Kazakhstan and Central Asian Republics: how buses are the future of CARS

By Joss Hiett

Bus fleets across Central Asia are in urgent need of renewal. According to Kazakhstan’s Ministry of Internal Affairs, 43% of Kazakhstan’s 59,516 buses are more than 20 years old, with a further 26% being between ten and twenty years old. According to Frost and Sullivan, across Central Asia, 10% of the buses are so old that they should not be used, and that at least 30% of the fleet should be replaced by 2023. The age and unreliability of buses is one factor in the high number of traffic deaths in the region; Kazakhstan, with the most dangerous roads in the region, has 24.4 road traffic accidents per 100,000 people annually. The UK, for comparison, has 3.1. Inadequate infrastructure, outdated traffic laws, and poor traffic law enforcement also play a significant role in the high rate of accidents, but the lack of crash safety features on these older vehicles is seen as a significant factor in the region’s deaths and injuries from crashes.

Authorities in Central Asia are also keen to upgrade their fleets for environmental and economic reasons. As developing countries, their cities are projected to grow at a faster rate than the global average over the next twenty years, with attendant rises in congestion and air pollution. These can be ameliorated by increasing the proportion of people who travel by public transport rather than in private vehicles. According to Dr. Kulwant Singh of the UN, given the high costs of installing infrastructure for urban light rail systems, whether over ground or underground, national and municipal governments in the region are focusing on improving bus services by expanding and allowing those operators to receive loans and financing for new buses, and the EBRD (International Bank for Reconstruction and Development) and EBRB have been active in supporting companies buying low or zero-emissions vehicles.

National and municipal governments across Central Asia have already begun to upgrade their transport systems. In Kazakhstan, for example, the four-year Path to the Future program, instituted in 2015, has led to large scale upgrades in the bus fleets of major cities: 80% of Almaty’s buses have been replaced since 2016, with similar improvements in Nur-e-Sultan (formally Astana), the capital, and Bishkek (Kyrgyzstan); the Bank for Reconstruction and Development (EBRD) is currently involved in financing the purchase of 6,330 new buses in Kazakhstan, Tajikistan, Kyrgyzstan, and Uzbekistan. In Kazakhstan in 2016, shortly after the inauguration of the Path to the Future program, 12,534 second-hand buses were purchased, versus 2,420 new buses. In 2017, 7,350 second-hand buses and 1,084 new buses were bought, and in 2018, Kazakhstan bought 7,690 second-hand buses and 2,420 new ones. Second-hand bus purchases have hugely outnumbered new bus purchases, as Kazakhstan sought to upgrade its fleet as quickly and cheaply as possible. Whilst the second-hand buses weren’t brand new, they were significantly improved on the existing stock in 2015. Over the last two years, however, the proportion of new buses to second-hand has increased from a ratio of 1:1.19 in 2016, to 1:3.2 in 2018.

Manufacturers

For manufacturers, this trend presents opportunities. Although the market for buses in the region is predominantly second-hand and will continue to be so, there are significant gains to be had for manufacturers willing to push sales of small and medium size low-cost buses. As of May 2019, for example, 74% of the buses sold this year in Kazakhstan were small or medium buses, and 74% were categorized as low-cost buses.

Russia and China currently enjoy the lion’s share of this market, with their manufacturers accounting for 73% of the total, with Korea and Japan providing the majority of the remainder. Both Russia and China have been able to benefit partially because of long-standing economic links with the region; Russia still maintains strong historical, cultural and economic ties with the region as the Central Asian republics are all former constituent states of the USSR, and China benefits from regional proximity and aggressive investment since 2013. Golden Dragon has had particular success: between 2018 and 2019, its bus sales in Kazakhstan increased by 1550%, and it has become the most popular brand among private operators.

However, there is a third way of penetrating the Central Asian market. The constituent countries of the overlapping Central Asian CIS (Commonwealth of Independent States) and ECO (Economic Cooperation Organization) enjoy tariff-free trade with each other, but there are official tariffs on imported vehicles.

