

The Spectrum Monitoring Station Operation Analysis to Eliminate Interference from Radio Communications

Boris M. Antipin¹, Evgeniy M. Vinogradov², Alexander O. Grossman, Evgeniya I. Tumanova³
The Bonch-Bruевич Saint-Petersburg State University of Telecommunication
St. Petersburg, Russia
boris_antipin@mail.ru, vinog1936@mail.ru, evjeny@gmail.com³

Abstract—A model of the spectrum monitoring station operation to eliminate interference to users of the radio frequency spectrum as a queuing system is considered. It is shown that a mathematical model with non-priority service disciplines is a useful tool for a qualitative study of the queue application formations for eliminating interference. A significant acceleration of the application passage for the interference detection in the monitoring service is possible due to the use of a priori information about the time of various types applications.

Keywords— *spectrum monitoring; queuing system; queue disciplines; interference detection*