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Construction of the model and algorithms to estimate the throughput characteristics of the multiservice section of communication network with allowance for repeated calls. (English.

Russian original) [Zbl 1120.90311](#)

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Summary: A model of a section of the multiservice communication network was constructed with allowance for the possibility of repeating a call that was blocked because of insufficient channel resource either in the section itself or at the subsequent segments of the load route including occupancy of the called device. For the proposed model and some of its important special cases, precise and approximate algorithms to estimate the main throughput characteristics were constructed. Solutions of some problems that are of interest from the standpoint of practical use of the results obtained were considered.

MSC:

[90B18](#) Communication networks in operations research

[90B22](#) Queues and service in operations research

Full Text: [DOI](#)

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