Private operators in CARS

Across the region, fares for public transport are often capped by national governments. To take Kazakhstan, for example, a fare cap across the country has been set by the national legislature, with municipal governments permitted to make small adjustments. These fares are set to be well within the means of the local population, whose salaries are significantly lower than those of Europeans and are comparable with the average salary in India. Whilst fare price controls have been effective in encouraging people to use public transport over private cars, they do reduce the profit margins for private operators. Many routes are currently loss-making, but with the short-term in income currently being made up with generous subsidies through ‘Path to the Future’ program, makes them economically viable; however, unless renewed, this program is set to expire at the end of this year along with the business case. Without direct financial support from the government, however, private operators in Kazakhstan would struggle to stay afloat.

For private operators, fare controls can reduce their cash reserves available for bus upgrades and make fleet renewal a less attractive option in an environment of thin or non-existent profit margins. So far, in Almaty, private operators have been compelled to upgrade with the use of more stick than carrot – municipal purchases of new buses. For private operators to upgrade in order to provide a comparable service to passengers and avoid losing passengers to city-owned buses, Almaty’s Transport Holding Company also now sets safety, noise and emissions standards for buses bought by private operators as a condition of being granted a route. The introduction of e-ticketing has allowed private operators to gather clear and high-quality data on passenger numbers and fare revenue, increasing investor confidence and allowing those operators to receive loans and financing for new buses, and the EBRD (International Bank for Reconstruction and Development) and EBRB have been active in supporting companies buying low or zero-emissions vehicles.

Government factors influencing fleet renewal

For national and municipal governments, the challenge is chiefly one of expense. As well as subsidizing private companies, the bulk of upgraded buses have so far been paid for through Transport Department budgets. Government funds are larger than those of private operators and government bodies can borrow money more easily and cheaply, yet the cost of upgrading bus fleets is still a significant expense for national governments with a far smaller tax base and annual budget than European countries. Kazakhstan currently has 3.2 buses per 100 people, comparable to the US and the UK, but must upgrade its stock on a far smaller budget: Kazakhstan’s GDP was $170 billion in 2018; the GDP for London alone was $765 billion in the same year.


Continued on p5
Kazakhstan and Central Asian Republics - A market assessment

Continued from p4

and municipalities have unofficial protectionist policies by preferring manufacturers who operate within the country or its immediate neighbours. Companies from Korea and Japan have skirted tariffs and domestic-manufacture preferences by opening manufacturing plants in-country; Hyundai with Astana Motors in Kazakhstan, and Isuzu with SamAuto in Uzbekistan. Several of the large Turkish manufacturers have plans to do the same, according to their representatives at Busworld Almaty in 2019. In order to qualify as having been domestically manufactured, only 51% of the process must take place within the country, so foreign manufacturers have been assembling vehicles in domestic plants, having fabricated most of the parts at their own factories. This reduces the amount of capital that must be invested in each new plant, as less training is required for the workers, and fewer specialised machines and tools need to be purchased.

So far, few European manufacturers seem to have similar plans; which was partially evident from the scarcity of European manufacturers at Busworld Central Asia. It is likely that even with in-country plants, European makers would struggle to compete with their Turkish and Chinese counterparts, who not only have a head-start and closer cultural ties to the region, but whose R&D avenues might make them a better fit for the region’s needs. This is because Central Asian countries are interested in cheap low-emissions and zero-emissions vehicles, as the purchase of these is the priority it seems by large development banks such as the EBRD. With seasonal temperature extremes comparable to the Central Asian region, Turkish and Chinese manufacturers have given greater priority to the battery-insulation technology required for e-buses to operate in these climates. European manufacturers’

Continued on p6

Operator Case Study

Almaty public service fleet renewal strategy

Over the last few years, Almaty has had huge success in upgrading its fleet of public transport vehicles and has done so despite severe budget constraints. Since 2016, 80% of its fleet has been replaced, according to Khamrayev Sadir, the General Manager of Almaty Transport Holding Company. As of May 2019, there are 1,680 buses on the road every day, running along 125 routes, serving a population of 1.7 million people, who make an average of 1.3m transactions with their ONAY cards per day.

