ABSTRAK

The use of drones, or UAVs, has increased in recent years. Because of their ability to monitor and map areas, UAVs have become an important tool in various industries, including the security and surveillance fields in Indonesia. LSU is one of the unmanned aircraft developed by the National Aeronautics and Space Institute (LAPAN).

The aim of this research is to conduct a techno-economic and regulatory analysis related to the use of the LAPAN LSU UAV for regional surveillance and mapping in Indonesia. The economic analysis involves the technical and economic assessment of the use of these UAVs in the context of territorial surveillance and mapping. To determine the efficiency and benefits of using LSU UAVs. In addition, this research analyzes the regulations governing the use of UAVs in Indonesia. Regulations and policies relating to the use of UAVs for surveillance and area mapping will be researched and evaluated. To gain an understanding of the applicable legal framework, regulatory elements such as air permits, privacy, security and operational requirements will be analyzed.

It is hoped that the results of this research will provide an in-depth understanding of the techno-economic and regulatory aspects related to the use of the LAPAN LSU UAV in regional monitoring and mapping in Indonesia. The results of this analysis can be used to inform decisions on the use of LSU UAVs in the context of regional surveillance and mapping, as well as provide recommendations regarding improvements to relevant regulations.

Kata Kunci: *Unmanned Aircraft Vehicle (UAV), LSU, Tekno-Economy, Regulation.*