Currently, buses still need recharge in order to run the full distance needed. For that, charging stations or charging pads need to be installed. This will involve many more stakeholders when it comes to implementing a BRT in modern cities and Volvo is taking the lead in this respect. Through the City Mobility Program, Volvo has identified suitable cities as partners to work on implementing a test route first in order to showcase the efficiency of the electrified buses. Trucks are also included in the City Mobility Program as the movements of trucks impact bus routes. On the outset, bus operations throughout the world are identical in terms of operations and challenges faced. Therefore, the learning from this program can be transferred to other regions and cities with metropolises like Kuala Lumpur benefitting hugely from the readily available data and insights.

### Ready for Malaysia

With Muthusubramaniam Muralli as the Country Manager Malaysia, special training programs for the service centres being carried out and a proven product line-up, Volvo is now ready to be more active in the Malaysian market. For Malaysia, Volvo targets a wide range of applications and clients, from government to private companies, stage buses to intercity coaches. The company is also ready to implement a BRTs systems as and when the need is identified and the cities are ready for this step. According to Agnevall, it is possible to implement a BRT even in large cities with existing infrastructure. 



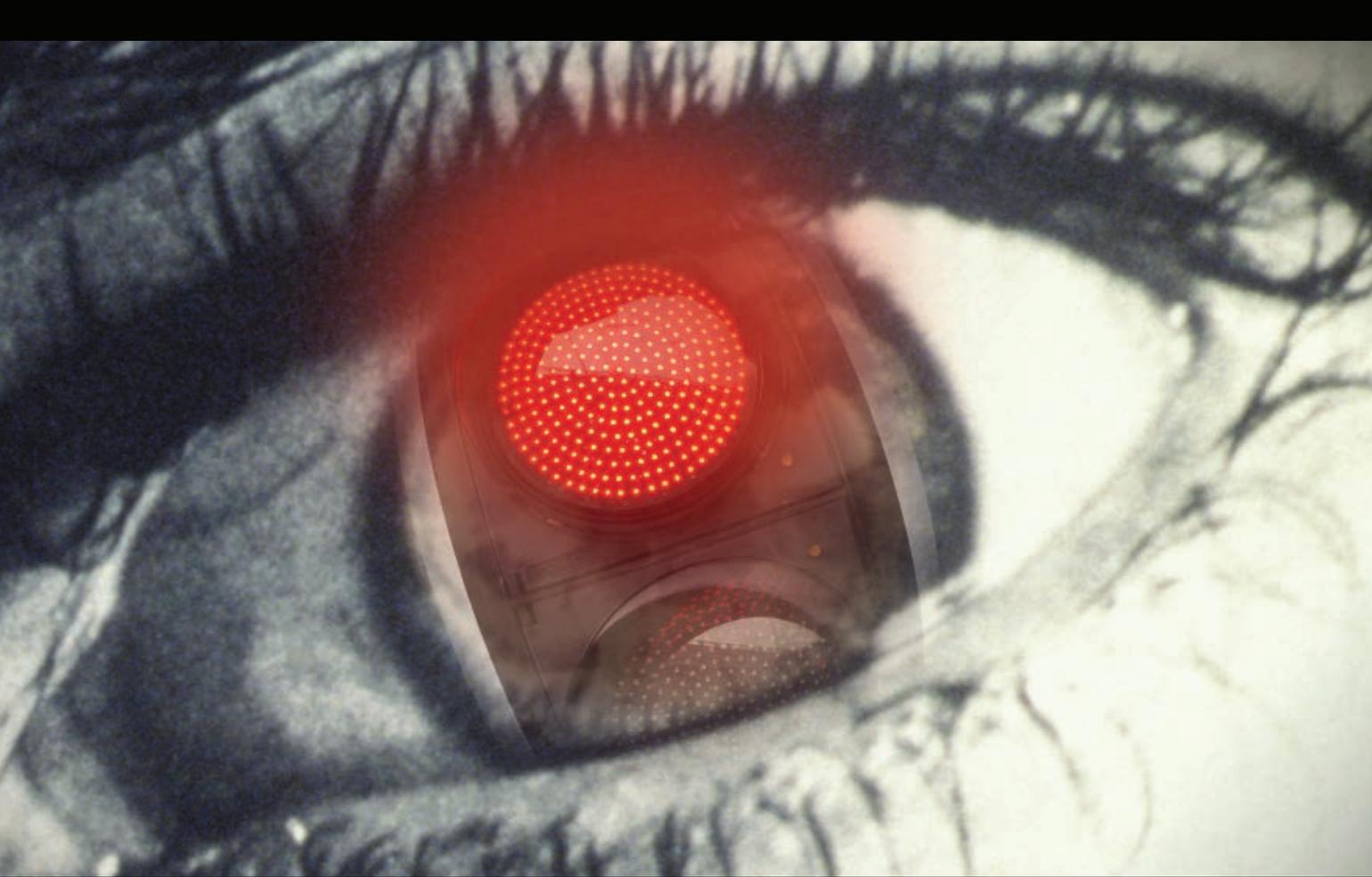
Håkan Agnevall is President for Volvo Bus Corporation within the Volvo Group.

He has an international industry background and has previously held senior management positions in Bombardier and ABB in various parts of the world.

Håkan Agnevall has a Master's Degree in Engineering Physics from Lund Institute of Technology and an MBA from IMD in Switzerland.

Håkan was born in 1966 and is married with two children





# Don't let red be the last thing that you see.



**Stop On Red.  
You Can Make A Difference.**

Remember that if you are a motorcyclist, traffic lights are there to protect you. But they will only work if you pay attention to them. Slow down on yellow and stop on red. Even if you think you can cross safely, don't! Running red lights is breaking the law and putting your life at risk.

Log on to [www.jkjr.gov.my](http://www.jkjr.gov.my) to learn more.

## Iveco Bus wins an important contract for 300 Eurorider chassis in Egypt

The Iveco Bus importer for Egypt, GB Auto – a Ghabbour Group company, a leading automotive assembler and distributor in the Middle East and Africa – has signed an important contract with the Cairo Transport Authority – CTA – for the delivery of 300 Eurorider chassis to be bodied as 12.20 m city buses.

Iveco Bus, a brand of CNH Industrial, will manufacture the 300 Eurorider chassis at its plant in Annonay, France. The chassis will be bodied by GB Polo, a joint venture between the Ghabbour Group and the Brazilian bodybuilder Marcopolo, at its plant in the Cairo suburbs. The two-axle Eurorider chassis will be fitted with the Iveco Tector 6 Euro 3 engine with a rated power of 270hp and an automatic gearbox.

These buses will enter operation at the end of 2014 and will be part of an extension of the Cairo fleet, which currently numbers some 2,000 buses. With 37,000 employees, the CTA offers transport services to more than 3.5 million passengers a day.

With an annual output of 150,000 units, the Ghabbour Group is currently the largest automotive manufacturer in Egypt. It produces cars, buses, trucks and motorcycles for many international brands.

Available as a 6x2 or 6x4 chassis with a right or left hand drive, the versatile Eurorider has been successful both in Europe and overseas, especially in Africa and Middle East. This new contract in Egypt demonstrates that Iveco Bus continues its development in conquering new markets and continuously provides leading urban mobility solutions.

# Beyond engine parts: Diesel Technic Asia Pacific Pte. Ltd. opens in Singapore



Equipped with a complete offering for the aftermarket, Diesel Technic is capitalising on the current growth in the region, planning for expansion throughout South East Asia.

Having seen the vast growth potential in South East Asia and Asia Pacific, aftermarket giant Diesel Technic is stepping up the operation with industry veteran Eike Merz leading the way. Several activities are already lined up for the remainder of this year and we are sure to get to hear more from this innovative company from Germany. Recently, Mr. Merz and his colleagues also visited Malaysia to connect with local companies and to introduce themselves as the provider of choice when it comes to quality aftermarket parts.

### Managing the region South East Asia: Mr. Eike Merz

Eike Torsten Merz is the General Manager of Diesel Technic Asia Pacific Pte. Ltd.

He has got nearly two decades of Automotive Aftermarket experience in Asia Pacific. During this time he has been based over six years in China and is living for eight years in Singapore.

Mr. Merz is looking forward to the interesting tasks and a successful start of the new subsidiary in Singapore: "After months of preparation and the opening in May, we are now looking forward especially to our distribution partners, who we will optimally support with the active sale and distribution of products of the brand DT Spare Parts, for our mutual success."

Mr. Merz and his team of well-trained, service-enthusiastic and dynamic associates are perfectly prepared to fulfil these objectives for a successful business development in Asia Pacific.

## GOEURO presents its worldwide transportation price index

**G**oEuro, www.goeuro.com, the online platform that compares and combine trips by train, bus and plane throughout Europe, presents its worldwide Transportation Price Index based on the train, bus and flight information for 51 countries across 5 continents.

Malaysia came in as the 3rd least expensive out of 51 countries ranked in the Global Transportation Price Index. Taking into account factors including distance, scheduling and taxes, GoEuro compared the cheapest bus, train and flight connections between the most populous cities in each of the countries, among other routes, and analyzed the data in the Price Index. Countries were then rated according to average price per 100km for each transportation type:

- On average, in Malaysia, bus journeys cost \$6.10/100km, train journeys cost \$2.84/100km and flights cost \$11.43/100km.
- The most expensive country for transport overall is Switzerland, where bus journeys cost \$18.67/100km; train journeys \$38.28/100km; and flights cost \$125.07/100km.
- The cheapest country for transport overall is South Africa, where an average bus journey costs \$3.67/100km; train journeys cost \$1.88/100km; and flights cost just \$11.63/100km.

### Broken down by transportation type:

-The cheapest countries for train travel are South Africa (\$1.88/100km), Georgia (\$2.39/100km) and Egypt (\$2.49/100km), whilst the most expensive are Denmark (\$39.84/100km), Switzerland (\$38.28/100km) and Austria (\$32.16/100km).

-The cheapest countries for bus travel are Egypt (\$1.88/100km), Ukraine (\$3.07/100km) and Thailand (\$3.11/100km), whilst the most expensive are Netherlands (\$28.58/100km), Austria (\$23.45/100km) and Norway (\$21.61/100km).

-The cheapest countries for air travel are India (\$10.36/100km), Malaysia (\$11.43/100km) and South Africa (\$11.63/100km), whilst the most expensive are Finland (\$138.90/100km), Switzerland (\$125.07/100km) and Lithuania (\$116.72/100km).

The full results and data from the GoEuro Transportation Price Index can be found here: [www.goeuro.com/transportation-price-index](http://www.goeuro.com/transportation-price-index)

## Bus & coach travel a new trend in Germany

**G**ermany has an extensive domestic bus network although most travellers stick with the convenient rail network unless they want to get to smaller towns, particularly in the Bavarian Alps and along the Romantic Road. However coach travel has recently become a popular alternative to the train with services to destinations throughout Germany and to other cities in Europe.

