

## goals

Source: database\_dump.json, 2025-12-05, 21:48

goal_id	goal_description	stakeholder	origin	priority	rationale	satisfaction_status	method_id
G-01	Design logic to assign an appropriate task to each agent at the start of the mission.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-02	Ensure that when an agent fails, its assigned tasks are automatically reassigned to other functional agents, if system resources permit.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-03	Ensure that correct behaviour is maintained across the swarm despite failure or inconsistencies in the output of a single agent.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-04	Ensure that the swarm reaches a collective decision for each task that requires coordination.	Project owner	Kaos model	Mandatory	A decentralised protocol means that the swarm has no leader and hence should be able to make collective decisions.	Satisfied	VVP-09
G-05	Ensure coordination among all agents when distributing the search area.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-06	Ensure that the provided simulation software is modified so that the implemented replanning protocol can be tested in that simulation environment.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-07	Enable the application of fault injection within the simulation to test system resilience and fault tolerance.	Project owner	Kaos model	Mandatory		Satisfied	M-02
G-08	Demonstrate that the swarm can maintain mission continuity despite disruptions, failures, or changes in agent availability while operating under the chosen protocol.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-09	Demonstrate that the swarm can recover from individual agent failures and continue operating effectively as a collective.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-10	Measure the time required to locate the target subject using the newly implemented chosen protocol, in order to evaluate its performance.	Project owner	Kaos model	Mandatory		Satisfied	VVP-09
G-11	Ensure that agents can make individual decisions in appropriate situations.	Project owner	G-04	Mandatory	Collective decision-making implies the absence of a central controller, requiring agents to operate autonomously. Therefore, agents must be capable of making independent decisions when necessary, including the ability to self-remove from the swarm in response to failure, inefficiency, or conflict with global objectives.	Satisfied	VVP-09
SG-01	All staff must be safe in all operational phases.	Safety Manager	FHA (PSA)	Mandatory		Satisfied	VVP-06
SG-02	Agents should avoid posing any threat to the subject.	Safety Manager	ARC (FSA)	Mandatory		Satisfied	VVP-06
SG-03	Agents should avoid collisions with each other, minimum distance from each other 30 m.	Safety Manager	containment requirements (FSA)	Mandatory		Satisfied	VVP-06
SG-04	Agents should avoid collisions with ground or ground obstacles, minimum altitude 15m.	Safety Manager	ARC (FSA)	Mandatory		Satisfied	VVP-06
SG-05	Agents should avoid collisions with third parties in the air, max altitude above ground 50 m	Safety Manager	ARC (FSA)	Mandatory		Satisfied	VVP-06
SG-06	The swarm should only fly in rural areas.	Safety Manager	IGRC (FSA)	Mandatory		Satisfied	VVP-06
SG-07	Damaged agent should return home if damage is critical or battery low.	Safety Manager	FHA (PSA)	Mandatory		Satisfied	VVP-06

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SG-08	The agents should move at different altitudes depending on the task, searching 15-20m, moving from one sector to another, 25-40m.	Safety Manager	containment requirements (FSA)	Mandatory		Satisfied	VVP-06
SG-09	The probability of the failure condition âœUA leaving the operational volumeâ€ shall be less than 10-3/Flight Hour (FH).	Safety Manager	containment requirements (FSA)	Mandatory		Satisfied	VVP-06
SG-10	When the UA leaves the operational volume, an immediate end of the flight must be initiated through a combination of procedures/processes and/or available technical means.	Safety Manager	containment requirements (FSA)	Mandatory		Satisfied	VVP-06
SG-11	The Ground Risk Buffer must at least adhere to the 1:1 principle.	Safety Manager	containment requirements (FSA)	Mandatory		Satisfied	VVP-06