System requirement ID	Requirement Description	System Design ID	Type	Verification method	Validation method	Reviewer	Date	Comments	Status
PM-01	The protocol module shall define the procedures will be taken so that all agents are aware of the prevailing mission state.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-02	The protocol module shall define the procedures that all agents shall follow to share the mission plan.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-03	The protocol module shall define procedures on how tasks are assigned to agents depending on the mission plan.	SD-17, SD-19, SD-20		Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-04	The protocol module shall define the procedures that all agents shall follow to communicate their (all agents) capabilities.	SD-07, SD-08	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-05	The protocol module shall define the message formats that all agents shall use to communicate their (all agents) capabilities.	SD-05	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-06	The protocol module shall define the procedures that all agents follow to assign tasks to agents based on the agents' capabilities.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-07	The protocol module shall define the rules that all agents will adhere to when re-assigning tasks.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-08	The protocol module shall define the procedures that agents follow to exchange task re-assignment proposals.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-09	The protocol module shall define the message format that all agents will use to exchange task re-assignment proposals.	SD-06	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-10	The protocol module shall define the procedure that agents experiencing degrade functionality shall follow so as to communicate their degraded status to other agents.	SD-01	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-11	The protocol module shall define the rules that agents follow to identify the criticality of tasks.	SD-14	IBD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-12	The protocol module shall define procedures that agents follow to assign high-criticality tasks to fully functional agents when any agent's functionality becomes degraded.	SD-15	IBD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-13	The protocol module shall define procedures that agents follow to assign lower-criticality tasks to agents experiencing degraded functionality based on their (the degraded agent(s)) prevailing capabilities.	SD-10	IBD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-14	The protocol module shall define the rules that agents follow to reach agreement on correct data, even if at least one agent provides incorret data.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
PM-15	The protocol module shall define the rules that agents will follow to reach a collective decision for tasks that require coordination.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
PM-16	The protocol module shall define the procedures that agents will follow to reach a collective decision for tasks that require coordination.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-17	The protocol module shall define the rules that agents follow to share information about the boundaries of their assigned search areas.	SD-13	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-18	The protocol module shall define the message-exchange rules that enable agents and agree on which agent searches what portion of the area.	SD-13	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-19	The protocol module shall define the conditions under which an agent is permitted to make independent decisions without prior consensus.	SD-02	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-20	The protocol module shall define the procedures that agents follow to notify other agents after taking an independent action.	SD-10	IBD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-21	The protocol module shall define the rules that agents follow to reintegrate independent decisions into the swarm's shared state once the communication with other agents is resumed.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-14B	The protocol module shall define procedures that allow agents to mitigate incorrect data received from at least one agent during consensus.	SD-06	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
PM-14C	The protocol module shall define the rules that ensure agents base their consensus decisions only on verified data.	SD-05	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed

System requirement ID	Requirement Description	System Design ID	Type	Verification method	Validation method	Reviewer	Date	Comments	Status
SSR-01	The protocol module shall define the procedures that will be taken so that all agents start in a safe way.	SD-03	AD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-02	The protocol module shall define the procedures that agents shall take when approaching landing area.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-03	The protocol module shall define the distance from the landing area when staff are present.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-04	The protocol module shall define the procedures that agents shall take when subject is found.	SD-09	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-05	The protocol module shall define the distance from the subject when subject is found.	SD-14	IBD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-06	The protocol module shall define the rules for agents broadcasting their position.	SD-14	IBD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-07	The protocol module shall define the buffer zone for all agents.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-08	The protocol module shall define the procedures that will be taken when agent buffer zones overlap.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-09	The protocol module shall define the procedures that will be taken when agent position data is delayed.	SD-09	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-10	The protocol module shall define the procedures that will be taken when agent position data is uncertain.	SD-09	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-11	The protocol module shall define the procedures that will be taken when agent flight capacity is decreased.	SD-09	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-12	The protocol module shall define the procedures that will be taken when agent communication is delayed.	SD-09	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-13	The protocol module shall define the minimum hight above ground for all agents.	SD-05	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-14	The protocol module shall define the procedures that agents shall take when avoiding stationary obstacles.	SD-05	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-15	The protocol module shall define the procedures that agents shall take when avoiding air obstacles.	SD-05	BDD	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-16	The protocol module shall define the operational volume based on input.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-17	The protocol module shall define the procedures that agents shall take when agent comunication is lost.	SD-18	Stateflow	Traceability analysis	Design review	E.Z	2025-11-14		Passed
SSR-18	The protocol module shall define the procedures that agents shall take when agent power unit is degraded.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-19	The protocol module shall define the procedures that agents shall take when agent battery is below 50%.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-20	The protocol module shall define the procedures that agents shall take when agent flight is unstable.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-21	The protocol module shall define the maximum and minimum altitudes for searching state.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-22	The protocol module shall define the maximum and minimum altitudes for transition state.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-23	The protocol module shall define the the buffer zone of the operational volume.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-24	The protocol module shall define the procedures that agents shall take when entering the operational volume buffer zone.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-25	The protocol module shall define the procedures that agents shall take when leaving the operational volumes buffer zone outer border.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed
SSR-26	The protocol module shall define the maximum hight above ground for all agents.	CE-04	Report	Traceability analysis	Design review	E.Z	2025-11-14	System design description	Passed