Almaty’s Transport Holding Company is a private company responsible for ticketing, revenue collection and administration of the city’s bus routes. It mediates between the majority and private companies: it directly manages the municipal bus fleet, which provides about 60% of the city’s buses, and regulates the thirteen private companies which, between them, comprise the remaining portion of the fleet.

Prior to 2016, it was a very different story – Sadir described the company’s whole previous lifetime, stretching back fifty years, as a ‘prolonged period of crisis.’ There were 24 municipal buses and 1000 unofficial buses, most of whom were driven by independent owner-operators. As a result, bus services were inefficient and patchy, and Almaty’s citizens often had to travel in vehicles which were noisy, dilapidated and unsafe. Parts of the city were chronically underserved as owner-operators competed for the most profitable routes.

The key to Almaty’s improvements was the introduction of e-ticketing in 2016, through the ONAY bus payment system. This spurred development in several ways. Firstly, it encouraged Almaty residents to use the bus system rather than their own vehicles or taxis – a standard fare with an ONAY card was 80 KZT, rather than the 150KZT it had been under the previous cash-based system. Secondly, it allowed the Transport Authority to collect valuable data about bus usage, helping the city receive a national grant to buy 400 buses in early 2017. Thirdly, e-ticketing created a clear record of payment, allowing small owner-operators bank loans to upgrade their own vehicles.

Although the city has spent significant sums on upgrading its fleet, these costs have been offset by significantly higher revenues; in 2016, Almaty’s buses collected approximately USD1.3 million per month. By 2019, that figure had risen to USD5.263 million for the month of May.

E-ticketing has also saved the local government money. Kazakhstan’s central government guarantees preferential fares to members of the twelve classes of citizens who qualify for discounts. Often, these discounted journeys lose money compared to the real cost of the fare, and private operators had been known to claim more subsidy than they were really earning. From 2016 to 2018, the subsidy paid out to private companies plummeted from USD9,822,509 to USD562,586.

The private operators have been somewhat squeezed; not only have they lost a large chunk of their subsidies; they have also had to upgrade their own buses in order to match the quality of the municipal fleet. Nonetheless, Sadir asserted that their costs were being more than offset both by increased fare revenue, and a new form of subsidy on ‘social’ routes, where operators are rewarded for operating routes in remote areas.

The Transport Holding Company is playing a key role in future overhauls. Not only does it set the minimum requirements a bus must meet to operate a route in the city, it has tendered on behalf of the municipal government an order for 200 new midi-buses and 60 large buses this year, with private operators projected to tender for 200 more. Sadir hopes to improve the quality of buses still further in the future. Whereas the first stage of overhaul involved buying diesel buses from the Russian manufacturer Liaz, and Chinese manufacturers Yutong and Golden Dragon (the latter being the most popular with the private operators), the company intends to focus on cleaner diesel and CN9 buses in the future. Sadir emphasised that whilst the first generation of replacement buses did not meet emissions standards expected in Europe, they nonetheless hugely reduced emissions in the city itself by encouraging citizens to use public transport rather than their own vehicles. As he put it “We started with diesel because the awful condition of the fleet at that time. We needed to change it quickly. With our budget, we could have bought fewer, more environmentally-friendly buses, but felt it important to update as much of the fleet, in the shortest possible time, that we could…” From an ecological perspective, our top priority is getting people in buses and out of private cars.” Electric buses are not currently seen as an important aspect of Almaty’s transport future due to their cost, the extreme seasonal temperature changes that characterise Kazakhstan, and the mountainous terrain.

