COMBATING AGRICULTURAL AND FUEL THEFT VIA SOFTWARE SOLUTIONS: STANDARD AND AI-POWERED APPROACHES

Teodor LUPU[1], Adrian GÂNGA[1], Nicoleta MIHALACHE[1], Chiril BOTNARU[2], Monica RUSU[2]

e-mail: cocamonica.pfa@gmail.com

Abstract

Agricultural and fuel theft are persistent challenges faced by farms worldwide, resulting in financial losses and operational disruptions. However, software solutions, including standard software and AI-powered technologies, have proven to be practical tools in combating these thefts. Surveillance systems, access control systems, inventory management systems, and asset tracking systems are some of the standard software solutions that can be implemented on farms to prevent theft incidents. AI-powered solutions, such as machine learning algorithms and image recognition technology, can enhance the effectiveness of these solutions by analysing large amounts of data in real-time, providing predictive insights, and optimising farm operations. It is evident that software solutions play a crucial role in combating agricultural and fuel theft, and their adoption can significantly reduce the risks and losses associated with theft incidents. Farms need to assess their specific needs and requirements and choose the appropriate software solutions aligning with their operations and budgets.

Keywords: agricultural theft, machine learning, electronic identification (EID), crop monitoring