

## **ABSTRACT**

*East Java will soon have a new international airport in Kediri, namely Dhoho International Airport. However, the airport's operations have been postponed until late January or early February 2024, from the initial plan that was scheduled to be inaugurated this month.*

*The airport, managed by PT Angkasa Pura I as the operator, has taxiways measuring 306 meters x 32 meters and 438 meters x 32 meters. Dhoho Airport has a runway length of 3,300 meters x 45 meters. As a result, this airport can accommodate the arrival of the largest aircraft, the B777-300ER. Therefore, it can serve wide-body aircraft of the 4E class for both domestic and international flight routes.*

*Dhoho Airport is the first airport in Indonesia to be established with 100% private investment. President Joko Widodo designated this project as one of the National Strategic Projects (PSN) under Ministerial Regulation Number 21 of 2022. In this project, PT Surya Dhoho Investama (a subsidiary of PT Dhoho Kediri Tbk.) will collaborate operationally with PT Angkasa Pura I as the airport business entity (BUBU) manager. In addition to the airport, Dhoho Kediri, through its subsidiary, will also develop access to the airport spanning 7.2 kilometers as part of the Kediri – Tulungagung Toll Road, which stretches 37 kilometers.*

*In designing this FTTB network, the simulation results show that the system has very good transmission quality. The Q factor value of 1204.11 dbm shows a large signal to noise margin, ensuring signal quality remains optimal. An eye height of 0.0080090 allows for accurate signal reading, while a threshold of 0.0040977 keeps transmissions stable by distinguishing valid signals from noise. A BER value of 0 indicates no errors in transmission, indicating high system reliability. And a path loss of 6,917 dBm ensures the signal remains strong even over long distances.*

*With this plan, it is hoped that Dhoho Kediri Airport will further facilitate various activities.*

**Keywords:** East Java, Dhoho Kediri Airport, PT. Dhoho Kediri, FTTB