The clock is ticking down rapidly to the opening of the largest – and oldest – exhibition in the world dedicated to the bus and coach industry. There are no trucks or cars, just buses and coaches of all sizes and the companies whose components, accessories and services are essential to the industry. There will be 411 exhibitors from 36 countries, an all time record for Busworld Kortrijk!

Some exhibitors have already announced what they plan to show in Busworld. Others are keeping projects under wraps until the last possible minute. In his company’s press preview, Rudi Kuchta, Senior Vice President, Bus Sales at MAN Truck & Bus AG, summarised the importance of Busworld very neatly.

He wrote: “Busworld is the bus fair in Europe, although it also attracts industry professionals from around the world. It is an ideal platform for showcasing the broad range of buses available from MAN and Neoplan and for informing visitors about our customer-oriented services. We also value the personal contact with our customers.”

Mieke Glorieux, Director of Busworld Kortrijk, responded: “Thank you, Rudi, for those kind words, and have a great exhibition!”

Safety, economy, comfort and alternative fuel systems are likely to be recurrent themes during Busworld Kortrijk.

Further European safety legislation will come into force in 2015 for all M3, Class III, vehicles, ie coaches that carry only seated passengers. The legislation will demand the fitment of forward collision warning systems with automatic emergency braking (AEBS), and lane keeping support systems with departure warning.

AEBS will be introduced in two stages, the first in November 2015 and the second in 2018, requiring a greater level of braking retardation. If AEBS senses that a coach is getting too close to a vehicle in front, it will use a combination of visual and acoustic warnings to the driver. If those are ignored, it will start operating the brakes, if necessary applying full emergency braking.

Although the price of oil, and therefore diesel, has fallen quite sharply in the last few months, fuel economy is still a very important topic. Experience with Euro VI engines seems to indicate that they are more economical than their predecessors, therefore they can pay back the higher initial price over the first few years of operation.

The latest step in Euro VI legislation introduces key changes to On Board Diagnostics (OBD) on new vehicle Type Approvals from the end of this year and on existing vehicle from the end of December 2016. the NOx emissions threshold detected by the system is reduced from 1500mg/kWh to 1200mg/kWh. A particulate matter emissions detection threshold is introduced at 25mg/kWh. The level at which sub-standard quality AdBlue is detected is lowered from 0.9g/mg/kWh to 0.46mg/kWh. Finally, the OBD operation must
Many visitors were surprised at the number of electric vehicles in Busworld Kortrijk two years ago. There are likely to be at least as many again. Technology in this important area is developing rapidly, spurred on by some of the world’s major cities. RATP has raised the bar by saying that it wants 80% of its fleet to be all-electric by 2025. That equates to well over 3,000 buses.

Buses fuelled by compressed natural gas appear to be making a recovery in some markets. Iveco Bus recently said that half the city buses produced this year in its Annonay factory will be gas fuelled. An MAN Lion’s City with a gas engine is the current International Bus of the Year.

Passenger comfort is always an important consideration. At the top end of the scale, Setra has recently delivered three coaches, to customers in Germany, Luxembourg and Switzerland, each equipped with only one very large comfortable seat on each side of the aisle. They are like business class in an aircraft. They are not uniformly lined up against the side wall, but alternate so that, on every second row, the seats are next to the aisle. They have clever bases, so that they can be swivelled round, facilitating meetings on the move.

Higher end inclusive tours with luxury coaches are under some pressure from three directions. Cruise liners offer the attraction of several destinations, without having to pack and unpack luggage each day. The internet enables many people to choose their own destinations. Despite the hassle of airport check in and security, they can travel half way across Europe in two to three hours, often less. Regulations on drivers hours are making it difficult and expensive to organise tours to more distant parts of Europe, like the North of Norway.

On the other hand, express coach travel is a growth area with France the latest major market to open up to deregulation of services.

