

Transmission wires a thing of the past?

Do coin-box telephones and old-fashioned radio and telegraph still have a place in our modern world?

By Anatoly Ruslanov

The number of mobile subscribers in Belarus has already exceeded 10m, while the number of regular Internet users is close to 5m. Under such conditions, it's hard for traditional types of communication to survive: letters, telegrams and wired-radio outlets. However, they still have a role to play in our age of electronic technologies.

Emails and SMS-messages seem to have replaced paper mail but the National Statistical Committee of Belarus stresses that written correspondence actually rose from 2000 to 2009. Of course, business correspondence has increased over the last decade but letters to friends and loved ones, as well as congratulations on various holidays, are still popular among our residents.

Traditional postal services do need to move with the times. Hybrid mails, uniting an electronic message with an ordinary paper version, are one such evolutionary move, adapting to the new situation.

In Soviet times, wired radio was in almost every home; now, plenty of rivals exist, with the wired network in modern Belarus seeing only losses. Its future is being discussed at state level, with some proposing it be completely dismantled, as in several foreign countries. Others believe it can save lives in emergency situations while some advocate using existing lines to connect subscribers to the Internet (although the technical feasibility of such a project remains questionable).

What about the telegraph? "These days, opera-

tors use computers instead of heavy telegraph devices; old telegraph nodes, which previously used to occupy whole buildings, can now be housed easily in a few ordinary telecommunication cabinets," notes Beltelecom. Meanwhile, taking into account the development of new communication means, the number of telegrams sent has fallen approximately 3-fold countrywide, down to around 5,000 daily.

The number of street coin-box telephones has also fallen across the country, with about 13,000 remaining (over 2,000 are installed in rural areas). This ensures a certain social standard but coin-box telephones can hardly compete with mobile phones. Nevertheless, they are extremely useful in some situations, since they can be used for reverse charge calls and can



ALEXANDER RUZHECHKA

Coin-box phones hardly compete with mobile communications but can prove useful receive incoming calls.

Over the last decade, the number of mobile subscribers in our country has risen 200-fold (against about 50,000 subscribers in 2000). However, the number of owners of fixed-line phones has also risen — by over 30 percent over the same period, to exceed 4m. According to Beltelecom, this rise will continue, as housing

construction rates are ever growing. Each new flat can be connected to the Internet, allowing residents to use interactive television, in addition to having a fixed-line phone at home. Specialists believe that fixed-line phones still have some surprises up their sleeve, boasting new technological features.

'Wires' are now trying to

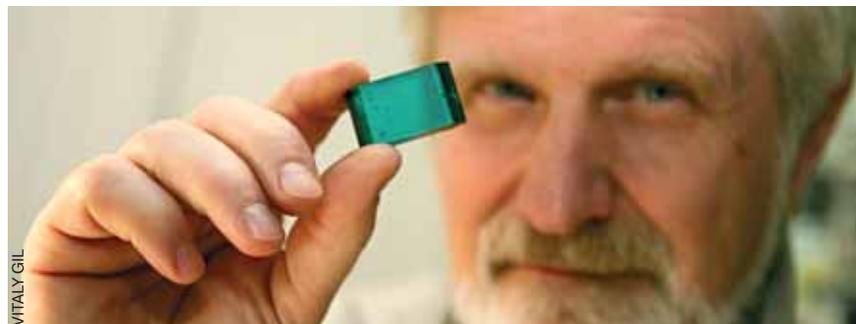
expand their opportunities, so it's too early to dismiss them. Undoubtedly, manual typing machines cannot compete with computers but not all older technology is so easily redundant. Some Western European countries rushed to dismantle their tram rails but have now begun restoring them, realising their 'green' properties and reliability.

Keeping jewellers happy

By Ruslan Nesterov

Scientists from National Academy of Sciences' Scientific-Practical Centre for Materials Research grow their first artificial red emeralds

The latest technology developed by Belarusian specialists is truly a discovery of global importance, explains Vladimir Merkulov, who heads the Superconducting Physics Materials Laboratory, at the Scientific-Practical Centre. He tells us, "For the first time, we can industrially create red emeralds; the first are now ready and are identical to natural stones in their appear-



VITALY GIL

Not anyone can distinguish between natural and artificial emeralds

ance. They are of good quality, keeping their colour and proving strong enough not to be damaged." In the future, Belarusian red emeralds should occupy a worthy position on the global jewellery market. The first customers are being sought, with marketing work proceeding already.

The technology of growing artificial stones is a novelty discovered by Belarusian scientists, with the technique being kept secret. We do know that beryllium oxide is used to grow each stone, being the major component of the 'recipe'; scientists from different states independently decide which other elements to use and in which propor-

tion, with Belarusian specialists having their own method.

The Scientific-Practical Centre has been producing artificial stones for several years, creating emeralds and rubies, which are in great demand domestically and abroad. These artificially grown stones are the equal of natural stones in their optical characteristics and transparency. In fact, they tend to have fewer defects.

A natural emerald is a unique and rare stone, with limited deposits on our planet. Foreign experts say that they'll deplete quicker than oil so, foreign jewellery making companies now prefer synthetic versions.

Master classes organised for doctors to share experience

Grodno Regional Perinatal Centre to share secrets with Kazakh colleagues

The Centre has won a tender to re-train doctors from Kazakhstan this year, having competed against specialists from Lithuania, Latvia and Israel. The Grodno

doctors have organised their first master class at Aktau's Perinatal Centre, demonstrating their true professionalism to their colleagues and proving why Belarusian medicine has an acknowledged reputation. They are to give two master classes in Kazakhstan's Mangys-

tau Region, also visiting other districts of the country, while Kazakh colleagues are also to visit Grodno several times for training.

Last year, almost 3,500 babies were born at Grodno's Regional Perinatal Centre, which aids women and babies in difficult cases.



BELTA

Doctors ready to share experience

Sports engineers trained at BNTU

By Lyudmila Vierovskaya

Belarusian National Technical University negotiates the establishment of joint scientific-training centres with SAR, Germany, China, Vietnam, Austria, Sweden, Russia, Ukraine and Poland

"Modern highly qualified engineering staff are the basis for solving the most complicated issues defining the development of any state," believes BNTU Rector Boris Khrustalev, an academician, doctor of technical sciences and professor. "In this respect, one of the BNTU's most important tasks is the realisation of staff potential, meeting global political, economic and technological standards. The establishment of scientific-training centres, jointly with leading universities in the SAR, Germany and other states, will help us train our students using the latest developments and scientific achievements."

The BNTU liaises with over 100 universities from 32 countries. Having preserved its academic school, Belarus' major technical university reacts promptly to economic challenges, offering three new specialities annually (there are 85

in total at present). The latest — such as geodesy, ship building and nuclear physics — are proving popular with applicants. It is also the only Belarusian university to train military economists and sports engineering specialists.

The BNTU has been regularly taking part in the Hannover Fair and, for the past five years, has been organising the national sci-tech trade fair, under the order of the Belarusian State Committee for Science and Technology, the Education Ministry and the National Academy of Sciences. It has taken an active part in establishing the Belarusian-Chinese Technopark in Changchun, while supporting international educational and scientific programmes (conducted by UNESCO, UNIDO and the DAAD Information Bureau of the German Academic Exchange Service). It is a fully-fledged member of the European University Association (EUA), the International University Association (IAU) and the European Society for Engineering Education.

At present, over 1,000 students from 30 states, from the CIS and beyond, study at the BNTU, which is among the highest figures for Belarusian universities.