Prior to 2013, long distance coach services (anything longer than 50km) was prohibited unless it could be proven that it did not compete with DB's rail network

and during this time coach travel in Germany was restricted to international routes, short regional services and intercity routes in and out of Berlin. However on 1 January 2013, this law was repealed leading to a more competitive market for domestic travel within Germany and the launch of many long distance bus operators that are often a much cheaper alternative to rail travel.

German long distance coach services include: ADAC Postbus, Berlin Linien Bus, city2city, Dein Bus, FlixBus, Mein Fernbus and München-Stuttgart Express.

## Volvo upgrades Kuching dealership



**T**he Kuching dealership has also undergone extension upgrades and renovation. It can now fit up to 7 trucks are one go thus making them more capable of meeting all the needs of the local truck users. The list of equipment and tools available has also been expanded making repairs and service more efficient and of the highest quality. These tools also contribute towards shorter duration's a truck is in the workshop. Volvo Trucks Malaysia strives to keep upgrading their services to serve customers better. Drop by the Kuching workshop to learn more:

Lot 1017, Section 66, KTLD, Jalan Kilang, Bintawa,  
93450 Kuching, Sarawak.  
Tel: 082-330 131 / 082-482 866  
Fax: 082-333 387/ 082-346 195 (parts)

# New Managing Director for Goodyear Malaysia

Goodyear has named Varinderjit Singh as managing director, Malaysia, effective July 8, 2014. He succeeds Ivy Peng, who has been appointed to a new ASEAN cluster role to lead growth and sales initiatives.

Varinderjit brings over 24 years of general management, sales and marketing experience stemming from careers with companies such as Samsung, Dell, NEC, 3Com, AMP and Mesiniaga. Most recently, Varinderjit held the position of vice president of Samsung's Enterprise Business in Malaysia. Prior to this, he was managing director for Dell in Malaysia and Singapore.

Varinderjit will be responsible for all areas of the Goodyear Malaysia business, ensuring that it achieves consistent growth of top line revenue and bottom line earnings, and delivers on the goal of creating sustainable economic value by being first with customers, the leader in targeted segments, the innovation leader, and competitively advantaged.

On his appointment, Varinderjit said, "Goodyear is a global leader in the tire and automotive industry and I look forward to expanding our footprints here in Malaysia as we continue to deliver meaningful innovations to our customers, fuelled by the passion of our people and partners."



HINO Motors officially opens new Malaysian manufacturing plant at Sendayan. Phase two of project already in progress.

YAB Dato' Seri Utama Haji Mohamad bin Haji Hasan, Menteri Besar Negeri Sembilan Darul Khusus witnessed the opening ceremony as the guest of honour.

In its four – decade long history in Malaysia, Hino Motors has finally opened its first production facility in Malaysia. The state-of-the-art RM172 million facility, known as Hino Motors Manufacturing (Malaysia) Sdn Bhd (HMMMY), is located on a 170,000 sqm site in Sendayan TechValley.

At the official opening ceremony of the plant, Hino Motors announced that it has already proceeded with the next

phase of its plans in Sendayan. Work on a motor vehicle pool project comprising a brand new building with 12 pre-delivery inspection bays, 12 accessories fitting bays, a paint booth and a delivery yard for Hino trucks and buses on an adjacent 57,240 square-metre site is progressing smoothly.

"This Sendayan plan is the first step towards equipping Hino Motors in Malaysia with the flexibility to respond to market demands and capability to shorten the delivery lead time to our growing list of customers in the future. One of my priorities is to make Hino Motors Manufacturing Malaysia a respected and welcomed member of the community and play a key role in the driving the economy of Negeri Sembilan and Malaysia," said Mr Ikuo Shibano, HMMMY Managing Director.



"Asian Trucker Media provides communications platforms for the commercial vehicle industries in South East Asia."

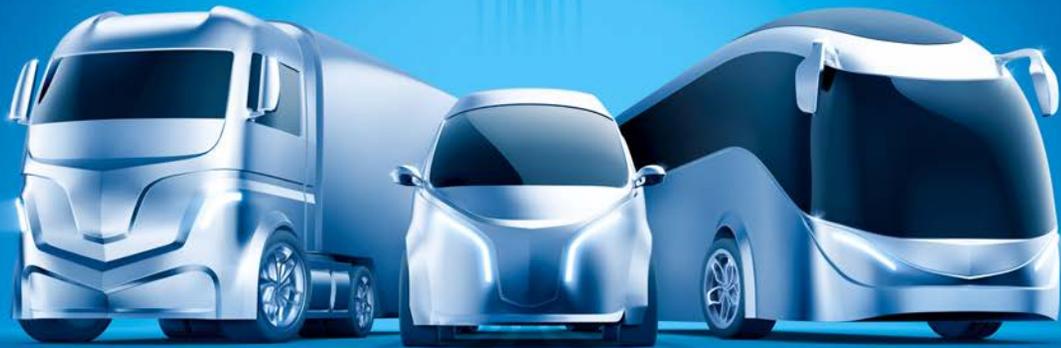
In line with our mission, we have just launched a dedicated website for buses, [www.asianbuses.com](http://www.asianbuses.com). The site will be supplementing the Bus Specials, which are also published by Asian Trucker Media.

The newly launched site will feature the same options for content, inclusive of a

dedicated Twitter account, E-Newsletter and online PDFs. For advertisers we are offering a number of options to suit the needs of individual companies

We are proud to announce that MAN Truck & Bus Malaysia has taken the initiative to be the first sponsor of the site.

For more information contact: [stefan@asianbuses.com](mailto:stefan@asianbuses.com)



# IAA

25. SEPTEMBER –  
02. OKTOBER 2014  
HANNOVER

## IAA Bus Special

*The 65th IAA Commercial Vehicle show was yet again the platform to see the latest in transportation and we are bringing you the highlights in this IAA Special.*

The Asian Trucker Team flew all the way from Malaysia to Hannover, Germany to witness the world's largest commercial vehicle exhibition. In just three words, it was enormous, mind-blowing and awe-inspiring. The IAA Commercial Vehicles has proven to be a stable pillar of this key industry with around 2.000 exhibitors from 45 countries, and showcased numerous innovations and technological highlights in the commercial vehicle industry. The exhibition was held for eight days starting from 25 September 2014.

### History

The origins of the IAA can be traced back to more than 100 years. In 1897, eight motor vehicles were exhibited to the public at the Bristol Hotel in Berlin. From these humble beginnings, a regular exhibition was established that, due to its high visitor turnout, had to be separated into an alternating exhibition of passenger cars and commercial vehicles in 1991.

The IAA Commercial Vehicles is special because practically all the suppliers are represented alongside the manufacturers. The IAA is therefore the world's only mobility fair, which represents the entire commercial vehicle industry along the whole value-added chain, providing the best conditions for good business.

### Bus Market

We have Volvo and Scania buses highlighted at IAA in this special feature. We managed to conduct exclusive interviews with these leaders and the main purpose was to dig into details of newly launched technologies, strategies and the innovations.

We hope this may be able to share some inspirational ideas with the Malaysia market.

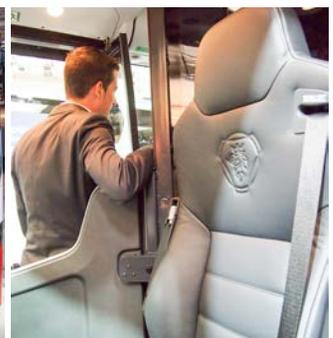
This time around, from our observation, the bus market tends to focus its attention to the hybrid buses and the electro buses. Technology is starting to be more advance day by day. Also, this progress is coming along with the increasing of environmental control and more benefits offered.

### VDA Innovation Stage

Presentation of technical innovation with dynamic, moderated driving demonstrations took place here. Topics include road safety, transportation efficiency, environmentally and climate-friendly drive systems, vehicle-to-vehicle and to infrastructure-communication such as:

- Test Drives with light and heavy commercial vehicles on public roads
- E-test drives on the IAA fairground
- Job and career at IAA Nutzfahrzeuge
- Vintage vehicles and US trucks
- Red Cross Special Emergency Relief exhibition
- Red Cross Blood Donation
- Automania Model Car Collection Market
- Expert days "workshops"

IAA is an occasion that provides a opportunity to approach and meet interesting companies. It was also a great bonding time with some of our partners from South East Asia. 



# Taking it to a whole new level: Volvo Buses

*Volvo Buses launches new vehicles that are always on track to address the market demands.*



As we enter the Volvo booth at IAA, a repeating “Thummb” thunders through the hall, indicating there is some incredible coming our way. Some 100 journalists have gathered on the stairs leading up to the Media Lounge of the Volvo booth at the IAA. As the lights dim, a countdown begins and the thundering increases, ending as Volvo’s management takes to the task of unveiling the latest innovations.

## The launch

The Volvo 7900 Electric Hybrid was officially launched at the International IAA Commercial Vehicles show. Its plug-in technology reduces fuel consumption and carbon dioxide by up to 75%, compared to a conventional diesel bus. Total energy consumption is reduced by 60% and charging at end stations takes only 6 minutes. The Volvo 7900 Electric Hybrid shares the technology of the well-proven Volvo 7900 Hybrid, securing high uptime and availability. Noise is a growing problem in many cities. The noise level beside an Electric Hybrid is 65 decibels, that is to say normal conversation level. The Volvo 7900 Electric Hybrid runs in electric mode on average 70% of the route, silent and emission-free.

## Innovation at IAA

The new Volvo 7900 Articulated Hybrid was displayed at the International IAA Commercial Vehicles. The Volvo 7900



Articulated Hybrid bus has a capacity for 154 passengers and up to 30% lower fuel consumption than the current diesel model. The Volvo 7900 Articulated Hybrid bus is equipped with Volvo’s new five-liter 240 hp diesel engine. It is approved for Euro 6 norms and will generate extremely low emissions. The emissions of nitrogen oxide will decrease by 87% and particle emissions will reduce by 50% compared with Euro 5. The bus also has a newly developed efficient system for heating and ventilation. Thanks to the location of the battery package near the central axle, the weight of the 18-meter bus will be evenly distributed, making it possible to increase the number of passengers. It is worthwhile mentioning that, while Volvo is forging ahead and quickly becoming a leader in electromobility, Volvo buses also offer a wide range of fuel efficient diesel buses.

## Safety Aspect

The Volvo badge always stands for safety. One of the latest safety systems included in the bus is the active collision avoidance system. This system will give a warning to the driver if it detects a possibility of a collision that might occur ahead if current speed and direction are maintained. If the driver doesn’t react to the warning, the system will react by automatically and apply the breaks to stop the vehicle. All Volvo Buses will undergo rigorous testing at the Active Safety Test Area (ASTA). ASTA is a company that is currently building a state-of-the-art proving ground for development and testing of active safety systems. This is to show the emphasis that Volvo places on this topic in order to maintain their safety quality. Apparently, Volvo is at the forefront in terms of safety. The new features are on top of a wide array of safety features that already come as standard on Volvo’s current range including ESP, retarder and all wheel disc brakes for example in the Malaysian market.

