ABSTRACT

The rapid development of technology, especially in the telecommunications sector, has driven an increase in network requirements. According to Cisco's annual report, the population of internet users is expected to increase to 66% of the total global population by 2023 reflecting the growth of technology in vehicle networks. In this context, Named Data Networking (NDN) emerges as a potential solution to improve data transfer efficiency in vehicular environments. Through the concept of Vehicular-NDN (V-NDN). NDN is a content-focused network architecture, and is considered the architecture of the future thanks to its routing scalability, forwarding speed, network security, and content and privacy protection. With this paradigm, data requests are made based on content that can support the efficiency of data acquisition in the vehicle environment.

The V-NDN network is expected to realize the future transportation system, which allows vehicles to communicate with each other (V2V) and vehicles to infrastructure (V2I). NDN has the potential to reduce delays in data retrieval by enabling consumers to access or share data through the communication process.

In this final project, a data transfer simulation is carried out using moving nodes using three forwarding strategies. The simulation is carried out using two schemes, changing the test time and varying the number of interests. Multicast Vanet as a whole has the best performance compared to the other two forwarding strategies. Best Route has better performance and outperforms Localhop.

Keywords: *Named Data Networking, Vehicular NDN (V-NDN), Strategy Forwarding.*