



SKYWAY'S IDEA IS TO DEVELOP PUBLIC TRANSPORTATION BY MOVING IT ABOVE THE GROUND AND CONVERT URBAN STREETS INTO WALKING AREAS, WITH GARDENS, PARKS AND COMMUNITY AREAS.



## “STRING TRANSPORTATION WILL CHANGE THE WORLD”

Anatoly Yunitskiy thinks that hardly anyone was born to spend half of the life in a traffic jam. He thinks he can solve that problem with the help of SkyWay string technologies aimed to improve public and freight transportation infrastructure. OnAir decided to get more details about that project right before the experimental launch of the first SkyWay model in the EcoTechno Park close to Minsk.



**Anatoly Yunitskiy, PhD,** is an engineer and the author of over 140 patented inventions, 18 monographs and over 200 research works. He is also a member of the USSR Space Science Federation and the head of two UN scientific projects. He specializes in the design of string transportation technologies that are suitable for implementation both for space industry and reorganization of the public transportation systems. Currently he implements his ideas within the SkyWay project.

### What is the technology's core thing?

In short, the sting is a wire that is stretched inside an ideally flat rail which has no temperature junctures or other joints along the entire track of any length. The track is assembled on a special support system, and a rail vehicle with steel wheels (we call it unibus) moves along it.

### How did you come up with such an idea?

That was one of the ideas I was working on earlier, within the program devoted to the development of the Planetary Vehicle. Its concept was first presented to the world scientific society about 40 years ago. The concept was called the Sky Wheel and its idea was in the ability to explore the space without launching rockets. The point behind the project back then was the comprehension that the space exploration and moving industrial facilities into the space would be the only way to develop our civilization that sooner or later will become a space civilization.



This is how the idea of the string rail appeared and later it became the core technology for the SkyWay project. Transportation of that kind will be cheaper for all the current alternatives and it also can become an organic part of our physical world since it minimizes harmful influence on the environment.

**How does it differ from other concepts?**

At first, the improved aerodynamics. It usually utilizes over 90% of the energy when we talk about high-speed transport systems. Since the system is located above the ground, we could lower the unibus' drag coefficient to 0.05. Imagine: its theoretical limit in physics is 0.04. If to compare, the coefficient of the world's fastest car Bugatti Veyron is just 0.38.

Second, the string technology uses an improved construction of a steel wheel. The steel wheel put on a steel rail results in 99.8% of efficiency, while the losses are dramatically

lower if compared with the pneumatic tire on the asphalt surface, not talking about other systems.

Third, the string transportation is environmentally friendly. The technology doesn't need an excessive infrastructure development to build the track that usually kills local ecology and blocks natural flow of subterranean waters. The track is assembled above the ground that is left for living. Also, the string transportation doesn't require asphalt, which now covers planet's surface that equals to five territories of the Great Britain. Also, due to good aerodynamics, it requires less energy, so it doesn't burn oxygen and has lower level of emissions.

Fourth, this system is just comfortable, both physically and psychologically since vehicles can have various designs and also because of smooth running, ideal rail and highest possible speed.

Fifth, it is secured. There are no weather limitations, no human factor since all the vehicles can be operated from the



**WHERE TO SEE:**

SEPTEMBER 20-23, AT THE WORLD'S LARGEST EXHIBITION OF THE TRANSPORTATION TECHNOLOGIES IN BERLIN (GERMANY). THE EXPOSITION WILL FEATURE LIGHT MODELS OF VEHICLES.





ECOTECHNOPARK IS A SHOWROOM OF SKYWAY TECHNOLOGIES. IT WILL FEATURE EXPERIMENTAL TRACKS AND VEHICLES FOR PUBLIC, FREIGHT AND HI-SPEED TRANSPORTATION SYSTEMS. THE TERRITORY RESEMBLES A BOTANICAL GARDEN TO STRESS THE GREEN SIDE OF THE TECHNOLOGY. IT WILL BE USED ALSO LIKE A RECREATION AREA FOR LOCAL COMMUNITY.

central computer and controlled by the network of linear and on-board computers. Also, the string is the basic structure with the improved safety margin and the rail will never get torn even if the support system of the overpass will be damaged in some place. This all is supported by our innovative anti-derail system.

#### Sounds great but why is your system often characterized as the Great Transportation Utopia?

I'm thankful for not burning me at the stake, you know. Well, in 1895, the British mathematician and physicist, the President of the Royal Society, Lord Kelvin used to say that "flying machines, heavier than the air, are impossible!". Also, the US authorities thought that William Boeing was a criminal.

I quite often see misunderstanding. A couple of times I was treated as a spy; in some countries they even tried to sue me. Well, 100 years ago hardly anyone paid attention to the first cars, and then the automotive industry changed the entire world.

#### Ok, is that a transportation alternative or full replacement?

At first, people moved on foot. Then, they started riding horses. Then, the railway replaced the cartage. Then cars and airplanes appeared. We can predict what can happen tomorrow. There will be no flying saucers, teleportation or carpet planes; we live in a real world with the laws of physics in place. There is nothing super-natural in the string technology. Using the laws of physics, we developed an optimal transportation system and we are ready to showcase it soon in our techno park in Marjina Gorka, close to Minsk.

I'm not concerned about the technology's effectiveness. World transportation infrastructure will be moving in that direction. Mass implementation will fully prove its advantages. When we build millions of kilometers of the track, the string transportation will replace traditional public systems. It will take next 50 years.

#### What will happen with the urban development?

Transportation issues define urban development. String technology enables people live close to nature but work and spend time in big cities, no matter if it is Moscow, Minsk or New York. I can't imagine any person who was born to spend half of their life in a traffic jam.

#### What transport do you prefer today?

My trips are usually on business. For example, I've covered about million kilometers just travelling to Australia. I have to use a car. But I personally don't drive. That was my decision.



IN NOVEMBER, AT THE ECOTECHNOPARK IN MAR'INA GORKA CLOSE TO MINSK. THERE, THE FIRST KILOMETER OF THE SKYWAY TRACK WILL BE ON SHOW.



#### What are the investment sources for the SkyWay?

Once I understood that this project is not for oligarchs, investment funds or banks. I decided to address usual people. I've developed a crowdfunding system that enables every person invest just US\$ 20 and officially get a part of my intellectual property that is now equal to 400 billion dollars according to independent consultants. Now there are over 100 thousand co-investors from 78 countries. ✉