

## Simulation Studies of Systems Handling Different Streams of Multi-Service Traffic With Priorities\*

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### Abstract

The paper proposes the use of digital simulation as a tool to approximate telecommunications systems that handle traffic with different priorities. In addition, the proposal presented takes into account multiclassing, streaming, elasticity and adaptability of offered traffic. The simulation has been written in the C# language with an emphasis on object oriented programming, using an event browsing approach. The aim of the research was to create a tool that solves problems that current analytical models cannot solve.

**Keywords:** Quality-of-service, traffic engineering, routing, traffic compression, traffic priorities.