Almaty’s Transport Holding Company offers an interesting example for other developing cities. On a limited budget, it used the data provided by an innovative and bespoke e-ticketing system to rapidly upgrade its public transport in a cost-effective manner. Other cities in the developing world which, like Almaty in 2016, have large populations and serious problems with congestion and pollution might well want to adopt the Almaty model. If others do follow suit, commercial opportunities abound for second-hand and refurbished bus sellers to provide the first generation of overhauled vehicles, for data specialists and computer programmers, for development banks and for private lenders, and, eventually, for the large manufacturers to offer green, low-emission vehicles.
**Allur Group assembling JAC buses in Kostanay, Kazakhstan**

Kazakhstan / China - CKD assembler of JAC-branded cars, Allur Group* announced at Busworld Central Asia in Almaty that it was now assembling buses at its headquarters in Kostanay, Kazakhstan. Since it began manufacturing last year, Allur says it has sold 100 buses in Kazakhstan and suggests that by the end of 2019 it will have sold 300 of its own locally assembled buses in the country. Prior to this development, it had sold two buses with total sales amounting to 700 during a period of four years.

The move to assemble JAC buses locally came about as a result of two transactions; the purchase last year of the Allur Group by a Chinese company, China National Machinery Import and Export Corporation (CMC) and, its cooperation since 2010 with vehicle manufacturing giant, China Anhui Jianghuai Automobile Co Ltd (JAC) of Hefei, China - for more details see below.

Vitalii Loktiev, Allur director of aftersales service and spare parts, at the event attributed the company’s success and recent move into the new bus market to the Kazakhstan government’s three-year plan to upgrade public transport in the country. A condition of the government’s plan was to prioritise vehicles manufactured within the country for municipal purchase.

Loktiev added Allur was currently engaged in a one-year trial of five buses in Aktau, used on the airport-city centre routes, and ten electric buses in Pavlodar, for use on inner-city routes. The airport bus, the HFF6123G03EV-2, manufactured under the brand name Ankai, is 12 metres long with space for 37 seated passengers. It uses a 600V/538V battery, providing a range of up to 320 kilometres with a maximum speed of 69 km/h. The drivetrain is made in-house by Ankai. In Pavlodar, the 10-metre HF66101K10EV, with space for 46 seated passengers, is being trialled. It has a slightly smaller 585A/H538V battery but can travel up to 100km/h and uses the same Ankai drivetrain as the 12-metre model. Both models have a full-charge time of approximately 2.4 to 4 hours.

The company is also focused on developing CNG buses for the region. At present, it has 80 CNG buses operating in Aktau; with the abundance and relative cheapness of CNG in the region, Loktiev said, it was highly likely to result in further orders for CNG buses in Central Asian cities.

*Allur Group - China National Machinery Import and Export Corporation, a wholly owned subsidiary of China General Technology Group (Genertechn) of Beijing in December 2018 acquired all the shares in Kazakhstan’s Allur Group. Included in this acquisition was the passenger car producer, SaryarkaAvtoProm LLP, which has been producing vehicles in Kostanay since 2010. It is claimed it is the only producer of CKD (CKD production including the body welding, painting and assembly) passenger cars in Kazakhstan. It produces a range of cars sourced from China Anhui Jianghuai Automobile Co Ltd (JAC) in Hefei, China, claiming a 36% local content.*

---

**Investment / Expansion / Export**

Samauto aiming to double bus production this year

Uzbekistan / Kazakhstan – Samauto* of Samarkand, Uzbekistan is planning to produce some 10,000 buses in 2019, which would be more than double the 4,000 units built in 2018, suggested Serkan Öztürk, export specialist for Samauto at Busworld Central Asia in Almaty, Kazakhstan held at the end of June.

Building on strong growth within Uzbekistan in the medium duty bus segment, Öztürk said Samauto planned to expand its exports business, focusing strongly on sales to other CIS countries. Öztürk acknowledged this was an ambitious goal, but one which it needed to achieve to justify expansion of its manufacturing facilities and building two and a half times the number of vehicles produced last year. According to Öztürk, since 2006, Samauto has exported 850 buses, 200 of those to Kazakhstan since it established dealership there in 2010.

