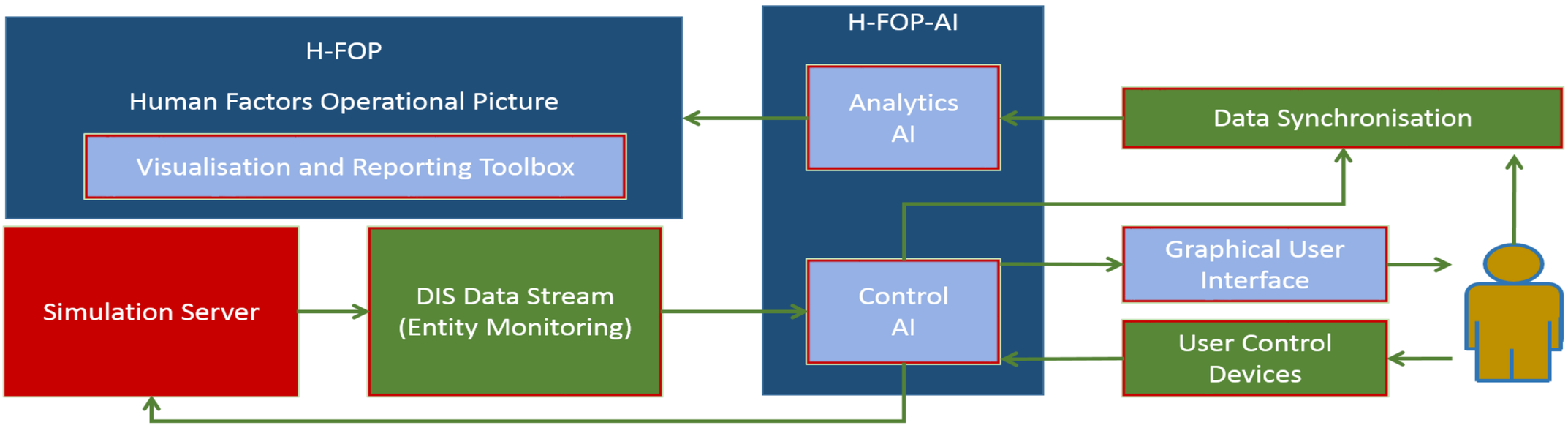
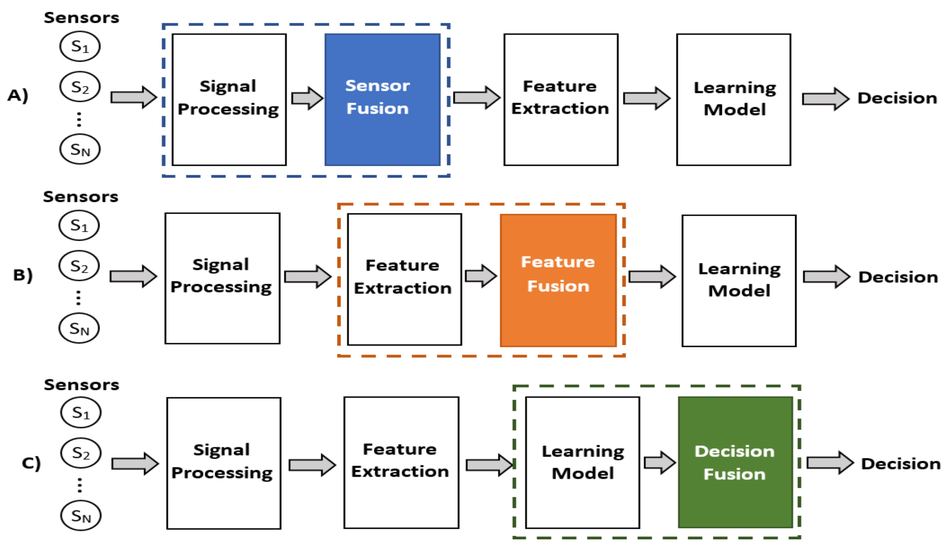
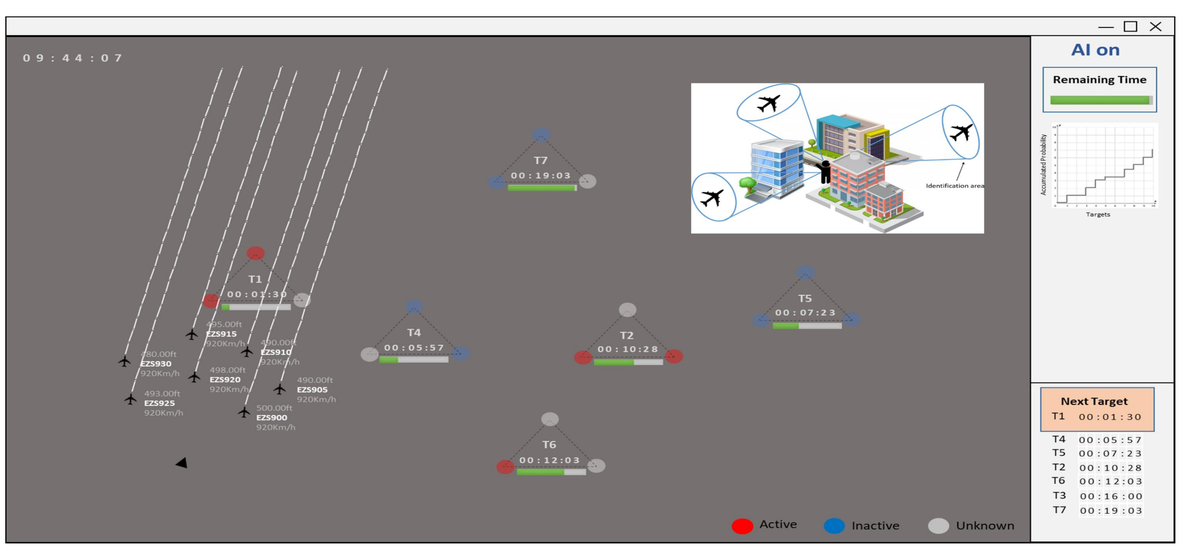
# Trusted Human-Autonomy Teaming in Teleoperations




Real-time picture of human states to inform allocation of tasks by the autonomous system helping to control the Tactical ISR assets




Fusion methods of multi-modal human data improve HFOP's robustness against sensors-failure and data-loss in Tactical ISR environments




Swarm-based Concept of Operation for Tactical ISR

## Purpose

- Supporting effective partnering between a tactical ISR operator and multiple autonomous systems in the land domain (reduce cognitive load, dynamic workload balancing, improve robustness using real-time multi-modal human performance and trust indicators).
- Trust-aware adaptive task allocation between humans and autonomous systems.

## Product

- HFOP: Human Factors Operational Picture (Real-time situation awareness picture supporting operators to optimise their performance) .
- SCOO: Swarm-based Concept Of Operation for allocation of air surveillance assets to support ground troops with intel on ground targets.
- Trust-aware human-autonomy augmentation system using HFOP and SCOO to balance workload between humans and many-robot systems in real-time.

## Partners

- UNSW Canberra: Hussein Abbass
- DST: Justin Fidock