“This is a huge opportunity for us to promote our city mobility strategy. IAA is the biggest fair in Europe and this chance shall not be missed to deliver key messages. People from all over the world might be gathered here, therefore there is a possibility to expand the business to everyone in the industries,” said Hlkan Agnevall, President Volvo Bus Corporation in an exclusive interview with Asian Trucker. **F**

# Scania sets records and heads into new directions with renewable energies



*The Swedish truck and bus maker sees increased profitability for clients with renewable energy solutions to propel trucks and is asking the entire industry to join forces to combat CO2 emissions.*

**W**e meet Henrik Henriksson, Member of Executive Board, Executive Vice President, Head of Sales and Marketing on the day before the official opening of the IAA and the Scania stand is already abuzz with people wanting to know about the latest innovations from the Swedish brand. "We all need to come together to address the CO2 challenge. Not only as one bus maker at a time, but as an entire industry" Henriksson is urging fellow vehicle makers.

In line with the notion of improving customer's bottom line, the Scania hybrid buses are now paying off even faster. Buses, like the Citywide, are hybrid buses that operate combined in cities and urban areas and thus offer a better payoff. With contracts usually being awarded for up to eight years, the payoff for a Scania bus will occur after some five years for an urban bus. The effort naturally is to reduce the payoff time.

Gas powered buses are one of the innovations shown on the IAA by Scania. "A lot of technology has been taken from the Oil and Gas industries and applied to these buses said Henriksson. For instance, fire suppression systems are integrated into the engine compartment. The trend that Scania sees is that private cars are no longer a status symbol in many developed countries. According to him, BRTs (Bus Rapid Transport Systems) are the answer to clean up the air, reduce congestion and if buses are using renewable energies to reduce waste. Scania's gas powered buses now manage to cover a distance of up to 1100 Km with one tank.

However, Henriksson is also critical towards the approach the entire industry is taking. He said " We need to become much better in selling our products as a system. Not as individual brands, but as an entire industry where we break down the barriers between competing companies and even work together to promote this." With BRTs being easy to implement and highly cost effective, it is time that more is done to promote them he stated further. In a recent discussion with a mayor in China this was reflected in what the mayor said. He is apparently breathing

the same bad air as everyone else and waste management is an issue. With a BRT using Scania's gas powered engines for instance one would achieve cleaner air, less congestion and less waste.

Scania has decided to focus on renewable energies as future fuels. According to Henriksson, this is the way forward as biofuels are CO2 neutral and in addition help reduce waste that cannot be used otherwise. Taxation and infrastructure are issues that need to be addressed though. For example, it may not be required to subsidise biofuels, but at least the taxes should be the same as for Diesel at the moment. Instead of waiting and hoping for a perfect solution, Scania is urging the industry to work with what is available and to act now.

Henriksson highlights the Asian market: "We have been there for a very long time. Scania has invested heavily and created growth. We have also seen fantastic developments of business and people. This is where we will nurture future leaders. In others words, we will not leave!" **T**





# Electric Buses

## – Increasing popularity with today's generation?

**T**his could be a scene we will see more often in the very near future: “Mum & Dad relax! I know what time the bus will arrive at the bus stop” lamented Lillian, an 18-year only student who prefers taking Rapid KL’s feeder bus to and from College, via the connecting Subang LRT hub.

“Yes, but previously we could hear the diesel roar as it travelled pass the end of our road before circling around our township on its return journey for you to make it to the bus stop” replied mum obviously concerned as Lillian was sitting for her Form 5 trial exams and this would not be the time to chance on travel.

“Mum, I can see the electric bus’ position on my smartphone. See (pointing to the apps on the screen), the bus is exactly 12 minutes away and it also states the bus number, the driver’s name and the number of passengers on board at this point in time”. Previously diesel powered buses which plied this route were much nosier and had higher vibration levels which enabled the discerning mum to acknowledge its presence once in the neighbourhood.

Like many millennials at her age, Lillian’s time is limited and she was hoping to further spend extra time with her parents at home. Once on board the electric bus, she connects with her friends on social media in the comfort and convenience of commuting to College.

“Even though I own the latest Jazz hybrid at home, the bus journey is preferred as it helps develop my patience, respect for others and most importantly, I enjoy being able to observe life and listen in on conversations during my daily journey”. Lillian has a mature appreciation for her well-being, health and that of the environment.

I penned the aforementioned dialogue as a scenario of things to come in the very near future in Malaysia’s public transport environment.

Back to the future now and who knows what else motivates and influences the rest of the 1.2 million bus commuters around the country to commute to work during peak hours as well as off-peak times in approximately over 9000 buses operating in Malaysian cities every day.

### Sync R&D – The home of Malaysia’s first electric buses

Coined EB1M (Electric Bus 1 Malaysia) is a vehicle worth watching and we will get a closer look in this article. Electric buses are powered solely by batteries. They should not be confused with hybrid buses; which are powered both by batteries and either petrol or diesel engine that is activated after the bus has gone a certain distance.

There are serious concerns around the world’s major cities today of existing diesel-powered buses causing poor air quality and resulting in other propulsion systems taking its place on the back of reducing natural resources.

Sync R&D Sdn Bhd was established in 2006 and specializes in resolving tomorrow’s engineering problems with today’s solutions. They have successfully delivered praise-worthy project management work in design, fabrication and helped both local and international companies become incredibly more successful than themselves.

When I met with their CEO, En Azlan Merican for a chat, he exemplified the



***Devindran Ramanathan takes a closer look at the EB1M electric buses and the efforts made by one Malaysian company to shape the industry.***

pride of his team in delivering numerous product engineering feats for their clientele.

“The ah-ha moment came in 2010 when we contemplated the future of our country’s fuel subsidies, depleting resources and how Sync R&D could be part of the solution in saving the environment” explained Azlan.

The rest is history and today, the 35-member team of engineers, designers, assemblers and technicians are based either at their design office in Bandar Sri Damansara or the assembly facility in Shamelin Heights Business Park, KL.

The team is steadfast in achieving the dream of supplying half (50%) of the nation’s feeder bus fleet size to Prasarana/ Rapid KL by 2017; timing it perfectly to meet the demands of an estimated 300 feeder bus service needed when the Mass Rapid Transit(MRT) begins to “rock and roll” around Klang Valley.

“Electric feeder buses will be the preferred start point to leverage on the immediate

benefits this will bring to the community as part of the overall Transport Master Plan” explained Azlan. A feeder bus service is a bus service that picks up commuters from your residential area and drops them off at a connecting rail transit station or express bus terminal.

When a feeder bus is operational, there will be no need for commuters to set out of their home in a car, motorcycle or bicycle and therefore mitigating the current dated concept of “park and ride”. Congestion will be reduced and costly while space is now being allocated for the construction of charging points for buses.

Obviously feeder buses will be the future to improve last mile connectivity.

A fully charged bus can have an effective range of 180 – 200 km; before retiring back to the depot station for recharging. This is ideal as an average shift per driver is approximately eight hours. With improvements in battery technology and durability, electric buses will travel even longer distances before requiring charging.

Sync R&D is a prime example of Malaysia’s latent talent in project management, leadership, technology, innovation and passion to work; coming together to provide a zero emissions solution to improve air quality in our home front.

**Environmental equation demystified**

Critics often allege that automotive companies are really not telling the public the complete truth and that there is no such thing as zero emission. Since operating full electric vehicles will still require electricity to charge the battery packs from a utility like Tenaga Nasional Berhad (TNB). Because TNB has generally many coal fired plants in its operations emission is still contained up the supply stage of electricity generation and is not totally emission free.

The reality however is that even when the electricity is sourced from fossil fuel, research has proven that there is still a reduction in overall air pollution compared to when running diesel powered buses.



The saving grace nevertheless is that many of these power plants are several miles away from cities and towns where people live. Safe to say that the air quality at these places then is therefore better (now, let's not get into the subject of the haze).

Proponents of electric buses need only to rely on the popularity from some of the more developed cities in the world like Los Angeles, London and Salzburg (many continuously being added to the list of cities) where on-going tests are being carried out and pollution concerns (including noise of diesel buses) prevent the purchase of diesel buses. Electric buses hold their greatest appeal in these trend-setting cosmopolitans.

**EB1M – Designed, developed and built by Malaysians, for Malaysians**

According to Azlan, "Commissioning and road testing with partner Rapid will commence in Q3 2015 to ensure that our promise will stand up to the rigours of operating in an intense urban environment as Klang Valley. We endeavour to reaffirm through our joint trials that significantly lower running and maintenance cost over the projected life span of the bus can offset the initial higher capital cost of these vehicles when compared to standard diesel buses".

I was greeted by Ganeson Arunachalam, Director of Engineering during a recent visit to the Shamelin assembly facility.

We had first met last October when the company participated at the 4th International Greentech and Eco Products Exhibition and Conference Malaysia (IGEM 2013) to showcase their concept electric bus in scale model along with components and systems of their key technological partners.

The production facility is off-limit to visitors at the present time as engineers and builders passionately test out various components, systems and state-of-the-art features of the pilot unit.

Later I met Nizamuddin Daud, an Engineer who thrilled me with his exuberance

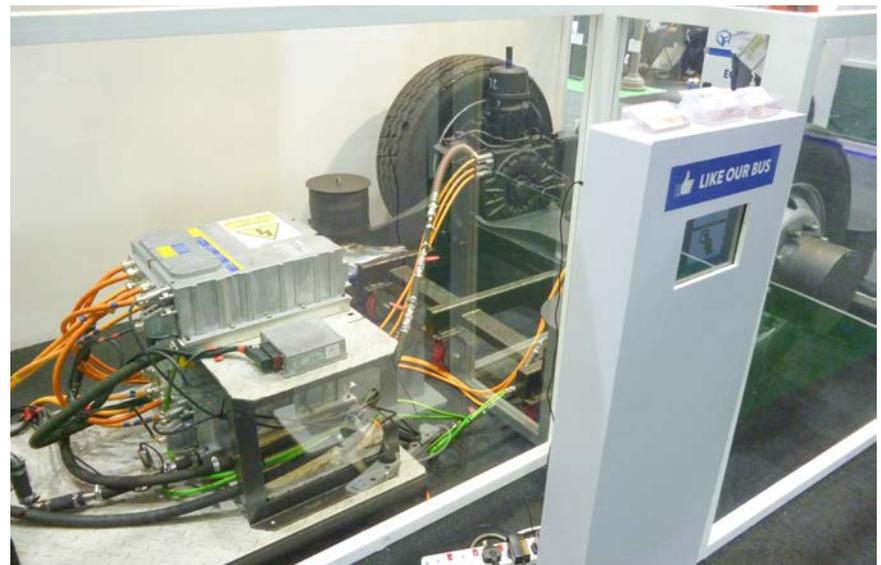
of being part of this historical project in Malaysia when we last met at IGEM 2013. Young engineers like Nizam are crucial to the project's success in ensuring EB1M introduces the necessary mobile applications incorporating features that interact with commuters in this tech-enabled world.

