ANALYSIS AND DEVELOPMENT FORECAST OF RUSSIAN TRUNK AIRLINE NETWORK

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Abstract. Trunk airline network in Russia is socially demanded, because it is aimed at meeting the transportation needs of the population. This research considers the network of domestic trunk airlines as a mathematical object. The research sets out eight basic optional models of existence conditions for through domestic air service in Russia, with different principles for choosing a set of elements for the training set, as well as principles for composing the elements as such. The research analyses the simulation model of domestic trunk airline network for 2006. Evaluation of the simulation model was based on the proportion of rightly forecasted existent and non-existent airlines.

Keywords. Airline network, existence conditions (for airlines), through air service, fuzzy modelling, fuzzy neutral network, network forecasting.