



busworld newsletter

Busworld Kortrijk

ALMOST FULL



The Iveco Ellis up was a star of the last Busworld.



There is plenty of space in the pavilions.



The new lower height Setra coach.



Composites can save a lot of weight.

The exhibition season in Europe has ended, with a number of smaller regional events, so the whole of the bus and coach industry can now turn its attention to next year's major international event.

Mieke Glorieux, Director of Busworld Kortrijk, says: "We are still receiving enquiries and taking bookings, but exhibition space is nearly fully committed. Many of our long-standing exhibitors have confirmed their regular spaces, but there is still some availability in pavilions 8 and 9."

"Sometimes there is resistance to these pavilions, because they are seen as temporary, but they are on permanent hard standing and fully serviced. One of the two main entrances to Busworld Kortrijk is through Hall 9 that lies parallel to the main road to the middle of Kortrijk. Halls 8 and 9 are already connected to

permanent Halls 1 and 2. We could even extend 8 and 9 and make a further connection directly into Hall 3."

Some European markets have been slower than others to introduce the Euro VI emission standards, but by the time Busworld Kortrijk



The 3,000th Euro VI Citaro.

opens its doors, Euro VI will be universal in the European Union. Already, Mercedes-Benz had delivered the 3,000th Euro VI Citaro, with customers reporting considerable savings in fuel consumption.

Although the price of oil is currently unusually low, most experts believe that the medium to longer term trend will be higher prices. That will focus the attention of the industry on maximising fuel economy and, at the same time, reducing carbon emissions.

There is no single quick-fix solution to reducing fuel consumption. Indeed there are many fac-

tors that can make a contribution. There will be plenty of them and their suppliers at Busworld Kortrijk.

There is room for further refinement of diesel engines to produce greater economies. Cummins, as a major independent engine manufacturer, has identified up to ten different measures, some small but others quite significant. When taken together, they could achieve savings of up to 30%.

Clever management of auxiliaries driven by the engine, such as alternators, compressors, cooling systems and air conditioning, can all

achieve savings. Energy that is normally lost when a bus brakes can be captured and used to top up batteries, saving alternator drives.

Savings can also be achieved from optimising other parts of the driveline, especially gear-boxes. Automated manual transmissions usually have a greater spread of ratios, enabling engines to work for more time at optimum and most fuel efficient speeds.

Tyre technology is also contributing to fuel economy. Tyre manufacturers are working on optimum tread patterns and also strongly advise maintaining tyres at correct pressures. This can be done by a variety of monitoring systems, including those embedded in the tyres themselves.

Structural materials and aerodynamics can also play a contributory part. This has been demonstrated and proved, for example, on the latest generation of Setra coaches, with their very low drag co-efficient. Composite materials not only save weight, but are totally resistant to corrosion.

Last, but by no means least, is the effect of the driver's right foot. Harsh acceleration and heavy braking can have a serious adverse impact on fuel consumption.

Nowadays, these can be monitored remotely by telematics systems. There are a number on the market that use GPS to continually monitor how a bus is being driven. Some of them use displays in the driver's compartment, within his eye sight, to make him continually aware of his performance and fuel consumption.

Typical systems use green lights when a vehicle is being driven most economically. Yellow lights and red lights can give progressive warnings of heavy fuel consumption. These systems can take into account the terrain on which the vehicle is being driven and also the approximate number of passengers being carried.

Because there are so many potential solutions for saving fuel, competition between suppliers is keen and that will certainly be confirmed in Busworld Kortrijk.



Radical interior of the Iveco Ellisup.



The pavilions are light and airy.

FURTHER STIMULUS FUNDS FOR CITY BUSES

The annual market for buses and coaches in India, over 7.5 tonnes gross, is around 40,000 units. For the last decade, the Government has been concerned about the high average age of city buses and their pollution. The vast majority of buses still have high floors that are unacceptable to passengers with disabilities.

In 2005, the Government decided to stimulate investment by the State Transport Undertakings in new buses by funding them as part of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) scheme.

