

**Associate Professor Włodzimierz Choromański**  
Director of Dpt. of Transportation Equipment Construction Theory  
Transport Faculty  
Warsaw Technology University,

## **OPINION**

Regarding: **Metropolitan Individual System of Transportation on an Elevated Rail**

## **M I S T E R**

Unquestionable socio-economic development, both in Poland and around the World, and the development of the so called “information society”, creates serious challenges related to transportation. These challenges are associated equally with the avalanching demand for transportation services, ecology problems, the soon-to-be manifested energy crisis related to the exhaustion of natural energy resources, the necessity to provide safety, adaptation of the transport means for disabled persons etc. The number of appearing problems is multiplying. Therefore it is not surprising that, in the widely understood engineering field of transportation means and systems around the World, there is intensive research happening and aimed at finding new solutions, which will answer these new challenges. A significant role in this search is played by the economic factor, which does not need to be elaborated upon.

In this light, a new solution proposed by Mr. Olgierd Mikosza (MSc EE.), appears to be a very interesting proposal, which, and I am stating this with full conviction, may potentially revolutionize transportation systems in cities.

The system proposed by Mr Mikosza consists of light, “intelligent” gondolas, which are travelling suspended under rails supported by light columns and at low exposition. An extensive network enables for dedicated transport, practically directly to the point of destination. The control system ensures a collision-free and totally safe mode of transportation.

This solution fulfils ecological requirements, allows easy adaptation to the needs of disabled, and is, which needs to be especially underlined, very economical. This economic factor applies both to the costs of system development as well as to its operation. The initial analysis, which I performed, shows surprisingly beneficial qualities of the MISTER system. Undoubtedly, one of its largest benefits is its flexibility. The system can be virtually modified at will and extended “quickly and inexpensively”.

Obviously, development of such a system requires initial research and experimental work, and only then it's implementation.

From the point of view of my knowledge and experience, I can say with full responsibility, that this system is technically entirely feasible, and what's more, potential technical problems do not seem to be unduly difficult. Without a doubt, the most complex element will be the control system.

Similar solutions, as proposed by Mr. Mikosza, are already beginning to appear in the World and I am convinced, that it is only a matter of time before they will begin to be implemented as city transportation.

I am convinced that it is worth undertaking this effort, so that Polish academic centres and companies become leaders in the implementation of such solutions for city transportation.

**Włodzimierz Choromański**