GPS tracking, low cost Bluetooth transmitters and seamless payment systems are some of the initiatives Sync R&D toil with; to ensure the joy, convenience and that the interest of commuters is understood.

In the absence of the monocoque body (the prototype unit is currently being fabricated), the entire floor plan of the electric bus is slowly taking shape. Battery packs from different suppliers are being tested to ensure compliance and integration with the entire vehicle Fleet Management System. There are serious thoughts deliberated by another group of engineers on potentially lowering of the ride height further; for ease of alighting for young, old or the handicapped.

There is clear feeling in this exciting team who seem to be in pursuit of the ultimate "tornado" with ground-up design works in progress.

Contrast this with importing a fully built-up (CBU) electric bus to appreciate the justification in promoting and utilizing existing talent. Whilst the team at Sync R&D is made up entirely of Malaysians, the company is working with several global leaders in many technological areas of batteries, electric motors and controllers.



### Cost Benefit Analysis

According to Azlan, the price tag for the e-bus is targeted to be just under a million ringgit compared to RM650k for a diesel bus. However the savings on fuel, maintenance and operational expenses make the lifetime ownership and operating cost of the electric bus considerably less expensive. It equates to up to RM200,000 per bus/lifetime or 16% reduction of life cycle cost besides completely eliminating harmful emissions.

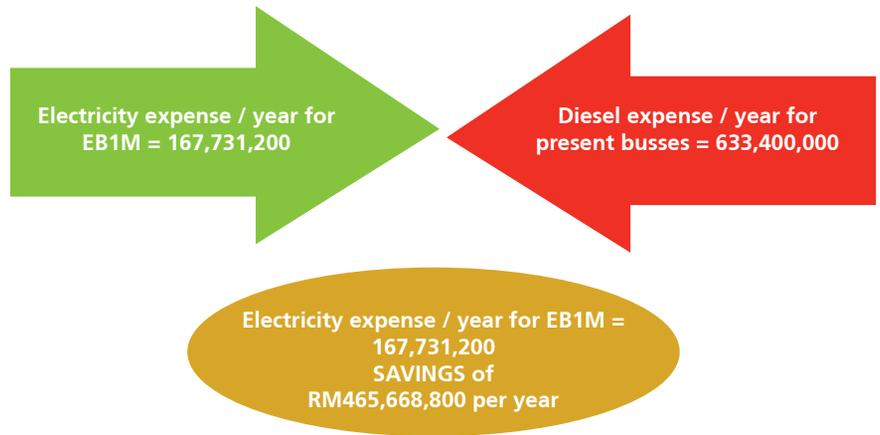
Whether Malaysia is a net importer or exporter of oil, any savings be it at government level or for any bus operator will augur well in the current capital challenging operating environment.

Having lesser running components and wear and tear items on an electric bus will enable the bus operator to keep significant lesser inventory and ensure faster uptime even. It is not uncommon for even major bus and transport operators today to experience only 75% of their fleet on the road supported in spare parts through rampant cannibalization from the other 25%; resulting in valuable parking spaces at most operators' premise

### What the future beckons

To ignore the kind of work companies like Sync R&D have transitioned from is of great peril. It is equally not difficult to recognize the positive impact of nurturing well-rooted R&D capable companies wishing to move on to effective commercialization of an idea that can have on the Malaysian Automotive Industry.

While the government is ensuring that there is an adequate supply of young Malaysians with the necessary technical skills and engineering sciences, it also has



*The above savings are conservative figures when you consider the further savings in diesel subsidies by the government once you switch from a diesel bus to an EB1M.*

to think of fostering R&D activities and innovation for the long term economic development of the country.

For private SME companies like Sync R&D to realize their full potential and grow to the desired scale, government support is most wanting during their challenging gestation period in order for the country to benefit economically in the long term.

“Importing a CBU may also soon wipe out existing coach and bus builders who have done the country proud up to now. There are approximately nine noted builders with skills and experience other countries would crave for. These builders are not to be treated as second class or forgotten like an aged bottle of single malt you forgot you had in the liquor cabinet”, warned Ganeson.

“Our business model takes into account their existence by envisioning a licensing program to build these electric buses to the required specification and needs of the buyer” added Azlan.

Although the initial investment in vehicles and infrastructure will make electric buses appear to be a more expensive option than simply buying a few more internal combustion engine buses, one has to seriously look at the lower lifetime cost of an electric bus.

In the very near future, for the benefit of the young like Lillian, we can look forward to seeing more of these vehicles operating in Malaysia and cities across the Asian region.

Sync R&D is crucial to Malaysia’s National Automotive policy in championing our drive to make our country an energy efficient hub in the ASEAN region. Interestingly, as the writer of this article, I took an online global survey to vote if diesel buses should be entirely replaced by all-electric buses and the result was a staggering 90% who said yes. **F**

### Savings in Bus Operating cost – Fuel vs Electricity cost

	Per day	Per year (x320 days)	Battery Holding Capacity	Electricity Charging Cost (3.5 hrs/ day)	Per year (x320 days)
1 bus/day: RM2.20 x 200 x 0.5	<b>RM220</b>	<b>RM70 400</b>	1.3 kWh X 200 km = <b>260 kWh/day</b>	RM 0.224 X 260kWh = <b>RM58.24</b>	<b>RM18,638.00</b>

#### Factors

- ✓ Diesel price/litre at the pump: RM2.20
- ✓ Diesel consumption per bus: 0.5litre/1km or 2km per liter
- ✓ Average daily travel per bus: 200km
- ✓ Operating days/year: 320 days
- With an conservative estimate of 9000 city busses
- Yearly diesel consumption is RM70 400 x 9000 = 633.4 Million

#### Factors

- ✓ Bus travels 200 km/day
- ✓ Energy consumption 1.3 kWh/km
- ✓ Off-peak commercial tariff rate applied
- ✓ Operating days a year:320 days
- Cost per year for 9000 city busses
- RM 58,24 x 320 days x 9000 = RM167,731, 200



#### About the author

“Devindran is a 23-year “young” veteran in the Malaysian automotive industry and held several senior management positions. He is now the principal of his own company, ACS AsiaPac Sdn Bhd focusing on Aftersales Training, Consulting and raising the overall image of the Aftersales stakeholders. For information on upcoming programs, log on to [www.acsasiapac.com](http://www.acsasiapac.com)

# Why do you need to know about tyre maintenance? It's all about safety and lowering Costs!



**D**o you regularly service and maintain your trucks and buses? Change the oil, check the brakes and gear oil levels, clutch adjustments, measure your brake pads, align and balance your vehicle's tyres? This thorough care and maintenance regime is after all done to prolong the safety and life cycle of your fleets. However, the safety aspect of tyre maintenance of vehicles is more often than not dismissed in the truck industry.

Tyre maintenance is a vital component in the trucking industry but it is often overlooked. It is a key factor for safe operations and lowering operating costs. Many trucking professionals are still not aware of the benefits and impact on safety through proper tyre maintenance. The prerequisite for successful maintenance and care is the correct choice of tyre, which can be recommended by Continental professionals. The important areas that will usually be discussed are tyre inflation, fitment of tyre and wheel on the vehicle, tread depth, repair and storage.

## Tyre Inflation

One of the most important causes for excessive irregular tyre wear and damage is incorrect tyre pressure. Proper inflation pressure is essential for achieving maximum performance, mileage and decreasing rolling resistance. Underinflation leads to increased flexing which causes the tyre to overheat and may cause tyre failure which in turn is a safety hazard. "In a tyre pressure survey carried out by Continental, more than 40% of tyres were found to be underinflated. Moreover, we identified that 40% of the inner tyre wheel positions on a dual axle could not be checked due to missing valve extension or misaligned wheel positions which is the major cause for tyre complaints. Poor pressure maintenance leads to irregular wear, consequently losing valuable tyre life which is a deterrent to safety", states Lee Ah Khong, Continental's Customer Service Manager Malaysia.

Service instructions are produced by vehicle manufacturers and Continental provides technical documentation about correct and safe tyre pressure. It is advisable for tyre pressure to be checked every two weeks but at least once in a month, when the tyre is cold (for safety reasons). Spare tyres must also be checked. When checking tyre pressure, be sure to conduct a visual inspection for external damage, e.g. by embedded nails or screws. Lee Ah Khong also commented that another common finding in the survey was the high percentage of non-usage of valve caps. These caps ensure that the valve is in a good

condition for accuracy of pressure readings during pressure checks. Therefore, any missing valve caps and leaking valves should be replaced immediately.

## Fitment of tyres

The right fitment of the tyre is another element to ensure safety and low costs. Right-sized rust-free rims which are not damaged and which do not show any signs of wear and tear should be used for safety reasons. New rubber tubeless valves or new inner tubes and flaps are recommended for a safe usage on new tyres. When fitting the tyre, do not exceed 150% of the maximum standard inflation pressure. Under no circumstances must 145 psi be exceeded. Sometimes, the correct fitting tools and equipments are not being used. This should also be taken into account.

## Fitting the wheel onto the vehicle

When your vehicles are sent for servicing, vehicle axle data such as toe-in, king pin inclination, castor and axle alignment must be regularly checked and adjusted to be within tolerances, after which the wheel should be fitted. Centering of the axle hub must be ensured. Moreover, the valves must be checked to move freely and easily accessible whilst valve extensions are vital for dual tyres for optimum inflation pressure and safe driving as highlighted by Lee Ah Khong. Another important criteria is to have the same type of tyres per single axle, e.g. radial tyres, which will guarantee optimum driving characteristics and maximum safe driving stability.

## Tread depth

Sometimes, tyres are over-used and therefore worn out to the extent that the belt is exposed which could lead to serious tyre damage or pose potential risks to safety. Therefore, tread grooves or sipes are featured on tyres around their entire circumference and over the whole width of the tread area to allow quick checks of the tread depth. "In Malaysia, truck tyres must provide a minimum tread depth of at least 1.6 mm or at least 2.2 mm for China, depending on the law in each country," states Floriano Mota, Head of Product Development TT APAC. The depth of the tread pattern is to be measured in the grooves or sipes.

On tyres with wear indicators (TWI = Tread Wear Indicators), the tread depth should be measured in the grooves where the wear indicators are located. Wear indicators on commercial vehicle tyres are bridge-like protrusions (raised rubber) 1.6mm or 2.2mm high, which show whether the tyre has reached the wear limit. The tread depth should therefore never be measured on the wear indicators but next to them. Lee Ah Khong emphasizes that frequent inspection should be done for tread depth to avoid any of the consequences mentioned earlier.



Newspaper to seal tyres? Not a safe way to manage your pneus.

### Tyre repairs

Tyre damage generally starts on the outer rubber. However, this superficial damage can eventually extend down to, or into, the tyre's reinforcing materials (casing/belt) which leads to yet another safety risk. Therefore the tyre should be taken to a specialist for assessment as soon as any external damage is detected.

Damage to the casing or belt, for instance due to a nail puncture or a deep cut, is particularly dangerous and a safety hazard because dirt and moisture may penetrate during the time when the damage occurred and when it was detected. More serious damage could occur as inflation pressure will be lost slowly. An underinflated tyre again is subjected to excessive strain.

