

# Opening widely windows to new opportunities

Innovative developments help us to see landscape from above, find genetic predispositions, and track the spread of plant and animal migration

By Valentina Goryacheva

Belarus' innovative development programme has brought us such novelties as a unique system of labelling and certifying organic products, highly durable brake pads, new ways of disposing of ammunition, the creation of domestic explosives for peaceful purposes, and unmanned aircraft with an operating range of 300km (allowing coverage of the entire country from Minsk).

The strategic importance of innovations is obvious; they are the ticket to the future and we must seize the moment. "On-going technological trends open 'windows of opportunities', bringing a new wave of economic growth," noted the President of Belarus, Alexander Lukashenko, recently addressing the Belarusian people and the National Assembly. "In such periods of large-scale global technological shifts, 'windows of opportunities' allow single countries to move ahead."

Belarusian science is ready to take a leap, with the market guiding which innovations gain inclusion on the state programme. "In particular, our project to deal with ammunition was developed from necessity: there was a large expired volume," explains the Deputy Chairman of the Presidium of the National Academy of Sciences of Belarus, Sergey Chizhik. "Of course, these weapons could be blown up but we've found a way to recycle efficiently and with economic benefit: for example, by removing non-ferrous metals."

Unmanned aircraft equipped with infra-red cameras can follow the movement of animals — from hare to bison — through Belarusian forests, guiding environmental and economic plans. Meanwhile, anyone wishing to find out their 'genetic identity' can do so for a fee. The first Deputy Chairman of the State Committee for Science and Technologies, Leonid Demidov, tells us that, this year, high-tech enterprises will have their tax liability reduced,

in order to stimulate their work.

Competition is a strong impetus. For example, Brest Electric Bulb Factory has designed and launched the production of a variety of fluorescent lamps to fulfil its role in the state's innovative development programme and the import substitution programme. They are more expensive than Chinese counterparts, which are flooding the Belarusian market, but of much better quality. "Producing energy-saving lamps for the third year, our main goal is to make them high quality yet cheap," asserts the Director of Research and Production at Akhova PUE, Nikolay Karviga. "We aim to make a lamp equivalent to a 75-watt incandescent bulb, costing no more than \$5-7 (in equivalent). We've made a prototype and, after certification, production can be launched." An intelligent combination of innovative potential and public-private partnership is producing not only high quality goods but revenue worth millions of Dollars to the budget.



Unmanned aircraft assembled at Minsk Aircraft Repair Plant

## Convenient flights to Rome

Belavia acquires another Boeing 737-300

The new aircraft is the 21st in the fleet, having now undergone complete technical inspection to confirm that it meets all international safety standards. The Boeing 737-700 is designed to transport around 150 passengers in economy and business classes, travelling up to 4,000km at a maximum cruising speed of over 800kmh.

The new aircraft joins Belavia's existing five Boeing 737-700s and is destined for the busiest charter routes: to

Bulgaria, Greece, Turkey and Egypt. It may also be used for regular flights to Tel-Aviv, Tbilisi and Rome.

Belavia plans to continue expanding its fleet with Brazil-made aircraft: the Embraer-175 (seating 76) and Embraer-195 (seating 107 passengers). By 2017, the company hopes to have purchased three Boeing 737-800s and Tu-154 planes, raising its fleet to 27 aircraft. This will allow the route network to expand and frequency of flights to be extended.

## With invisible armour

Two hundredth armoured car produced in Smorgon

The first armoured car was produced by Russian owned LLC Practic-Service in 2008, at the Smorgon plant. Based on a Volkswagen model, the vehicle offers protection for those in need of extra security: VIPs or those transporting important goods or documents. The USA was first to

produce such cars, which appear 'ordinary' yet which harbour armoured sheets inside the body and are equipped with bulletproof glass and cameras. The enterprise also armours cars based on Peugeot and Ford models. Two hundreds of such cars already have a customer waiting and the enterprise plans to produce three new models.

## Neighbours come closer

By 2015, travel time between Minsk and Vilnius by rail should stand at two hours

According to the Deputy Director General of Lietuvos Gelezinkeliai (Lithuanian Railways) and the Director

of the Passenger Transportation Directorate, Raimondas Burkovskis, speaking at a press conference in Minsk, by late May, travel time between Minsk and Vilnius should fall to 2.5 hours. By 2015, it should stand at just

two hours.

This year, passengers will benefit from Lithuanian Railways' introduction of new diesel trains, which are able to reach speeds of 140kmh. Electrification of the line within the next two years will

allow speeds of 160kmh, enabling the further reduction of journey time.

According to Mr. Burkovskis, Belarus and Lithuania are now discussing the launch of a diesel train between Vilnius and Lida.

## Comfortable travel



Swiss trains immediately win recognition among passengers

Belarusian Railways purchasing 40 contemporary passenger carriages

The first four sleeping cars will be delivered from May-June, with all car-

riages equipped with air conditioning. Meanwhile, 19 passenger carriages are being overhauled and upgraded, with AirCon systems installed.

From 2013-2014, Swiss

Stadler Bussnang AG is to deliver six electric trains (five carriages each) for business class regional lines. The new trains will boast greater comfort (seats positioned to face the same

direction) and increased capacity (302 seats instead of the existing 216 on electric trains. Each of the new electric trains will feature three vacuum toilets (including one with disabled access) compared to existing trains having only one WC. The new trains will also boast additional shelving for large-sized luggage.

Belarusian Railways has announced its renovation and updating of its passenger fleet, having purchased about 170 passenger carriages over the past six years — including those for travel to the EU. The latest carriages not only feature air-conditioning and eco-friendly toilets but have power sockets to allow passengers to charge laptops and mobile phones.