Öztürk, said Samauto currently produces five bus models from six to eight metres in length, equipped with either diesel and CNG engines made by Isuzu Motors and Cummins. As well as buses, Samauto manufactures trucks and specialist vehicles, producing ten different models of chassis which can be combined with 40 different bodies.

At Busworld Central Asia Samauto exhibited its LE 60 and HC 40 bus models. The 8m LE 60 low-entry model has either a Cummins 415Bse 185B or an ISUZU 4HK1-TCC engine and automatic Allison 2100 gearbox and can accommodate up to 57 passengers. The 38 passenger 6.9m HC 40 high floor bus has a front-mounted Isuzu 4HF1 engine and Isuzu MY5Y75 gearbox.

The buses are built at the factory in Samarkand, Uzbekistan, using CKD kits from Japan.

*Samauto – Samauto is the brand name of Samarkand Automobile Factory LLC of Samarkand, Uzbekistan, a joint venture between Uzbek company, SamKochAuto, also of Samarkand, the Itcho Corporation and Isuzu Motors Ltd.

**Technology / Data Management**

Almaty’s ONAI card gives great management data

Kazakhstan - ONAI, Almaty’s cashless public transport payment system, was established in 2015 as part of a government scheme to improve Kazakhstan’s digital infrastructure by 2020. Having consulted systems used in 24 other cities (London’s Oyster Card and Hong Kong’s Octopus card) it proceeded to develop its own system, tailored to the habits of its local citizens.

The project has so far been extremely successful: Fewer than 1% of bus payments are in cash, the majority of those being from non-natives. ONAI cards not only reduce the price of travel but it can be used as a secondary debit card and used as a discount card at many cinemas, restaurants and bars in Almaty. It can be topped up at one of 3000 kiosks in Almaty or via a mobile App.

Currently 80% of Almaty’s citizens have ONAI cards, and use them to make 1.2 million transactions per day. The principal advantage of the ONAI system is that it has allowed Almaty’s transport authorities to gather huge volumes of data about who is using public transport, how much they are using it, and at what times, thus allowing them to improve their bus routes and increase provision at the most heavily-trafficked times of day and areas of the city.

---

**Trend / Alternative Drive**

**Huge potential for Voith transmissions with gas buses in Central Asia, says representative at Busworld Almaty**

Germany / Kazakhstan – Claiming that almost all buses in Astana, Kazakhstan’s capital, already have Voith transmissions, Anton Khapugin, Voith regional sales director said at Busworld Central Asia in Almaty that the company’s potential for sales growth in the region for its DWA transmissions was huge. He said the potential for growth in Almaty and in other Central Asian cities was due to the high compatibility of its transmissions with CNG engines, which Khapugin believed were most likely to become the main successor to diesel buses in the region over the coming years.

Voth Turbo, the division of the Voith group which specialises in drive and braking systems, were present at Busworld Central Asia Almaty to expand their already sizeable footprint in Central Asia. Promoting its automatic transmission, which was first developed over sixty years ago and has undergone continuous refinement ever since. The transmission today has four forward gears, one overdrive gear and one reverse gear and the latest version, DWA 6.6 is designed to prevents gear changes until the vehicle is traveling at 20km/h to reduce fuel consumption, reduce maintenance and extend the life of the transmission.

The project has so far been extremely successful: Fewer than 1% of bus payments are in cash, the majority of those being from non-natives. ONAI cards not only reduce the price of travel but it can be used as a secondary debit card and used as a discount card at many cinemas, restaurants and bars in Almaty. It can be topped up at one of 3000 kiosks in Almaty or via a mobile App.

Currently 80% of Almaty’s citizens have ONAI cards, and use them to make 1.2 million transactions per day. The principal advantage of the ONAI system is that it has allowed Almaty’s transport authorities to gather huge volumes of data about who is using public transport, how much they are using it, and at what times, thus allowing them to improve their bus routes and increase provision at the most heavily-trafficked times of day and areas of the city.