Funds were released for the purchase of 15,000 buses for operation in 68 cities. Of those, 51 each had a population of more than one million people!

The vehicles had to be either low entry or with a floor no more than two steps above the ground. Specifications had to be high, including passenger information systems, destination equipment, GPS and multiplex wiring.

In March 2013, the Government announced JNNURM-II, making available further funding for around 10,000 buses. It has taken time to release the funds and for tender documents and quotations to be supplied, but the manufacturing industry has recently received major orders for vehicles which will be delivered through to 2016.

The Managing Director of one major manufacturer noted: "With rapid urbanisation and increasing agglomeration in Indian cities, it is important to modernise public transportation systems and other technologically advanced and empathetically-designed transport solutions."



The 10,000th Solaris was all-electric.



The Transmilenio in Bogota.

SEMINAR



busworld
academy

KNOWLEDGE PLATFORM
FOR THE WORLDWIDE
BUS & COACH SECTOR

During Busworld India, on 29 April, Busworld Academy will host a seminar on safety and sustainability. A preliminary programme has been announced.

Mr AA Badusha, Deputy Director and Head of the Vehicle Evaluation Laboratory and Homologation Management and Regulation of India will evaluate the impact of the Bus Body Code one year after its introduction in India.

Mrs Anumita Roychoudhury of the Centre of Science and Environment will deliver a paper entitled "Towards One Million Buses in India".

Mr Carlo Mol of the International Energy Agency of Belgium, will discuss the introduction of e-mobility and experiences in Europe.

Mr Jelle Van Winckel, Chief Executive of DTS a Flemish company, will demonstrate safety systems to keep drivers alert. It is also hoped that Mr Sanclemente, Chief Executive of Transmillenio of Bogota, Colombia, will be able to discuss Bus Rapid Transit systems as part of the solution for the problem of urban congestion.

Further information will be provided in the next Newsletter.

EMISSIONS IN INDIA

India has emission standards similar to those in Europe, but two or three stages behind. They are known on the sub-continent as Bharat Stages, therefore Euro I is BS I.

BS I was introduced in Delhi and other cities in 1999. BS II came into force in eleven major cities in April 2003 and followed in the rest of the country in April 2005. The cities were Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Ahmedabad, Pune, Surat, Kanpur and Agra.

BS III, ie Euro III came into effect in the major cities in April 2005 but did not follow in the rest of the country until April 2010. One of the reasons for the long delay was ensuring adequate supplies and distribution of low sulphur diesel.

BS IV became mandatory in the major cities from April 2011 and the Government said in the autumn of 2012 that it hoped to introduce BS V in 63 cities by 2015.

The capital, Delhi, suffers badly from pollution. At the turn of the century, the Supreme Court decreed that all buses in the city should be fuelled by CNG. This included converting older buses to run on gas but it was not a major problem, because they had high floors with space beneath to accommodate gas tanks.

More recently, demand in Delhi has moved more towards buses with lower floors, including some with sections just one step above the ground. On those vehicles, as in other parts of the world, gas is carried in tanks at roof level.



India's crowded cities suffer pollution.



Modern gas buses are extremely clean.

ALL-INDIA PERMIT FOR COACHES

According to the industry newsletter, "Truck & Bus Builder", the Ministry of Road Transport & Highways is proposing a new scheme to facilitate seamless movement of tourist coaches across Indian states.

Currently, an operator has to obtain a permit from each individual State and Union territory on a tour. The new proposal is for an

all-India permit which will be collected by the Central Government by means of an annual fee based on criteria such as the number, type and size of coaches.

The proposed rates are INR50,000 for ordinary tourist buses, INR75,000 for luxury tourist buses and INR100,000 for super luxury tourist coaches. The funds would then be distributed to the States and Union territories by Central Government.



Coach travel will benefit from a national permit.

BOOK NOW FOR BUSWORLD INDIA

The sixth edition of Busworld India will be held from 28 to 30 April next year in the Bombay Convention & Exhibition Centre in Mumbai. It is being organised by Busworld and its local partners in India, Inter Ads Exhibitions.