Further east, Polskibus.com has recently announced an additional international service, linking Warsaw with Vilnius, Riga and Tallinn. The most successful operators in this market sector generally specify longer than standard coaches, often with over-deck or double deck layouts. Their target is to maximise revenue, at the same time minimising fuel burn per passenger.

Minibuses and minicoaches will be very well represented in Busworld. Many of these companies specialise in converting popular panel vans like the Iveco Daily, Mercedes-Benz Sprinter and Volkswagen Crafter, to name three of the most popular examples. Conversions include small buses that can work in very confined urban areas, vehicles suitable for carrying passengers with disabilities and small coaches, some of them to very luxurious specifications for only seven or eight passengers. Exhibitors are coming from countries as diverse as Latvia, Lithuania, Poland, Greece, Slovakia, Spain and Turkey.

There are growing demands for information and entertainment systems. Modern passengers expect facilities to recharge phones and laptops, also wi-fi connectivity and, on longer distance coaches, full entertainment systems. Mieke Glorieux sums up the feelings of the Busworld team: “As usual, it has been hard work preparing for Busworld and that will really intensify in the last two or three days when all the stands are built and exhibits brought in to the various halls. Although there are quite a number of doors around the perimeter of Kortrijk Xpo, it still takes planning to ensure the sequence in which larger exhibits, like vehicles, are brought in to the halls.

“We are all looking forward to meeting exhibitors and visitors, many of whom are old friends. Busworld is like one great big happy family and I hope that you all have a very informative and enjoyable time at Busworld.”

There will be many minibuses in Busworld.
European Coach and Bus Week

European Coach & Bus Week (ECW) is being held from 10 to 14 October, immediately before Busworld Kortrijk. Traditionally, the event tests vehicles, but at the last edition of Busworld Kortrijk, ECW was also opened to other exhibitors that do not manufacture vehicles.

Two years ago, the focus of ECW was changed by the Board. They wanted to provide insights into technological developments within the bus and coach industry and their possible impact on travel, in the widest sense. The Board wanted to reach out to all the different parties, such as policy makers, bus and coach buyers, and the customers who travel on the vehicles. They wanted to highlight the innovative character of the industry that does not always receive the attention and praise that it deserves.

As in previous years, there will be a Grand Award Coach and a Grand Award Bus because buses and coaches are designed for different functions and therefore have different levels and needs of safety, comfort, ecology and design.

Vehicle manufacturers have entered a wide variety to take part in ECW. Full size coaches include the MAN Lion’s Coach Efficiency, the Setra TopClass S 515 HDH, the Volvo 9900 with the new Dynamic Steering, a Yutong HTC12 and last, but by no means least, the tri-axle Van Hool EX17H, built in Macedonia. Midicoaches are represented by the Anadolu Isuzu Visigo, first seen two years ago at Busworld, and the smaller Kutsenits Tourist on a Mercedes-Benz Sprinter base.

Competition among buses is very interesting. BYD, Ebusco and Yutong are entering all-electric buses while the only full size diesel city bus is the Anadolu Isuzu Citiport.

This selection will be quite a challenge for the judges.

In addition to the Grand Awards, ECW can grant Best of Category Labels in the following categories: Safety, Ecology, Comfort and Ergonomics, Styling and Design. The Board feels very strongly that these awards have to be earned, therefore ECW can grant a maximum of eight Labels – four to coach and four to bus, and a minimum of none! Entries for innovation awards among non-vehicle manufacturers have proved very popular. More than 30 submissions have been received, but some will be eliminated because the judges are looking for genuine new product innovation, as distinct from improvements and refinements to existing designs.

However, it says a great deal for the industry that more than 30 suppliers believe that they have achieved innovation. It will make the task of judging very interesting.
Hoşdere Factory celebrates 20 years

Daimler Buses recently celebrated the 20th anniversary of the opening of the impressive Hoşdere factory near Istanbul. When the original plant was built, it was in open countryside to the west of the city, just off the main highway to Central and Western Europe. Greater Istanbul has spread out since then to surround the factory!

