

Abstract

The volume of work is 52 pages, 19 figures, 1 table and 10 sources of information.

Indoor Visible Light Communications (VLC) are a promising technology to alleviate the looming spectrum crunch crisis in traditional RF spectrum bands.. This work examines how to provide the most accessible Li-Fi network for transport systems.

The purpose of this work is to develop proposals for the introduction of Li-Fi technology in transport systems (cars, traffic lights) to improve road safety. Communication cooperation on the road includes car-car, car-infrastructure and vice versa. This data can be used to detect events such as road works, traffic jams, approach to an ambulance, etc.

Keywords: VLC, Li-Fi, ITS

Based on the results of this work, an article was published:

[1] Піталова М.Д., Мікляєв Г.О. “ Багатовузлова мережа SDN з використанням технології Li-Fi ”, Матеріали 14 МНТК «Перспективи телекомунікацій», Київ, 2020 р.