---

**Kazakhstan and Central Asian Republics - A market assessment**

Continued from p6.

best hope is to focus on the second-hand market, potentially by instigating strategic buyback schemes in Western Europe for older Euro VI diesel and CNG buses.

Direct imports of new buses are still a possibility – currently, domestic production facilities can produce only 25%14 of the region’s projected needs by 2023, but it will be difficult for European manufacturers to compete on price with low cost producers from Russia, China and Turkey.

One notable trend in bus trends across the region is the growing importance of data. Companies specializing in e-ticketing software and hardware, data analysis to optimize bus routes and inaugurate demand-responsive schedules, and fleet telemetry
Anadolu Isuzu focussing sales in Central Asia

Kazakhstan / Turkey - Hakan Kefoglu, export director for the Kocaeli, Turkey-based bus and coach builder, Anadolu Isuzu (Anadolu Isuzu Otomotiv Sanayi ve Ticaret) speaking at Busworld Central Asia in Almaty last month said the company was actively looking to expand bus and coach sales in the region. With over 60% of its revenue in 2019 already being generated from export sales, he said, Anadolu Isuzu intended to increase this percentage even further in the coming years; in part by taking advantage of the free trade agreements between Turkey and the Commonwealth of Independent States (CIS), which offers it a competitive advantage compared with other European manufacturers based outside Turkey.

Kefoglu said Anadolu Isuzu already has 65 vehicles in operation in neighbouring Tajikistan and were currently the largest provider of buses in Azerbaijan, Kazakhstan’s neighbour across the Caspian Sea. Furthermore, he said, the company’s delegation in Almaty had had several productive meetings with transport officials representing Almaty and Astana during their time in Kazakhstan as well as with representatives from cities in Azerbaijan.

Kefoglu pointed out municipal and national tendering processes in Kazakhstan and other central Asian republics were inclined to give priority to manufacturers that build vehicles within their country or within the region. When asked if Anadolu Isuzu intended to set up an assembly or manufacturing facility in the region, Kefoglu said discussions were being held regarding CKD (Complete Knock Down) kit assembly, but nothing yet had been finalised.

For Kazakhstan and other countries central Asia, Anadolu Isuzu is focusing on sales of its 9.5m and 12m CNG buses. Whilst the overwhelming majority of buses sold in Kazakhstan are currently second-hand diesel buses, Kefoglu said municipalities across the country were looking to overhaul their fleets over the next five years, and can access an element of funding to achieve this through the European Bank for Reconstruction and Development (EBRD) and the International Bank for Reconstruction and Development (IBRD) providing they acquire qualifying low-emission vehicles. Given the abundance of natural gas within Kazakhstan, and other countries in the region, Anadolu Isuzu (and other manufacturers) believe CNG-fuelled buses offer the best solution. In answer to the prospect for electric buses, Kefoglu suggested the harsh and very climate conditions in Kazakhstan and the central Asia region presented real challenges in terms of maintaining the integrity of the batteries of an electric bus – notably the temperature range of the battery cells. Kefoglu added that Anadolu Isuzu were in talks with China’s BYD, regarding use of its NMC and Li-ion batteries, and the prospect of developing electric vehicles which could cope with the extreme seasonal temperature changes characteristic of the region. He also emphasised that Kazakhstan, and other Central Asian countries, had budgetary and infrastructural constraints which meant that the latest in electric vehicle technology was simply beyond the budgets of many municipal authorities and private operators.

Continued on p8

Otokar evaluating strategy for exporting to Central Asian region

Kazakhstan / Turkey - Otokar* of Sakarya, Turkey attended Busworld Central Asia held in Almaty, Kazakhstan at the end of June to showcase its products in a country and region where it sees considerable potential for export growth. Representatives at the show stated Otokar had already sold buses in Azerbaijan, and it currently has vehicles on trial in Georgia, and it is keen to expand into other countries in the region.

