![AUS4INNOVATION]

Disaster Response and Search & Rescue

Digital transformation for effective management of disaster responses and search & rescue

Funding granted: AUD 440,000

Context

Vietnam is among the countries most affected by natural disasters, with the impact of global warming increasing the frequency and severity of disaster events. The Vietnamese Government, in cooperation with international partner organisations, continue to devote enormous effort in search and rescue (SAR) missions during and post-disasters. Through the application of new technology to improve training and equipment, SAR activities during the increasingly regular floods, landslides, oil spills and maritime incidents can be made safer and more effective. Digital technologies also present opportunities to minimise the tragic consequences of rescue efforts, like the SAR mission in Rao Trang hydropower plant in 2020 that claimed more than a dozen lives of rescuers.

Solution

This project aims to bring the latest advances in digital transformation technologies, in particular Unmanned Aerial Vehicles (UAVs), Artificial Intelligence and Simulations to training for SAR activities in Vietnam. These core award winning technologies are based on real-time remote sensing algorithms and software developed by the University of Technology Sydney (UTS) and the Live Virtual and Constructive (LVC) simulation tool developed by Le Quy Don Technical University (LQDTU). These technologies will be combined to develop a system with real-time remote sensing and aerial surveillance together with simulation training for different SAR scenarios.

Key activities

1. Transfer UTS remote sensing technology to LQDTU for customising, training and testing with real footage.
2. Develop SAR simulation-based training systems.
3. Field test real-time remote sensing software with drones and UAVs.
4. Field training for SAR missions with VINASARCOM (National Committee for Search and Rescue of Vietnam).

For further information

Prof. Eryk Dutkiewicz
Head of School of Electrical and Data Engineering
Faculty of Engineering and Information Technology | University of Technology Sydney
Email: Eryk.Dutkiewicz@uts.edu.au

Dr. Kien Nguyen
Le Quy Don Technical University
Email: kiennt.simtech@mta.edu.vn

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