SkyWay technology was presented at the forum "Novosibirsk – city of endless possibilities" that was held recently in our city. The forum also discussed the possibility to implement a pilot project of SkyWay string route, which will presumably pass between the Novosibirsk National University (NNU) and Academpark. The discussion continued at a meeting of the Club of promising initiatives, the initiator of which is the CEO of the Department of industry, innovations and entrepreneurship of the city administration Alexander Lyulko.

— The ideas that seemed fantastic at first, then often became popular in real life, — said Alexander. — We decided to create an open platform where experts could discuss the prospects of implementing any innovative project in a free manner.

This time the subject of discussion was the project of the SkyWay route regarding its relevance to the transport infrastructure of Novosibirsk. It is based on the so-called string technology developed by the Belarusian engineer Anatoly Yunitskiy. The author calls his invention "an effective tool for solving many global problems facing our civilization in the XXI century". He promises a great future for it.
This concept was born as a project of a high-speed elevated transport. It is partially similar to the project of the elevated transportation being developed for many years by the staff of SibNIA (Siberian Scientific Research Institute of Aviation). The difference is that the overpass consists of string rails, which is less costly than traditional supports. Thus, the concept of the elevated transport system was created, later called the SkyWay. The main elements of such a track are: 1) pre-stressed continuous rail-string overpass; 2) rail cars on steel wheels — highly aerodynamic, equipped with the anti-derailment system and having an intellectual safety system.

This technology arouses great interest currently. Yunitskiy’s team was invited for participation in the famous Berlin trade fair InnoTrans 2016 in September this year. In addition, they are building a demonstration center In Belarus, where several tracks will operate (from 1 to 15 km), on which the technology will be presented in "hardware". Currently preparations for the construction of the first SkyWay line in Australia are under way. And now the idea of a pilot route in Novosibirsk Academgorodok (Academic town) was announced. The cost of the project is about 400—450 million rubles, the payback will be achieved with the passenger traffic from 3,000 people a day.

According to the developers, this technology has a number of advantages. They include environmental friendliness, full automation and high payback of the transport infrastructure. Another "bonus" is the creation of new niches for business. In particular, one of the conditions that were put forward by Novosibirsk supporters of the project to Minsk, was the priority to local enterprises while placing orders for equipment and works in case of the beginning of the project.

However, as noted by experts, the technology also has a number of potentially "weak points". Both economic (it will be difficult to secure the route with a sufficient number of passengers) and technical (for example, how the equipment will behave under the Siberian frost).

— In the transition from design to practice there always appear various problems that the developer could not envisage, – said the scientific Director of SibNIA Alexey Seryoznov. — It is very good that there are investors in Belarus willing to fund practical tests in the demonstration center under construction. For us, the best would be to wait until they master the technology in this center, carry out the
necessary engineering follow-up, and then we will be able to talk about the construction of the lines in our cities including Novosibirsk.

In fact, all the participants agreed that certain skepticism does not mean that Novosibirsk should reject the string-rail transport technology.

— As the respected experts correctly noted, the more diverse the transport system is, the more reliable it is, and the elevated transport will also find its niche in our city, — said Alexander Lyulko. — Moreover, Yunitsky’s technology can work in combination with the developments of the elevated high-speed transport, which SibNIA scientists have been doing for many years. It is a great idea to see how it will work in practice in Belarus. Moreover, representatives of our municipality are invited there in November, when the test site will be opened. And, hopefully, we will avail of this invitation. And then, if the claimed advantages are proven by tests, we shall be thinking about the development of the elevated transport in our city. In addition, we have already developed the project of a route from Academgorodok to the River-boat station in the center and to the airport "Tolmachevo". This would seriously unload the Bolshevik street and a number of central highways. It would cost less than the construction of the forth bridge. The cars of a string-rail track could provide transfer of passengers to the terminal stations of the main elevated route.

Another possible field of application for the SkyWay line is to become a kind of tourist attraction. In this respect, such unusual "funicular" might be in demand and profitable. And the problem of passenger flow can be solved in different ways. For example, by building a route not from NNU to Academpark, but from metro station "Zaeltsovskaya" to the zoo and then to Zaeltsovsky Park.

Georgy Batukhtin