

Abstract

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Effect of Link Bandwidth, Number of Channels and Traffic Load on Designing Optical Burst Switching Networks

A detailed simulation is carried out for analysis of various optical parameters effect on burst loss ratio (BLR) in optical burst switching (OBS) networks. Effects of link bandwidth, number of channels and traffic load are studied. The obtained results show that one parameter can compensate another to reach the same BLR. For example, one can decrease the link bandwidth by 50% and increase the number of channels while maintaining the same BLR. This leads to have many OBS networks designs giving same performance.