ASYMPTOTIC STATIONARITY OF TANDEM OF QUEUES

Władysław Szczotka

Abstract: In [12] it was proved that the process of waiting times for single server queues is asymptotically stationary if

(1) a generic process $X = \{X_k, k \geq 1\}$ is asymptotically stationary,

(2) X satisfies condition AB and

(3) the two-sided stationary extension $X^* = \{X_k^*, -\infty < k < \infty\}$ of the stationary representation of X is such that $\sum_{j=-n}^{0} X_j^* \to -\infty$ a.e.

The paper gives a detailed characterization of condition AB. Next, the sufficient conditions on the input to a tandem of queues are given under which the inputs to the nodes in that tandem satisfy conditions (l)-(3).

2000 AMS Mathematics Subject Classification: Primary: -; Secondary: -;

Key words and phrases: -

THE FULL TEXT IS AVAILABLE HERE