When it first opened, the Hoşdere factory had a covered production area of 30,000 sq m. It received vehicles that were partly built in an older factory in an industrial part of Istanbul and became responsible for assembly, painting and finishing. The capacity at that time was 2,000 units per annum.

Over the years, the Hoşdere plant has regularly been expanded and now builds complete buses and coaches, following closure of the other older plant nearly ten years ago.

The covered area has increased to nearly 140,000 sq m and the plant employs 3,300 people, substantially up from the original 530 in 1995. Output is running at 16 units per day and is expected to reach a total of 4,500 in 2015.

Hoşdere builds five main product families. The top-of-the-range Travego is available at various heights and lengths, the highest models being for the important Turkish intercity market. The Tourismo coach range is very popular, available in left and right hand drive and at various lengths.

The Intouro is an interurban bus, while the Conecto is a city bus, available in solo and articulated versions. The most recent additions to production are the Setra MultiClass Business Line models.

Within these five main ranges, there are about 35 derivatives. Currently, vehicles from the Hoşdere factory are delivered to around 70 countries. The whole factory is very well equipped, including an extensive Material Test Laboratory.

Hoşdere also benefits from a highly skilled and flexible workforce with average ages considerably below those found in Western European manufacturing industries.

Mercedes-Benz gas bus launch

Busworld Kortrijk is well known for its premières. Mercedes-Benz will launch the Citaro NGT. This has the new 7.7-litre M936G compressed natural gas engine mounted vertically and offset in line at the rear. The engine is closely derived from the OM936 diesel unit but the combustion process is practically free from particulates, therefore there is no need for selective catalytic reduction or filters. Noise levels are around half that of the diesel engine which itself is remarkably quiet.

The new M936G gas engine is around 230kg lighter than the previous 12-litre unit and is reckoned to be around 20% more economical. Gas is stored in new composite bottles under a neat cover towards the front end of the roof.

Mercedes-Benz has got off to an excellent start with the NGT. The city of Augsburg is taking 68 of them, all but 15 to be articulated.
**Man celebrates 100th birthday**

*Although the origins of MAN go back more than 270 years, it was 100 years ago that the company first started building buses and trucks. Originally, they were made in a joint venture with Saurer of Switzerland, but MAN soon went its own way. It was a pioneer in the use of diesel engines, and they soon gained a strong reputation for reliability and economy.*

Originally, the company built chassis and worked with numerous bodybuilders. Gradually, it evolved a range of competitive integral buses and coaches with rear mounted engines.

At Busworld, MAN will show a selection of vehicles in Hall 2. Their key topics are fuel efficiency and safety. The Lion's City bus range has been consistently product optimised and will be shown with a number of new features that will contribute to lower fuel consumption, enhanced driver comfort and improved serviceability.

The Lion's Intercity will make its world premiere. This is a versatile model, suitable for a wide range of applications such as interurban services, day excursions and school transport. It has been designed and built to achieve low Total Cost of Ownership.

The Neoplan range will be well represented, including the latest generation Skyliner. This double deck coach will have a bistro layout in the lower deck where passengers can socialise. Another exhibit will be a Cityliner with an individual lounge interior designed by the Bus Modification Centre.

Visitors will also be able to go to the demonstration park and sample a Neoplan Tourliner. This 5-star coach has VIP seating for 32 passengers. The seat rows on the left are individual, while the rows on the right are double seats. Interior fittings include easy-to-view monitors, a 56-litre fridge and a useful on-board kitchen.

Busworld congratulations MAN on its 100th anniversary and wishes it every success for the next 100 years.

