

## Evaluation of Parameters of Subject Models and Their Mutual Effects

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**Abstract :** It is known that statistical information on operation of the compound multisite system is often far from the description of actual state of the system and does not allow drawing any conclusions about the correctness of its operation. For example, from the world practice of operation of systems of water supply, water disposal, it is known that total measurements at consumers and at suppliers differ between 40-60%. It is connected with mathematical measure of inaccuracy as well as ineffective running of corresponding systems. Analysis of widely-distributed systems is more difficult, in which subjects, which are self-maintained in decision-making, carry out economic interaction in production, act of purchase and sale, resale and consumption. This work analyzed mathematical models of sellers, consumers, arbitragers and the models of their interaction in the provision of dispersed single-product market of perfect competition. On the basis of these models, the methods, allowing estimation of every subject's operating options and systems as a whole are given.

**Keywords :** dispersed systems, models, hydraulic network, algorithms

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