All these factors can render a tyre irreparable and unsafe by the time the damage is finally discovered. Sometimes a tyre can also have invisible damages which occur as a result of an overstrained area other than the originally damaged and which remains in the tyre even after the repair. These might lead to subsequent failures or punctures. This is the reason why each tyre must be carefully inspected by a tyre expert before it is being repaired. Only a specially trained person can decide whether it is possible to repair the tyre or not and if the tyre will be capable of delivering safe performance after the repair.

### Storing tyres

In general, how do you store your tyres? Do you place them in an open sun-lit backyard, stacked on top of one another? Do you know that tyres age more quickly if they are exposed to direct sunlight or heat? Tyres should be stored in cool, dry, dark and moderately ventilated rooms. Tyres which are not fitted on rims should be stored standing up. Contact with fuel, lubricants, solvents and chemicals are advisable to be avoided as it might be a safety hazard.

In summary, tyre maintenance is a core activity which needs to be adhered to regularly to guarantee safety and of course, lowering your driving costs. Tyre maintenance has become a mandatory safety precaution and economical solution for your business. If you wish to, you may visit or call your nearest Continental office for professional advice and recommendations for your tyre maintenance. 

# Hop onto this purpose-built bus to discover Kuala Lumpur in a new way

*Not only is the Hop-On Hop-Off offering a unique way to see Malaysia's capital, but it is also an interesting special purpose vehicle with many stories to tell.*



**K**nown as a global concept, the Hop-On Hop Off offers tourists a unique perspective when exploring a city. One buys a ticket, valid for a certain time, and then uses a special vehicle to move from one attraction to the next, hopping on and off at one's own leisure. Here in Kuala Lumpur, the concept has also become the brand name with KL's Hop On Hop Off bus circling the city centre, connecting hotels, attractions and major shopping centres. One can explain this by using the example of a restaurant. A restaurant is nothing but a concept, but in this case, the concept's idea sprung the idea for the name of the operation as well.

## A unique vehicle

The bus used for Kuala Lumpur is a very special one indeed. Not only does it offer a open air viewing deck, but it is also unique as it is a double-deck bus built on a two-axle chassis. "We opted for Scania bus chassis as they were the only ones at the time that could support this configuration" said Amin Rahmat

Abdul Rahman, Director of Operation of Elang Wah Sdn Bhd, which is running the buses during our exclusive interview. He said stated that "We are very grateful for the support of the authorities to make this happen. Naturally, you need a lot of approvals and permissions for this kind of operation. It took a total of 18 months to get this all done and ready for the first trip". The double-deck bus has a speed limiter and the permission to operate it was granted based on the fact that the vehicle is operated within the city where it will be driven at low speeds, unlike double-deck coaches in inter-city use. The routes, although having changed over the years, also needed to be approved. Here the company worked closely with the operators of hotels and attractions along the way to provide tourists the best possible experience.

One of the main aspects of the operation is the cleanliness and reliability of the vehicles. As this bus transports tourists from all over the world, the bus captain, the attendant and the bus itself are all brand ambassadors for Malaysia.

## Instant success

After the initial set-up phase, the concept found a good response. Launched seven years ago, it was also officially launched by the former Tourism Minister while the second generation was launched by the Prime Minister of Malaysia, Dato' Sri Haji Mohammad Najib bin Tun Haji Abdul Razak. When first launched, four Scania buses were servicing the route around town. Today, ten Scania K310 buses with 250 - 270 horsepower provide the service. During weekends, all ten buses are on the road as these are the busiest days. During weekdays, buses may be sent for regular maintenance and servicing while a minimum of eight are running.



Amin Rahmat Abdul Rahman, Director of Operation of Elang Wah Sdn Bhd share with us some insights



*Hop onto this bus to explore Kuala Lumpur*

By using up to ten buses, there will be one departure every 10 to 15 minutes and passengers will be enjoying smooth rides. The iconic buses have also been used for parades in other states and for celebrations.

### Daily challenges solved

Not only does the bus have to be in spotless conditions, also the crew needs to be on top of their game at all times. Drivers have to be very careful when moving around in the city and they have to serve passengers with a smile. As with any other business, there will be issues arising. As the passengers are on a schedule to see a city, anything that may be reason for them to complain must be handled on the spot. "We have empowered our staff to deal with issues on the spot and managers are on stand-by to meet passengers on extremely short notices. Most problems are easily solved, but they have to be addressed right away" explains Rahman.

As ambassadors for the country, the crews undergo regular training and are well equipped to manage difficult situations. It boils down to "understand" passengers, not in terms of language, but in regards to what they expect to get out of the ticket they buy.

The company has realised that the drivers are the core component of the operation and has put several procedures in place to assist the bus captains to better perform their job. To begin with, the drivers are on five-day working weeks with two days off. This way, the bus captains can plan for their time off and they don't rely on extra trips to make more money. What the company found out is that each driver has very specific driving habits. Some actually damage the vehicle or

cause more wear on certain parts. Initially, drivers would just use any bus. However, as several drivers shared buses, the bad driving habits caused accumulations of problems. In essence, the buses were showing several symptoms of incorrect driving behaviour, resulting in high maintenance cost. Now, one driver will be assigned to one vehicle. This way, the wear and tear of parts caused by a certain driving behaviour is limited to only few issues per bus. In short, the company is aiming at one driver and one problem.

### On-board tech

Technology plays a big role in the operation. Via GPS tracking, all the buses can be located at the present position, giving management an overview of how the operation is running at any given moment. To meet the requirements, a local system was customised for Hop-On Hop-Off. In addition, Scania's FMS is in place and the vehicle maker is running training courses to assist drivers with the improvement of their skills through the Fleet Management System.

While these technological advancements help to streamline the business, the passengers have completely different needs. Initially, a sound system was installed and passengers could listen to explanations on certain location via a headset, offering nine languages. However, through a survey Hop-On Hop-Off found out that passengers prefer human interaction over canned documentary. Reacting to that, the sound system was human tour-guides came on board when newer buses were commissioned, replacing the automated system.

If you haven't, maybe you want to Hop-On and Off to explore Kuala Lumpur in a different way? **F**



# FC Bayern Munich scores with MAN coaches

*We may see eleven players on the field, but some team members may never be seen although they play a crucial role in ensuring a football team wins. Such as the coach of FC Bayern Munich and its driver.*

**W**ithin Germany, football teams travel in style in long distance coaches. For the record breaking champions of FC Bayern Munich, the MAN long distance coach is a home away from home, a meeting place to discuss game tactics and recover from exhausting games. When all eyes are on you when playing on the pitch, reaching your destination safely and relaxed is paramount.

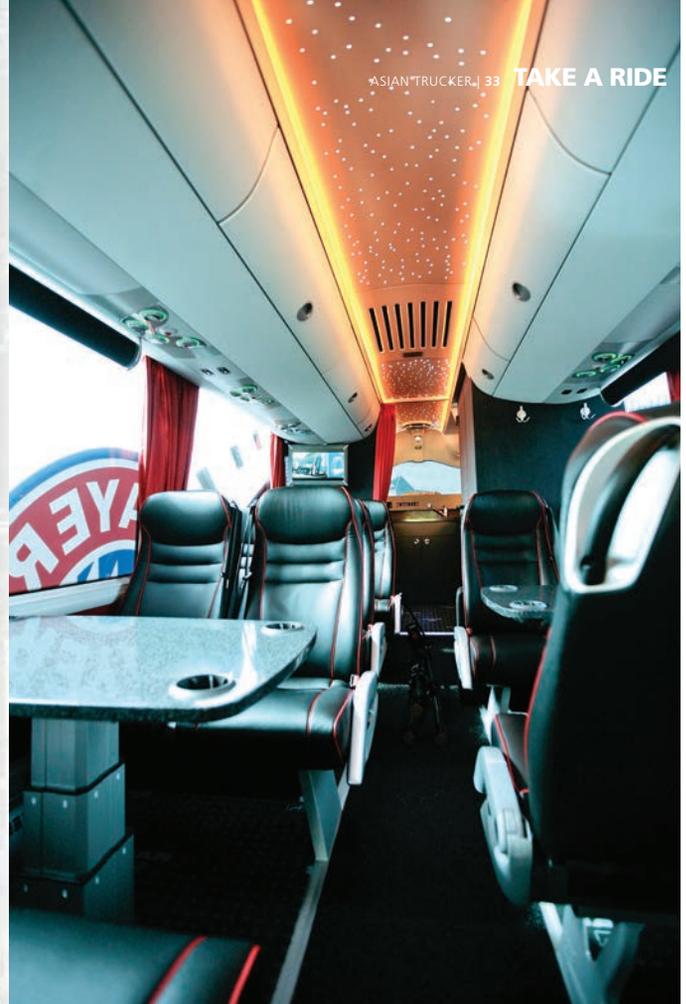
## Football and TV

Michael Lauerbach drums on the steering wheel of his MAN. He keeps getting off the coach and looking over from the car park on Säbener Straße in Munich to the training grounds. The FC Bayern Munich coach driver is used to waiting for his team. But today he is a little nervous. The shoot for FC Bayern Munich's "Brückenschuss" clip is about to start. For everything to work, Michael Lauerbach has to drive the coach at a steady speed – this is the only way to assess how the ball will fly later. Michael Lauerbach is sure of one thing: "Maintaining the same speed won't be a problem for me." But the schedule is tight and his driving skills will play an important role (See the video clip here: <http://www.youtube.com/watch?v=5k8TPR52lbQ>)

Driving the FC Bayern Munich team is a dream job for him. Michael Lauerbach is also particularly proud of his team coach: "The coach holds the road really well. It handles like a dream round bends. Nothing can throw us off." The pros travel to every Bundesliga match, DFB Pokal game, and Champions League battle in this coach. In 2013, FC Bayern Munich caused a sensation: it was the first German team to win the treble. The Bayern Munich players were also driven to these finals in their team coach – so the coach is also perfect for breaking records. For today, the players are only extras in the shooting of this clip.

## Ultra-modern and luxurious

MAN buses used as team coaches are ultra-modern, packing the latest technology from the south German brand. In addition, these long distance buses feature interior fittings that go far beyond the already extensive possibilities offered in series production and provide everything a sportsman's heart desires. They include tables with electrically adjustable legrests which lower into the floor, exclusive leather seats and countless multimedia facilities such as a premium sound systems, TFT



screens, a DVD system and even W-LAN. Satellite TV in team coaches can nowadays be taken as standard. The generously sized kitchen at the rear with Ceran hob and ice-cube machine leaves no wish unfilled in the on-board service either. An emergency generator in the luggage compartment ensures that the high-value equipment is constantly ready for use.

### Safely to the top of the league

Neither has safety been neglected. Beside functions such as ABS (anti-lock braking system), which have been a matter of course at MAN for years now, and a reinforced bus body, the new MAN Lion's Coach Supreme also features ESP (Electronic Stability Program) to prevent overturning and LGS (Lane Guard System), which reliably warns the driver if he is about to stray from his lane. High-quality xenon headlights and cameras at the front and for reversing guarantee an optimal view at all times. And when the FC Bayern players are actually fighting for national and international titles on the pitch, not only the regular driver, but also an electronically controlled alarm system ensure that the team coach itself and everything in it remains where it is.



