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**Model of joint servicing of real-time service traffic and data traffic. I.** (English. Russian original)

Zbl 1235.93240

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Summary: A model of joint transmission of the real-time service traffic and the delay tolerant data traffic is constructed and examined. At developing the model, the pulse nature of the arrival of information making up the data traffic is taken into consideration. The real-time traffic has preemptive priority in occupying and using the channel resource and, if it is required by the transmission conditions, displaces the data into buffer. The main performance indices of the joint demand servicing are defined, and a scheme of their estimation based on solving the system of equilibrium equations is constructed.

**MSC:**

93E10 Estimation and detection in stochastic control theory

93A30 Mathematical modelling of systems (MSC2010)

94A12 Signal theory (characterization, reconstruction, filtering, etc.)

94A40 Channel models (including quantum) in information and communication theory

Cited in 6 Documents

**Keywords:**

real-time service traffic; channel resource; system of equilibrium equations

**Full Text:** [DOI](#)

**References:**

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