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**VDL launches Double Deck Futura**

*One of the most significant world premières at Busworld Kortrijk will be the launch of the new Futura FDD2 double deck coach. This is not an update of the previous and popular Synergy coach, but a completely new vehicle that builds on the prize-winning Futura single deck family.*

The FDD2 is instantly recognisable as a Futura family member, especially on the front and rear faces. The front is distinguished by what appears to be a massive one piece screen, but is in fact made up of several glasses for ease of replacement.

FDD2 uses the same modular construction system as the single deck Futuras. The engine is the 12.9-litre DAF MX13 unit developing 510hp/375kW and 2,500Nm of torque at 1,000-1,425rpm. The gearbox is the popular 12-speed automated ZF AS-Tronic unit.

VDL’s designers have achieved 1,855mm headroom in the lower deck and 1,730mm on the upper deck. There are two staircases and one of the attractive features is the use of rounded corners on all the interior trim.

VDL will offer the FDD2-130 and FDD2-141 at overall lengths of 13,085 and 14,145 metres respectively. The longer model can carry up to 96 seated passengers if a toilet is not required.

Luggage accommodation can be a problem on double deck coaches, but VDL has achieved 9.3 cubic metre capacity and additional lockers have been provided within both decks wherever space can be found. The new Futura will go into production next year when supplies will be quite constrained, but the target is to hit up to 30% of the European double deck coach market within two to three years.
Scania fuels variety

At Busworld, Scania will showcase the industry’s broadest range of alternative fuelled vehicles. Klas Dahlberg, Head of Buses and Coaches, says that Scania has gradually expanded its offering to satisfy nearly every market need and, perhaps, even more importantly, to deliver buses for operations with every commercially available fuel. “Scania can help customers to make a real difference in reducing carbon emissions.”

In addition to diesel and compressed natural gas, Scania can offer bioethanol, biodiesel and biogas. The company has more than thirty years experience of bioethanol, the most readily available alternative fuel in the world, with a potential for up to 90% CO2 reduction. Klas Dahlberg issued an invitation to visitors. “We at Scania look forward to fruitful discussions with operators in Kortrijk. Make a point of visiting our stand. We have some great news in store.”

Predicting the electric future

IDTechEx Research of Cambridge, England, carries out independent research and business intelligence, with regular reports on electric vehicles, including buses. Their report, “Electric Buses 2015-2025”, found winners emerging in new bus technology. It said that pure electric powertrains based on lithium-ion batteries win. It supported more rugged electric motors used two per bus, for efficiency, in-wheel, and with four wheel drive capability.

Dr Peter Harrop, Chairman of IDTechEx wrote: “Fast charging wins. Wireless charging removes hassle and personnel issues such as holding a heavy, wet power terminal. It will even evolve into semi-dynamic charging where the bus battery is smaller because it is topped up at traffic lights and bus stops using solar roads, etc. Wireless charging will be really popular when turnaround time for a full charge matches contacted versions. Gallium nitride power components, energy harvesting shock absorbers, sometimes as energy independent active suspension, are promising. Structural electronics as solid-state supercapacitors, batteries and circuitry may eventually win.”

Dr Harrop made further interesting predictions. “Unlike to be adopted in the majority of buses are fuel cells or battery swapping because of total cost of ownership and operational issues. For the next decade, fuel cells and their hydrogen will continue to cost too much even when the hydrogen comes from fossil fuels, ie not green sources. Purchasers and legislators now care a lot about green sources. Gas turbines in buses will not be efficient or economical enough for mainstream. Gauntlet charging will not become mainstream – it is not permitted in many locations, is ugly, and often expensive to install and maintain.”

There are going to be many claims and counter-claims as the electric bus industry finds its feet. One of the more biased comments was recently attributed to the CEO of an American manufacturer who is reported to have said: “What really bothers us is when a city blindly re-orders 500 diesel buses. You might as well build a new coal-fired power plant right in the middle of your city.”

That is over the top, but we can expect similar comments as the sales battle intensifies. If you are interested in this topic, you can follow the manufacturers debate in the Busworld Academy Congress on 20 Oct 10 a.m.