- |   |                            |   |
|---|----------------------------|---|
| <b>01</b> Pep Guardiola<br>Chefcoach        | <b>07</b> Xherdan Shaqiri  | <b>16</b> Daniel van Buyten             |
| <b>02</b> Domenech Torrent<br>Co-Trainer    | <b>08</b> Diego Contento   | <b>17</b> Jérôme Boateng                |
| <b>03</b> Matthias Sammer<br>Vorstand Sport | <b>09</b> Holger Badstuber | <b>18</b> Mario Götze                   |
| <b>04</b> Toni Tapalovic<br>Torwart-Trainer | <b>10</b> Mitchell Weiser  | <b>19</b> Thomas Müller                 |
| <b>05</b> Javier Martínez                   | <b>11</b> David Alaba      | <b>20</b> Claudio Pizarro               |
| <b>06</b> Thiago Alcantara                  | <b>12</b> Franck Ribéry    | <b>21</b> Manuel Neuer                  |
|   | <b>13</b> Rafinha          | <b>22</b> Philipp Lahm                  |
|   | <b>14</b> Dante            | <b>23</b> Tom Starke                    |
|   | <b>15</b> Patrick Wehrauch | <b>24</b> Arjen Robben                  |
|   |                            | <b>25</b> Pierre-Emile Hojberg          |
|   |                            | <b>26</b> Hermann Gerland<br>Co-Trainer |
|   |                            | <b>27</b> Mario Mandzukic               |
|   |                            | <b>28</b> Toni Kroos                    |
|   |                            | <b>29</b> Bastian Schweinsteiger        |
|   |                            | <b>30</b> Jan Kirchhoff                 |

Another safety feature worth mentioning is the emergency break-assist. It warns the driver in case of impending collisions and will automatically break the vehicle in order to avoid an accident. There is also a 360° Bird's eye view camera that ensure that there is no blind spot around the bus. Lastly, there is an electronic system that assists the driver when changing lanes.

### Other teams on buses

FC Bayern Munich Basketball's players can rely on MAN as their strong partner. MAN has been the premium partner of football Bundesliga club FC Bayern Munich since 2008 and is also supporting the club's basketball team. As part of the agreement, the Munich based company made an exclusively fitted MAN Lion's Coach available as a team bus to transport the basketball artists comfortably during the season. All Munich's representatives in the top German sporting leagues now travel to their away games in MAN team buses: FC Bayern and 1860 Munich (football), FC Bayern (basketball) and EHC Munich (ice hockey).

FC Bayern Munich Basketball's exclusive team bus, an MAN Lion's Coach customised to meet the needs of the bigger than average athletes, will ensure comfortable travelling on the road to the title. With an overall length of 13.8 metres, the touring bus offers both luxury and complete relaxation. The trips to the away games will be experiences in themselves, while the

trips home again will help the athletes to recuperate after their strenuous matches. Each player will have one of the total of 18 double seats with legrests. In order to provide even more legroom and maximum comfort, the space between the rows of seats has been increased to around 1.2 metres. For optimal networking, the players have access to WiFi and personal USB ports and power supply. The built-in console for video games provides off-court entertainment and the integrated galley caters for much more than just the small appetite. The proven, top technology of the MAN Lion's Coach will see the team getting ahead, speedily and safely. **T**



### Lion's Coach L



### Technical data

#### Vehicle dimensions

Length	13,800 mm
Width	2,550 mm
Overall height	3,812 mm
Wheelbase at front	6,600 mm
Wheelbase at rear	1,470 mm
Turning circle	22,100 mm

#### Engine Euro 6

**Model, arrangement**  
D 2676 LOH common-rail  
6-cylinder diesel engine  
vertically installed  
Displacement: 12,400 cm<sup>3</sup>  
Rated output: 324 kW/440 hp,  
max. torque 2,100 Nm

D 2676 LOH common-rail  
6-cylinder diesel engine  
vertically installed  
Displacement: 12,400 cm<sup>3</sup>  
Rated output: 353 kW/480 hp,  
max. torque 2,300 Nm

#### Gearbox

6-speed manual gearbox  
MAN TipMatic®, automated  
12-speed manual gearbox with  
EasyStart (standard with 353 kW)

#### Running gear

**Brakes**  
EBS brake system,  
disc brakes  
on all wheels

#### General

**Seats**  
52 passenger seats\*\*\*  
57 passenger seats\*\*\*  
**Luggage compartment space**  
11.5 m<sup>3</sup>  
**Permissible total weight**  
25,530 kg

# Road Safety is priority – Jabatan Keselamatan Jalan Raya (JKJR)

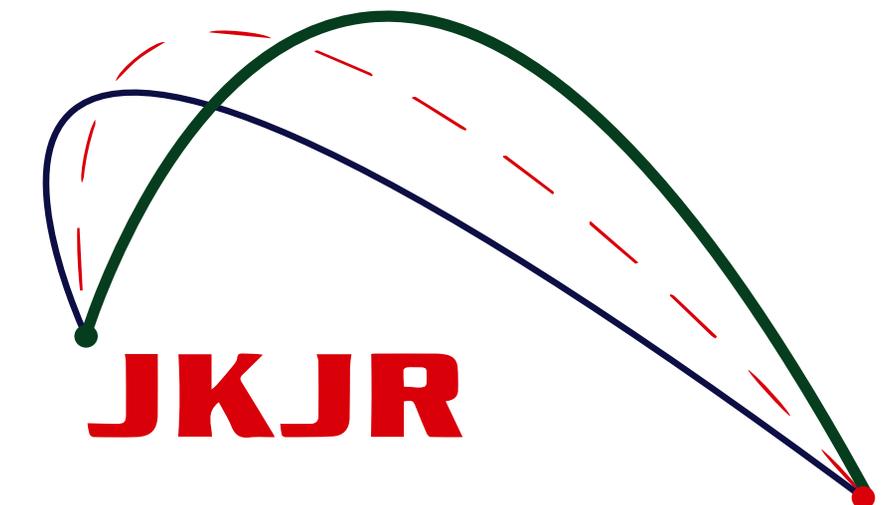


*JKJR's schedule is packed with road safety initiatives for 2014 in order to achieve the road safety standards of developed countries in the year 2020.*

**D**ato' Dr. Tam Weng Wah, Director General of Jabatan Keselamatan Jalan Raya Malaysia (JKJR), spent some time with us to share about road safety issues in Malaysia and to explain in detail the role of JKJR.

Some people mistake JKJR with JKR (Jabatan Kerja Raya). However, JKJR is not an enforcement agency and has no power to carry out certain functions or actions. JKJR's role is to be a road safety advocate focusing on educating the general public. It works through schools, companies, government organisations, communities and NGOs.

"We have offices in every state in Malaysia," said Dato' Dr. Tam Weng Wah. "Our daily work is based on our KPIs (Key Performance Indicators). In this KPI system, we have arranged an advocacy programme for every week. This means that there are advocacy programmes happening every day throughout Malaysia. We also use social media accounts, Facebook and Twitter, to share with the public information about



the programmes that we organise or participate in."

JKJR uses three measurements to benchmark the safety of Malaysia's roads in comparison to other countries. These are standard measurements for worldwide comparison. JKJR is aiming at decreasing the number of deaths to 10 per 100,000 population, 2 per 10,000

registered vehicles and 10 per billion vehicle kilometres travelled.

In the terms of accidents that are caused by heavy vehicles, they account for less than five percent. Accidents involving motorcycles are at the highest level at about 50%. "The management of every organisation dealing with transportation should know how to play their part

well, without depending on government enforcement alone. Companies may start to implement or develop their own road safety initiatives. They can start with the employment contract to emphasise it as a priority rule even before the driver starts working with them," he added.

According to Dato' Dr. Tam, safety can be cultivated as a habit. Imagine if you forget to brush your teeth in the morning, you will have an uncomfortable morning. The same goes with buckling your seatbelt before you start driving. If it has become your habit to wear it, not wearing it will feel uncomfortable.

"Everyone should take this as a very crucial matter. Regardless who you are or who you work with, either in the government or non government sector, if you fail to follow the rules and regulations of the road, you may face legal action" said Dato' Dr. Tam.

According to Dato' Dr. Tam, one of the methods used in educating the public is through advertising. What he is wishing for is that more companies, even outside transportation and logistics, would include road safety messages in their advertising. People need to realise that road safety is everyone's responsibility.

Whenever a campaign is held by JKJR, they distribute road safety brochures, pamphlets, stickers and goodies bags to the public. Reflective safety jackets, multi-purpose safety hammers for emergency use and many more practical items are distributed at some major events. During helmet exchange programmes, the public is invited to bring their worn-out or damaged helmets to exchange for a SIRIM approved helmet and visor. This is one way JKJR promotes the use of SIRIM approved helmets.

**ISO 39001**

ISO 39001 sets out the minimum requirements for a Road Traffic Safety Management System implemented by organisations. Governments, authorities, road safety groups and private companies are encouraged to adopt this standard as the number of people killed or injured on the road each year is rising. This framework will provide information on how to manage drivers, vehicles and journeys in a safe manner.

**What can the public do?**

One may ask what can the public do in order to help increase road safety?

Many of us do not know where to go for assistance. According to Dato' Dr. Tam, you may give your feedback or file a complaint to one call centre, 03-8000 8000. You can send a photo of a location or area that you feel is a safety concern to the local authorities or to the Public Complaints Bureau. JKJR can also be the channel to submit your feedback to. The public should be encouraged to become the third eye informing local authorities whenever they see any negative action or bad road conditions.