Emre Sarp, commercial vehicles sales and marketing group manager at Otokar said it was still evaluating its strategy for the region, but would work on the basis Central Asian Republics would, under incentives from the European Bank for Reconstruction and Development (EBRD) and the International Bank for Reconstruction and Development (IBRD), move towards adopting European emissions and safety standards. Should this happen, Sarp said, Otokar would be well-placed to make inroads into the market. Turkey, he added, has pre-existing bilateral free trade agreements with the constituent countries of the Economic Cooperation Organisation (ECO), of which most Central Asian states were members. Reduced trade barriers with and between ECO nations would put the Turkish Otokar at an advantage over other European manufacturers, which do not enjoy the same ease of access.

* Otokar is a brand created by the 50:50 joint venture between Turkey’s Anadolu Isuzu and Germany’s Isuzu Sports
Astana Motors adds Golden Dragon to growing portfolio

Kazakhstan / China - Astana Motors of Almaty in March this year it had begun to assemble Chinese buses from Xiamen Golden Dragon Bus Co Ltd of Xiamen, according to Adilbek Gayev, the head of distribution for commercial vehicles at Astana at Busworld Central Asia in June. On display was the electric 12m XML6125CLE model. Equipped with a Lithium iron phosphate battery (LiFePO) battery (LFP 576 VDC / 540 Ah (311KWh)), it can carry 40 passengers up to 260 km on a four-hour charge. It featured 2F RLB2EC independent front axle and 2F AV 132 rear axle. The XML6125CLE, like most of Golden Dragon’s current range, has a monococque body which has been electro-plated in a series of coats and polymers, thus increasing the strength and corrosion resistance of the body. Buses with this “e-coating” not only have decreased maintenance costs but are enabled to have lighter and thinner body frames – a particularly important consideration for electric buses.

In China, Golden Dragon has three manufacturing plants producing 40,000 units each year. Plans for the Astana plant are more modest: At present, Gayev indicated the Golden Dragon buses on display at the show were the only ones yet to have been produced at the Astana plant. However, Golden Dragon’s strong historical sales in the region do point towards demand for locally assembled Golden Dragon buses, which can be sold without tariffs within Kazakhstan, and exported without tariffs to other CIS countries.

The Golden Dragon brand is the company’s third foreign commercial vehicle brand that it is now assembling and distributing in Kazakhstan and the surrounding region. Astana Motors today is Kazakhstan’s largest vehicle dealership. Founded 27 years ago, it expanded into commercial vehicles in 2005, and currently claims to have a 26% market share for commercial vehicles in the country. In 2011, it started assembling vehicles at its plant in Astana. Initially, it assembled Hyundai trucks and began assembling Euro IV and Euro V Hyundai County mid-buses the following year. In 2017, it expanded into assembling MAZ (Minsk Automobile Plant) trucks and heavy specialised vehicles. Assembling these units in Kazakhstan has allowed Hyundai and MAZ to gain a significant presence not only in the country, but also in the region: According to Astana Motors’ owner, Nurlan Smagulov, Hyundai is the second highest-selling brand of vehicle in CIS (Commonwealth of Independent States) countries.

Strategy / Export / Assembly

Local CKD assembly with Azerbaijan’s Ganja raises expectations of sales in Central Asia for Belkommunmash

Belarus / Kazakhstan - Belkommunmash of Minsk, Belarus, a producer of trams, trolleybuses and more recently low floor full electric buses, used the inaugural Busworld Central Asia exhibition in Minsk, Kazakhstan to display two scale-models of its electric buses; the Electrobus E321 (a 12.2m, 18t gvw, low floor, three double-doors, 180kW motor and passenger capacity of 83 with 26 seats) and the Vitovt Electro E420 (a two-axle low-floor vehicle with two sets of double doors between the axles). A spokesman for Belkommunmash at the show said it was the company’s intention to export more electric vehicles: This year it shipped four electric buses and two charging units to Uzbekistan and, by the end of the year it would also have delivered both electric trams and trolley buses to Uzbekistan. In the past year it has also shipped three trolley buses to cities in Moldova, Kyrgyzstan and St. Petersburg in Russia.

