2018 - 2023



Regional aeronautical infrastructures network for medical emergency and civil protection

Summary

It is public knowledge that in Portugal the use and operation of medical emergency and civil protection aerial resources are not fully exploited due to the lack of adequate airport, aerodrome and heliport infrastructures for their operation. While there have been substantial improvements in the operational conditions of the infrastructures integrated into the DECIR - Special Device for Combating Rural Fires in recent years, but most of these infrastructures have a seasonal nature, and few of them allow for the operation of aircraft in Performance Class 1 - PC1, precisely those that are required for medical emergency operations.

Therefore, based on our knowledge of this reality, primarily because we have been involved in various Certification processes and obtaining authorizations from ANAC specifically for the operation of these air assets, we have been able to witness their daily operations and their stressful relationship with the designated operating sites determined by the respective competent authorities.

This observation and the knowledge gained have compelled us to develop a pilot study for the creation of a Regional Network of Airport Infrastructures for Medical Emergency and Civil Protection in the VISEU DÃO LAFÕES Intermunicipal Community - CIM Viseu Dão Lafões, in order to provide INEM (National Institute of Medical Emergency) and ANEPC (National Authority for Civil Protection) with the best operational conditions on the ground.

We are referring, of course, to the existence of well-identified and minimally prepared locations for the operation of air assets, particularly helicopters, as time is crucial for the success of this type of rescue, not only for safeguarding material assets but, more importantly, for preserving human life. Thus, the purpose of this work is to verify and validate the establishment and operation of a Regional Network of Airport Infrastructures for Medical Emergency and Civil Protection in the VISEU DÃO LAFÕES Intermunicipal Community - CIM Viseu Dão Lafões, which consists of 14 Municipalities, covers an area of 3,483 km2, and has approximately 270,000 inhabitants.

Hence, the ultimate objective is to ensure the provision of faster assistance under better operational conditions and with a perfectly acceptable risk for all stakeholders, particularly considering the inherent risks in air operations and at a low cost.

Keywords

Air transport, airworthiness firefighing, emergency helicopter medical service, pre-surveyed sites – helicopters, helicopter operational conditions.



PhD student

Paulo Alexandre Ramos de Figueiredo Soares

PhD program

Aeronautical Engineering (UBI, University of Beira Interior)

Supervisor

Jorge Reis Silva (UBI, University of Beira Interior; CERIS, IST, University of Lisbon)

Co-supervisor

Period

2022-2025

Funding

-