MG Group will be at Busworld india.

With the new Indian Government stimulating investment in buses, this is an excellent platform not only for vehicle manufacturers, but also component suppliers. Standards on Indian buses and coaches are improving remarkably, opening up opportunities for all sorts of component supplies.

Import duties for fully built components tend to be high, therefore the preferred route into the market is working with a local partner. India has an abundant supply of skilled labour and Western accounting systems, therefore partnerships can be a very successful solution.

Indian bus and coach manufacturers build around 50,000 vehicles over 7.5 tonnes gross each year. Around 20% of those are supplied to export markets. With those volumes, there is substantial scope for suppliers to work in India.

Busworld India is an ideal opportunity to meet the Indian industry and to see how it works.



Many old buses need to be replaced.

The climate in Mumbai in April is normally very pleasant and there are some excellent hotels within easy reach of the Convention and Exhibition Centre.

SUBROS EXPANSION PLANS

One of the first exhibitors to commit to Busworld India was Subros Ltd, a leading manufacturer of air conditioning and refrigeration systems in India. While its main business is supplying air conditioning systems for cars, the company has recently opened a new factory at Oragadam, near Chennai, to consolidate its air conditioning operations for commercial vehicles.

Subros is confident that there will be a major increase in demand for air conditioning systems for buses and coaches, and also for refrigerated road transport. The company can supply air conditioning for all sizes of buses and coaches, ranging from 6kw to 45kw in capacity and suitable for vehicles from four to twelve metres overall length.

All the company's air conditioning systems use environmentally friendly refrigerant. Subros is confident that the new Government will put emphasis on infrastructure and road transport, leading to a substantial increase in demand for air conditioning in the bus and coach industry.

Current news on electric buses

Any visitor to Busworld Kortrijk in 2013 would have been struck by the number of all-electric buses in the exhibition and steps being taken by manufacturers such as Volvo to extend the range of all-electric operation with hybrid buses.

There are various systems on the market whereby buses can be given a fast charge of electricity at each end of a route, either from an electricity supply beneath the bus, or from an overhead gantry.

Other manufacturers believe that the future lies in all-electric buses that have on-board batteries with sufficient range for a full day's work. This is a challenge, because the batteries not only have to propel the vehicle, but also provide power for lighting, heating, air conditioning, and many other systems on board the bus.

Most full size vehicles require around three tonnes of batteries to obtain a full day's autonomous range. That pushes the unladen weight of a typical 12-metre city bus up to around 14.0 tonnes. It therefore restricts the number of passengers that can be carried within maximum legal weight limits. However, battery technology is advancing quite rapidly and some experts believe that lighter battery packs will become available.

In January of this year, the European Union launched the ZeEUS project to help fund a number of projects with ultra-low emission vehicles. Several manufacturers and eight European cities are participating in the project which is being overseen by UITP. Some vehicles are all-electric, while others still require a



Volvo will supply Edinburgh with 24 Electric hybrids.

small diesel engine to power a generator and keep batteries fully charged.

The first vehicles to enter service under the ZeEUS project came from an unlikely source. Irizar is best known for its impressive range of luxury coaches, both fully integral and built on various makes of chassis. An indication of the company's forward product strategy came at Busworld Kortrijk last year when a bus body was exhibited outside, mounted on a low entry chassis.

Irizar said at the time that it was working with other group companies to develop all-electric vehicles and that it was not planning any hybrid products as an interim stage.

Recently, a pair of Irizar i2e all-electric buses entered service with TMB, Barcelona, as part of the ZeEUS project and another went to the northern Spanish city of San Sebastian. They were the first vehicles to enter service as part

of the ZeEUS project and will be closely monitored. Solaris and VDL will supply all-electric buses to cities in Germany.

The ZeEUS project has also brought together other important players, such as electricity supply companies. They have to understand the implications of the overnight supply of electricity to recharge a large fleet of all-electric buses, and what impact that might have on other users of electricity in the neighbourhood of a bus depot.