The spokesman also announced that in January this year, Belkommunmash had signed a manufacturing cooperation agreement with the Ganja Automobile Plant in Ganja, Azerbaijan. This agreement was for the delivery of four electric bus model E321 units in CKD kit form for assembly by the Ganja Automobile Plant for a pilot electric bus model for the city of Ganja.

Belkommunmash’s recent growth in exports, the company said, was due to the company’s electric vehicle design and particularly for its inclusion of differential supercapacitors, made by Aowei. Whilst current electric bus models fitted with these supercapacitors have a limited range (for example, just 30km in its 8m model and 50km for its 10m model), Belkommunmash claims they have the advantage of being fully re-charged in just six minutes, making the vehicle highly suited to urban operations. Another advantage stated was that unlike batteries, supercapacitors don’t lose energy density with the number of charging cycles and so the supercapacitor is expected to last double the lifetime of batteries, offering an average of ten years of use (90,000 charge cycles) rather than five years with traditional / standard battery technology.

In order to expand its presence in Central Asia and Eastern European countries, Belkommunmash says it has created two types of hybrid buses. Its hybrid models use the same supplier for the batteries and supercapacitors, and the engines are manufactured and supplied by BelGeo, a local Belarussian company.

Belkommunmash targets western Europe

Belkommunmash also announced at the show its intention to expand into the EU. It plans to unveil a new electric bus model at Busworld in Brussels later this year. It announced it has established a joint venture with an unnamed Polish company in order to lower the cost of entry into the European Market, the company will to receive an EU certification for its vehicles.

Founded in 1973 to manufacture trams and trolleybuses, Belkommunmash began producing electric vehicles in 2016, and since then it has had considerable success within Belarus. Currently it has 90 full electric buses in operation in Minsk: 48, 18m articulated E433 Vitovt Max Electro buses and 32 shorter Electrobus E321 12.2m buses, as well as electric trolleybuses and trams in cities across the county.

Manufacture / Joint Venture

Local production in Tajikistan with JV partner expected to give Akia sales advantage in CIS countries

Turkey / Tajikistan / Kazakhstan - Akia Avusto Automotive Industry LLC (a joint venture company established in January 2018 between Akia Hess Otomotiv Karoseri İmalat San. ve Tic. Ltd (Akia) of Istanbul, Turkey and the Avesto Group (a diversified group of companies operated by the Tajik government for encouragement of foreign investment and technology in the country) of Dushanbe, Tajikistan, announced at Busworld Central Asia in Almaty, Kazakhstan that in June this year it had inaugurated a bus factory in Dushanbe, Tajikistan. With an initial annual bus manufacturing capacity of 300 units a year, the Turkish company said it planned to increase sales in the region, and that this goal would be aided by its ability to build vehicles within the Commonwealth of Independent States (CIS) and thereby, avoid import tariffs part on vehicles built outside the CIS.

At the show it displayed three buses, an 8m (Ultra LE 8) model (Ultra LF 12) and a double deck; all featured Euro 5 Mercedes-Benz engines with ZF transmissions and axles. The Ultra LE-8, for instance, featured a Mercedes-Benz OM934 LA 5,1-litre Euro 5 engine, capable of generating 130kW output and 750Nm of torque, matched with ZF transmission and axles. It can accommodate 26 seated or 30 standing passengers.

At the show, while Serkan Denizmen, Akia’s Sales and Marketing Manager, acknowledged its buses carried a higher upfront cost, the high-quality level and lower maintenance and service costs over the lifetime of the vehicles meant a higher level of passenger comfort for a lower cost of ownership for the operator. The joint venture operation of Akia Avusto has been established with a paid-in capital of 90 million Somoni (EUR8.5m) and was expected to generate work for some 200 people. It has six lines for production comprising welding, priming and painting, mechanical and electrical assembly, interior fitment and final quality control.