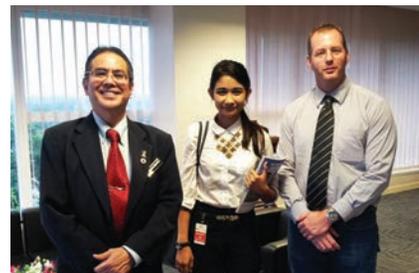
**ASEAN**

The ASEAN Road Safety initiative is an action plan to improve road safety in southern Asian nations. ASEAN Road Safety is now in the process of setting up a regional road safety centre. Malaysia has enough experience, expertise and connection to the other countries to be a viable candidate to host this centre. Malaysia is trying actively to set up the road safety centre within the country. This is supported by the fact that Malaysia already has MIROS as a related government agency. MIROS is a research centre for road safety and MIROS's latest research project is the ASEAN NCAP (rating of new vehicles through crash tests). MIROS gives a star rating for crash test results and the safety features of a new vehicle. It is essential for the public

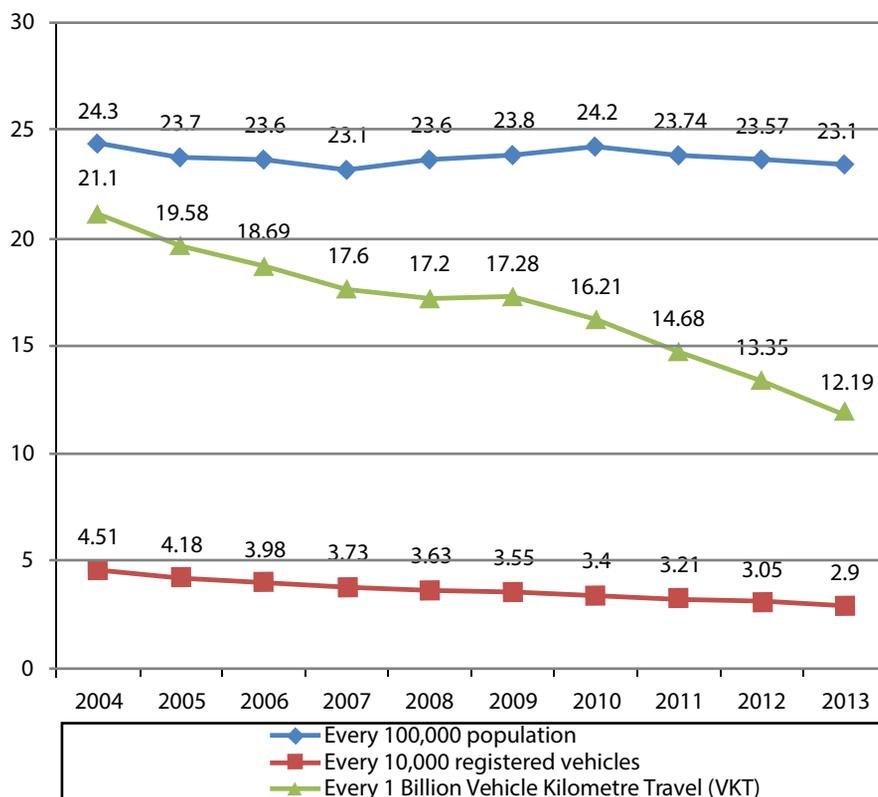
to know the level of safety when buying a new vehicle and to encourage the industry to produce safer vehicles.

Knowledge and awareness has to be persistent, the message cannot be sent just once; road safety campaigns have to be continuous. Media is playing an important role as they are the most effective channels to influence the public. Positive things that happen in the transportation industry need to be publicised instead of only reporting on accidents and reckless driving.

Road safety is a collective responsibility. It starts from the base, which is home. JKJR is willing to collaborate with any organisation on road safety matters. They have collaborated with private sector organisations, agencies, schools, universities and NGOs in promoting and enhancing the awareness of road safety among different types of road users. **F**



**FATALITIES INDEX (2004 - 2013)**



# SAFETY AND RELIABILITY YOU CAN DEPEND ON



• Electronic Stability Program (ESP) and  
• retarder standard on all Volvo coaches for  
• ultimate road handling and vehicle control

• Select your own body  
• from a wide array of local  
• coach bodybuilders

The Volvo B7R and B11R chassis are not only platforms for productivity thanks to their powerful engines with outstanding fuel efficiency, they are also among the safest and most reliable vehicles on the road today. All Volvo coaches come with ESP as standard along with the highest quality all wheel disc brakes and retarder. The Electronic Brake System (EBS) regulates the entire braking sequence with instantaneous precision and includes Automatic Braking System (ABS) and Cruise Control, meaning you, your driver and passengers can all have the ultimate peace of mind no matter how far the journey.

Robust and precision built, the Volvo B7R and B11R chassis are both designed and built in Sweden for a long problem free life with outstanding uptime. Made from the highest quality carbon steel, the bolted frames are extremely durable even on the roughest of roads. All Volvo vehicles undergo rigorous quality testing and you can rest easy knowing the Volvo B7R & B11R have been proven in operation for several years worldwide.

## VOLVO B7R & B11R CHASSIS

Volvo Bus Malaysia, +60 3 5510 3300, [www.volvobuses.com](http://www.volvobuses.com)

Volvo Buses. Driving quality of life





## Moving the island: Rapid Penang

**P**ublic transport has undergone a rapid transformation. As Major Shukri tells us, the competitive landscape used to be a very different one. Before Prasarana (the company behind Rapid KL, Rapid Penang and Rapid Kuantan) rolled into the island, there used to be more than ten operators, vying for the business of local commuters and tourists. According to Shukri, there were some major flaws in the approach of these operators. "There were no standard prices, timing was unpredictable and certain areas would not be served as these routes were not seen as profitable. We changed all that and as a result, we are now the only operator left on the island," he says.

### Big, new fleet

Prasarana has a fleet of 330 buses in Penang and on the mainland. There are eight corridors that Rapid Penang serves, out of which three are on the mainland (with 70 buses) and five on the island (with some 190 buses in operation). On average, Rapid Penang operates 260 and 244 buses on weekdays and during the weekends respectively. The balance is typically being serviced to ensure a high utilisation with low numbers of breakdowns. The buses are only seven and four years old. At the end of the year Rapid Penang will take delivery of another 120 buses while 50 are being decommissioned. By that time, the fleet will comprise of 400 buses, all of which are Scania. The increase in buses is the result of studies carried out together

with the state government. It is suggested that there will be an increased need for bus transportation. Shukri believes that "If you offer more routes, good connectivity and shorter waiting times, more people will opt for the bus and leave the car at home".

### Challenging environment

Although the bus operation has been very successful, there are still issues that need to be addressed. "Penang is very congested and there isn't a dedicated bus lane," says Major Shukri. Naturally, this makes it difficult to operate the buses, no matter how new and technically advanced they are. In another study, the implementation of a dedicated bus lane is discussed and Rapid Penang is hopeful this will become a reality. At





## *We met with Major Shukri in Penang to learn more about the history and future plans of the bus operator and how public transport is different from transportation in the Klang Valley.*

this moment, the bus system is also the only public transport available apart from taxis.

Major Shukri highlights that the Klang Valley for example has more than just one transportation system and that this makes it easier for people to move around. On Penang low cost transportation is important since there are many international manufacturing firms employing overseas labourers. These workers depend on affordable transportation. High density areas are another aspect of public transport Rapid Penang is looking into in an effort to ease the traffic woes of the Penangites.

Tourists coming to Penang also need to be considered and the experience using a bus has to be a pleasant one. During festive seasons, there is an influx of tourists and hopping onto the bus is for many a good way to explore the island.

### **Why Scania?**

The first 200 buses deployed in Penang were Scania and the company has made good experiences with the Swedish brand. Shukri states that "The after sales service is important and we are getting what we need and when we need it." He went on to say that the use of only one brand is also saving cost in other areas as there is a reduced spare parts inventory, less administration and mechanics don't need to be trained on several different brands. Buying parts in bulk is also beneficial.

Prasarana's headquarter defines the specification of the buses and vehicles which will be selected based on a tender process. At the end of this year, all 400 buses on the island will be Scania's.

### **Electromobility for Penang**

On implementing electromobility in the island, the project need to be studied further and conduct thorough research. Meanwhile, Prasarana currently testing the electromobility and shall operate at Sunway in near future.

### **Scania Bus Specification**

The buses have 2 types of seating capacity: 25 and 41 seats which can accommodate a total of 65 passengers at one time with added features for passenger friendly use. The vehicles are equipped with low entry front and middle that allow passenger to get on and off easily, especially those with impaired mobility. A wheelchair ramp is built into the bus at the exit door. Besides that, the bus is also furnished with a wheel chair back rest with seat belt, priority folding seat for those in need and displays for passengers with impaired mobility, i.e. sound and lighting signal. Additionally, the buses are equipped with Electronic Braking System (EBC), Traction Control (TC), Hill-Stop Assist features and Electronic Destination Board.

Rapid Penang's buses are fitted with CCTV with recording capabilities and GPS equipment for bus tracking system. **T**



**YOKOHAMA**  
Industries  
**YOKOHAMA INDUSTRIES BERHAD**  
(292788-17)

# In the business of starting your bus: Yokohama batteries

*Yokohama today is a trusted name in automotive batteries in Malaysia, providing all JIS and DIN standard models for passenger and commercial vehicles.*

**Y**okohama Industries traces its origins back to 1961, when it was founded as Tai Kwong Yokohama. In the beginning, the business was based on the reconditioning of used automotive starter batteries. Today, the company operates a cutting edge manufacturing plant that resides on 36 acres in Semenyih, Selangor. This integrated facility features an automated plant, well equipped Research and Development facilities and full engineering capabilities. It is renowned for automotive batteries and being the most modern battery manufacturer in the country. Yokohama Industries have been a Public Listed Company on the Malaysian Bourse since 1995. Along with its manufacturing facility, Yokohama also operates a lead & a plastic recycling plant in Pengkalan, Perak. Both plants are ISO 9001 and ISO 14001. The manufacturing plant is also TS 16949 certified.

We visited the Yokohama plant and the marketing team took us along on a tour through the factory to get the inside scoop on Yokohama. One recurring question is about the name as it implies ties to the tire manufacturer from Japan. However, Yokohama is truly a Malaysian company and it was never related to the Japanese company. Yokohama has been operating for 47 years and it will celebrate its 50th anniversary in 2017. Domestic distribution of Yokohama batteries is carried out through Borneo Technical Co. (M) Sdn Bhd, which has 17 branches serving a nationwide base of 17,000 customers.

Of its annual production of two million batteries for cars, trucks and buses, over half its products serve Malaysians every day. The rest makes its way to local automotive OEMs & 40 other countries worldwide.

## **Batteries**

For all intents and purposes, a battery is designed with the idea to start the vehicle and maintain the electrical use of the vehicle when the engine is switched off. In terms of physical sizes, a bus battery tends to be bigger than a car battery. Generally, the bigger the battery, the higher the capacity. A large bus usually operates on a 24 Volt electrical system, but in order to have 24 Volts, two 12 Volt batteries will be connected in series.

The voltage tells you the state of charge of a battery. Most people judge the condition of a battery by its voltage, simply because voltage can be measured, while capacity can't. However, what really matters is how much capacity and cranking amperes a battery still contain to start a vehicle. Your truck alternator should be providing 28 to 28.8 volts to ensure proper charging.

## **Facts**

Alternators are used in modern automobiles to charge the battery and to power the electrical system when the engine is running. When your bus is not running but you are using the air condition or the radio, you will then use your battery power. Nowadays it is common to charge your gadgets, such as mobile phones, in the vehicle. The electrical supply of all the electrical components comes from the alternator if you run your engine. The alternator is designed to power all such items without drawing power from the battery. However, if you add gadgets (amplifiers, lights, etc.) you will add to the power consumption. Should one add gadgets, it is necessary to change the alternator to match the power consumption. Should the alternator not produce enough energy, then the battery will add the balance. Over time, this will result in the battery being drained.



