Risk Analysis in Road Transport of Dangerous Goods Using Complex Multi-Criteria Analysis Method

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Abstract: In the management and organization of the road transport of dangerous goods, in addition to the existing influential criteria and restrictions that apply to the road transport in general, it is necessary to include an additional criteria related to the safety of people and the environment, considering the danger that comes from the substances being transported. In that manner, the decision making process becomes very complex and rather challenging task that is inherent to the application of complex numerical multi-criteria analysis methods. In this paper some initial results of application of complex analysis method in decision making process are presented. Additionally, the method for minimization or even complete elimination of subjective element in the decision making process is provided. The results obtained can be used in order to point the direction towards some measures have to be applied in order to minimize or completely annihilate the influence of the risk source identified.

Keywords: road transport, dangerous goods, risk analysis, risk evaluation

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