Manufacturers also want some common standards on charging equipment, so that they can recharge a mixed fleet of all-electric vehicles with the same flexibility as they can refuel a mixed fleet of diesel buses.

By the time of Busworld Kortrijk in October 2015, more all-electric and virtual electric buses will be in service around Europe and further electric vehicles are likely to be in the exhibition.



The first VDL all-electric bus.



This Ebusco all-electric bus has been running in Finland.



Irizar all-electric buses in Barcelona.

European coach and bus week



EUROPEAN
COACH &
BUS WEEK

The very important European Coach and Bus Week, or ECW for short, takes place immediately before every edition of Busworld Kortrijk.

For ECW in 2013, the Board of Busworld decided to adjust the focus of ECW to play more of a pioneering role. They wanted ECW to provide insights into future technological developments within the industry and their positive impact on mobility.

The Board also wanted ECW to reach out to different parties, such as policy makers, bus and coach buyers, and even the general public. It wanted to highlight the innovative character of the industry that did not always receive the attention that it deserved.

At the same time, the Board wanted to retain the best features of the old formula, including the unique opportunity to test the latest buses and coaches and put them through their paces. They are still driven on a mixture of normal roads and assessed for their appeal and comfort for drivers, tour guides and passengers.

For drivers, it is important to have a very comfortable seat, controls that come readily to hand, easily readable display systems and excellent all round visibility. Tour guides must have a very comfortable seat, with space to carry out their work and store documents. For passengers, important features are the ease



Ziehl Abegg won 1 of the 5 Innovation Labels in 2013 with its ZAwheel.

of entry and exit, seat comfort, all round visibility and interior noise levels.

In 2015, there will again be separate competitions for buses and coaches because they are quite separate types of vehicles with different priorities for drivers and passengers.

Small buses and coaches will not be tested separately but will be judged in either the bus or coach category, depending on their specifications.

The Grand Award Coach and Grand Award Bus will continue as in previous years. Every vehicle that enters will be participating in this competition.

As in 2013, there will be new Best of Category Labels, for Safety, Ecology, Comfort & Ergonomics, and Styling & Design. Every Label will be granted a maximum once to the coach and once to the bus with the highest score in each particular category.

If no vehicle has an exceptionally good score in any category, the judges can decide not to grant that Label. The Board believes that these Labels must be meaningful and therefore they have to be earned. This competition will be open to all exhibitors with vehicles.

Again, following the success of the 2013 competition, there will be one very special Label for Innovation. For this part of the competition, manufacturers can also enter with a prototype or demonstration vehicle since no test drives will have to be performed. An actual vehicle

must be presented, because drawings or scale models will not be accepted.

The innovation label is open for all exhibitors, so also for components, spare parts,... even services. If your product or service is innovative, it can be awarded with an Innovation Label. In 2013, 5 innovation labels were awarded to non-vehicles.

Further information on entering European Coach and Bus Week will be carried in future editions of the Newsletter.

WE NEED YOUR NEWS

Busworld has launched a new digital newsletter that will be published every two weeks. It will be known as **Busworld BUSINESS** and is an additional service which will be sent to all addressees in the Busworld Database. This will be in addition to the news items that are regularly published on the Busworld website.

We know that many people from all over the world regularly rely on Busworld to keep up to date with news and developments in the industry, so please send us news of your activities, new products, major orders, and any other topical developments. We will continue to carry news items on the website and the main items will be published in Busworld BUSINESS for mailing every second week. This free service will help you to reach a wider audience.



Van Hool's Exqui.City won the Grand Award Bus in 2013.

Seasonal greetings to all the friends of Busworld



Join the Busworld community on Twitter (@Busworld), Facebook (page: Busworld) and LinkedIn (group: Busworld Academy)!

Receive the latest bus and coach industry news via our bi-weekly Busworld BUSINESS. Register at our website www.busworld.org

newsletter online

The Busworld Newsletter is now available on-line at www.busworld.org. Alternatively, we can arrange to send it to you by e-mail.

Please make your request to inge.buytaert@busworld.org.