Automated plate casting



Air leak test

The lifespan of a battery will vary considerably with how it is used, how it is maintained and charged, ambient temperature, and other factors. A bus battery tends to be used for a long duration, as some tour operators run their buses around 20 to 22 hours per day. However, the age of the bus does not affect the battery. It depends on the state of the alternator, if the battery is protected from excessive shocks and if it is being maintained properly. If a battery is taken care of, it will provide cranking power for a long time. Therefore, it is essential for owners of the bus to be aware of the condition of the battery. Regular checks are a must if you want to avoid costly breakdowns.

As there are other brands in the market, one may ask what the difference between Yokohama products and others is. "Generally, availability, cost and brand reputation matters to consumers. At Yokohama, we build with quality as first consideration. Besides numerous quality checks during production, stringent testing that meets and exceeds international standards are conducted and repeated before product are approved for mass produced" said Dennis Yong, General Manager of Yokohama.

### Factory Visit

To better understand the product, we have been led by the Yokohama team on a tour of their factory. Operators are well equipped with safety equipment and a clinic is provided within the factory area for general consultation and emergency cases. Integrated technology is used for better quality and as well as for environmental control. We were taken to the Research and Development Centre, where the entire range of test equipment needed for the battery is housed. Here, it is demonstrated how a battery is developed from the concept stage till the final product. The Centre for Electrical Research (CER) also leads and facilitates joint research programs with universities, institutions and industries to ensure that Yokohama maintains its position at the forefront of Malaysian and global technologies. 

## How to take care of your battery



### 1. Check your electrical connections

Make sure the battery terminals and cable connections are clean and tight to enable proper current flow. Corrosion on the battery terminals can prevent a bus from starting by adding electrical resistance, so it is important to clean the terminals periodically using water and a wire brush. Ensure you wear the correct protective gear (gloves and eye protection) as the white powder (lead sulfate) is toxic if inhaled, ingested or comes into contact with your skin.

### 2. Keep batteries clean and dry

A dirty battery surface can lead to a discharge and corrosion. It is important to avoid spilling oil or grease onto the top of the battery.

### 3. Avoid draining

Avoid leaving vehicle accessories on regularly as this will discharge the battery which will then require a recharge. Constantly recharging may shorten the life of your battery.

### 4. Secure your battery

Check that your battery is secure at all times, as vibrations can damage the battery plates. Inspect battery terminals regularly; loose connections can cause breakdowns.

### 5. When to replace your battery

If the battery is too weak to provide a sufficient voltage to the starter, you'll hear a distinctive clicking sound and the engine won't crank over. This clicking indicates that the battery is not fully charged. Sometimes a faulty alternator will be the culprit, but other times the test will reveal a weak battery not capable of holding a charge. This means the battery must be replaced.

#### TIPS:

- You may have to reset your clocks and radio presets, since all battery power was lost.
- If your bus doesn't start after running fine, just hours before, it may be a problem with the battery. Usually it happens with an older bus with an older battery. Just putting in a new battery without cleaning the cable connector corrosion sets you up for the same exact problem all over again. Corroded material just keeps eating away forever, if you don't get it all.



**TAM** | VIVE



TECHNICAL DATA	Vive TH
Overall length	10.200 mm
Overall width	2.460 mm
Height with a/c	3.535 mm
Wheel base	5000 mm
Front overhang	2.200 mm
Rear overhang	3000 mm
Angle of approach	8 deg
Angle of departure	7 deg
Turning diameter	18.530 mm
Weight of unloaded vehicle	9.710 kg
Perm. total weight	16.000 kg

PASSENGER CAPACITY	Vive TH
Number of passengers (seats)	41+1+1
Capacity of luggage compartments	8 m <sup>3</sup>
Entrance door number	2
doorway width front	860 mm
doorway width rear	800 mm
Interior height	2.000 mm
Step well height	360 mm
Floor (height above ground)	1.332 mm

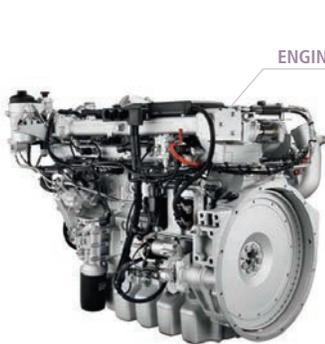
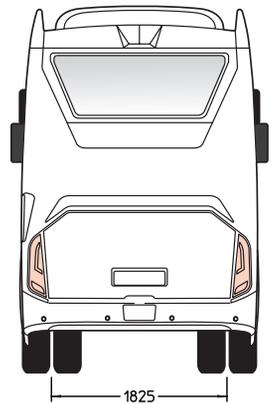
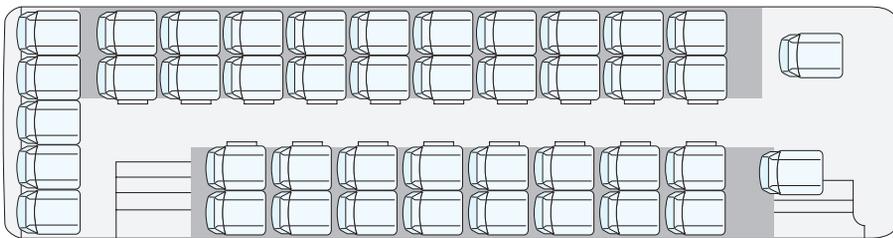
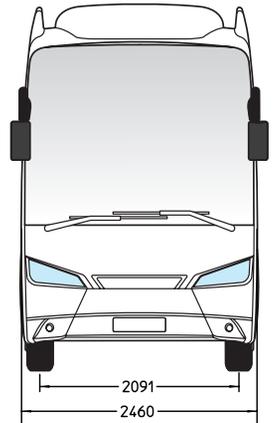
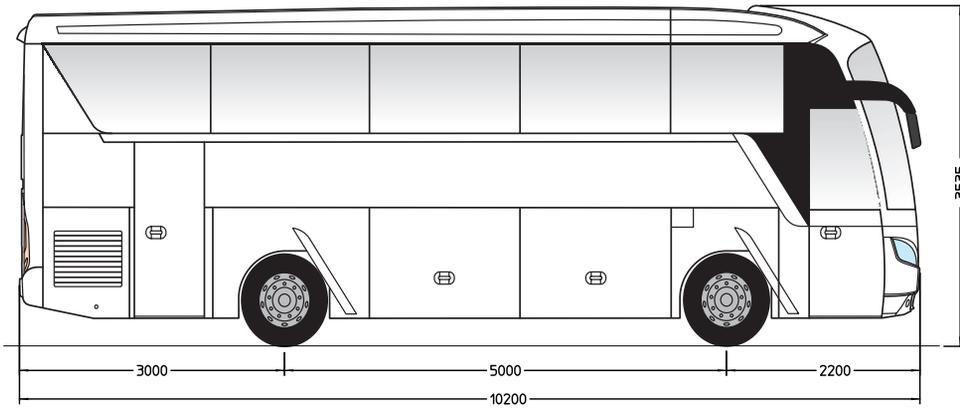
## The Vive TH is the spoilt tourist among our buses.

This model offers the luxury and comfort of a real high deck coach on compact 10.2 m length. Providing a maximum capacity of 41+1 seats and a luggage compartment of 8 m<sup>3</sup> the Vive TH is a reasonably priced alternative to larger coaches and an ideal vehicle to operate on narrow roads.

Powered by an MAN D0836 LOH 72 (Euro 6) or a Cummins ISB6.7I (Euro 6) engine and equipped with either manual or automatic ZF gearbox with intarder and Konvekta or Eberspächer air condition, all the expectations of passengers, operators and drivers can be met.

ENGINE Cummins Diesel ISB6,7I (EURO 6)





Gearbox ZF EcoLife



Rear Axle System A 132



# OUT OF AFRICA RESTAURANT AND KUDU BAR.



## White and Sparkling: Asian Trucker Networking Night

Held for the fourth time, the Asian Trucker Networking Night sees great attendance from the industry, with participants donating 3000 RM for a good cause.

### Premium Sponsor



SINOTRUK MALAYSIA SDN BHD

### DJ Sponsor



### Tyre Sponsor



For the fourth time running, the Asian Trucker Networking Night brought together industry players for a great night of fun, business discussions and for the first time a donation drive. Over 100 leaders from the industry dressed in white and converged to celebrate trucking, making this event yet another success.

"Appreciate your introduction" was a phrase we heard many times during the

night. Thanks to the Asian Trucker team, many made new connections during the night and we are certain that talks continued on the following days.

During the evening Asian Trucker organised a donation drive, the first ever. "We have chosen a foster home in need of support and we will organise more such initiatives in the future" said Stefan Pertz during the event. A total of 3 000

RM was raised during the night and handed over to "Rumah Titian Kaseh" the following week.

Asian Trucker expresses its sincere thanks for the donations and for the support of the sponsors for the event, namely Sinotruk Malaysia as headline sponsor, Kit Loong and ITG. The next Asian Trucker Networking Night will be held on 15 May 2015 during MIBTC. **T**



# Supercool™

*Engineered For Safety*

20,000,000

20 Million Tyres Retreaded With GIIB Supercool Premium Compound  
That's a lot of trust.

Bus operators in over 60 countries worldwide rely on GIIB Supercool to get thousands of their passengers safely back home again.

Why can you trust GIIB Supercool premium pre-cured treads to give outstanding performance and keep you safe on the road? Take a look at the unique GIIB Supercool features.

- **Up to 40% cooler**
- **30% better mileage**
- **20% higher chipping resistance**
- **Anti-avulsion abilities**
- **German technology used**
- **Less maintenance downtime**



**Goodway Rubber Industries Sdn. Bhd.** (147222-D)  
(Subsidiary of Goodway Integrated Industries Berhad, a Malaysian public listed company)

A-06-03, Level 6, Empire Tower 1, Empire Subang, Jalan SS 16/1, SS16,  
47500, Subang Jaya, Selangor, Malaysia.

**T** : +60 3 5632 9981    **F** : +60 3 5632 9980    **E** : marketing@giibword.com

**GIIB**  
*Engineered To Care*

[www.giibworld.com](http://www.giibworld.com)



# Scania Total Solutions - optimised for your best profitability.

With over 100 years of experience in over 100 countries globally, Scania's wide range of industrial solutions offer the highest level of performance, safety, fuel economy, reliability and robustness. With Scania's superior driver training and after sales service, we can optimise your operations for the best profitability.

## Trucks

Able to handle long-haulage, distribution, construction and special purposes, our trucks cover your every need.

## Bus and Coach Chassis

Our dedication to passenger comfort makes every city or intercity journey an enjoyable one.

## Marine, Industrial and Power Generation Engines

Features powerful technology and flexible customer options to power up your business.

## Services

We are located in 10 Scania owned and operated service centres across Malaysia, providing scheduled maintenance, parts services and contracted services for maximum uptime. No matter the time, location or need, our service teams are always accessible with our 24/7 roadside assistance and mobile service vehicles for difficult-to-reach areas.

## Scania Credit

Value and flexibility of diversified financial solutions from hire purchase to insurance with your profitability in mind.

Call us at +60 3 7845 1000 and speak to one of our consultants. For more information on our network of branches and after sales service centres, please visit our website.

