

Release Note

Group: Intelligent Replanning Drone Swarm

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Document Overview

This document begins with a dependency diagram showing the relationships between the deliverables of each phase: the Planning phase, Implementation phase, and Reporting phase. It then includes a table listing all project deliverables, along with their titles, versions, and brief summaries.

Dependency diagram

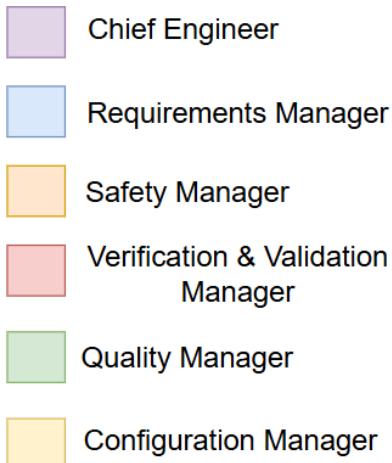


Figure 1: This figure shows which manager for each color in the figures below represents.

Planning Phase

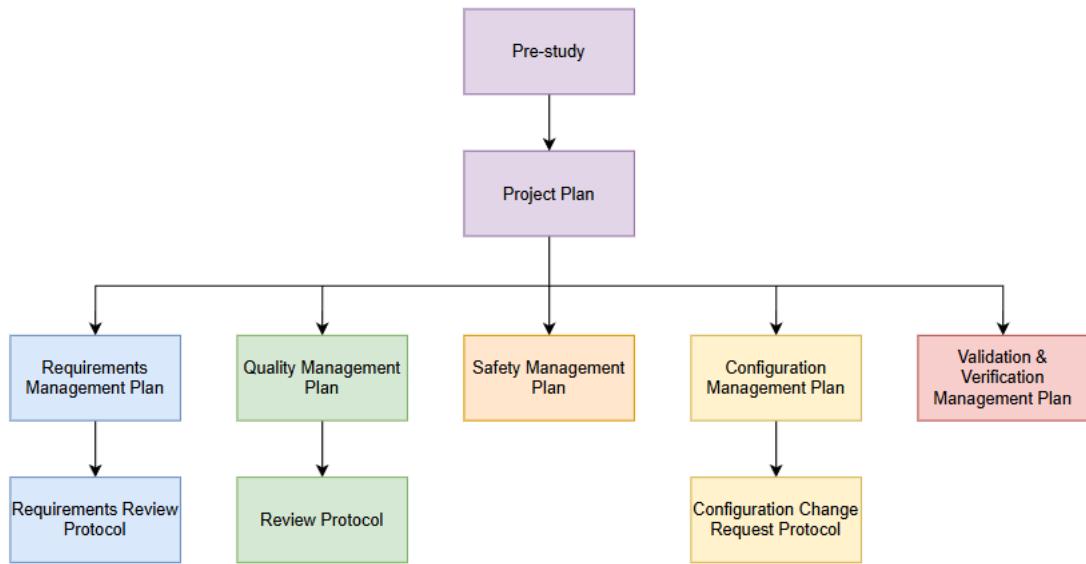


Figure 2: This figure illustrates a map of the dependencies between the deliverables in the first phase, planning phase.

Implementation Phase

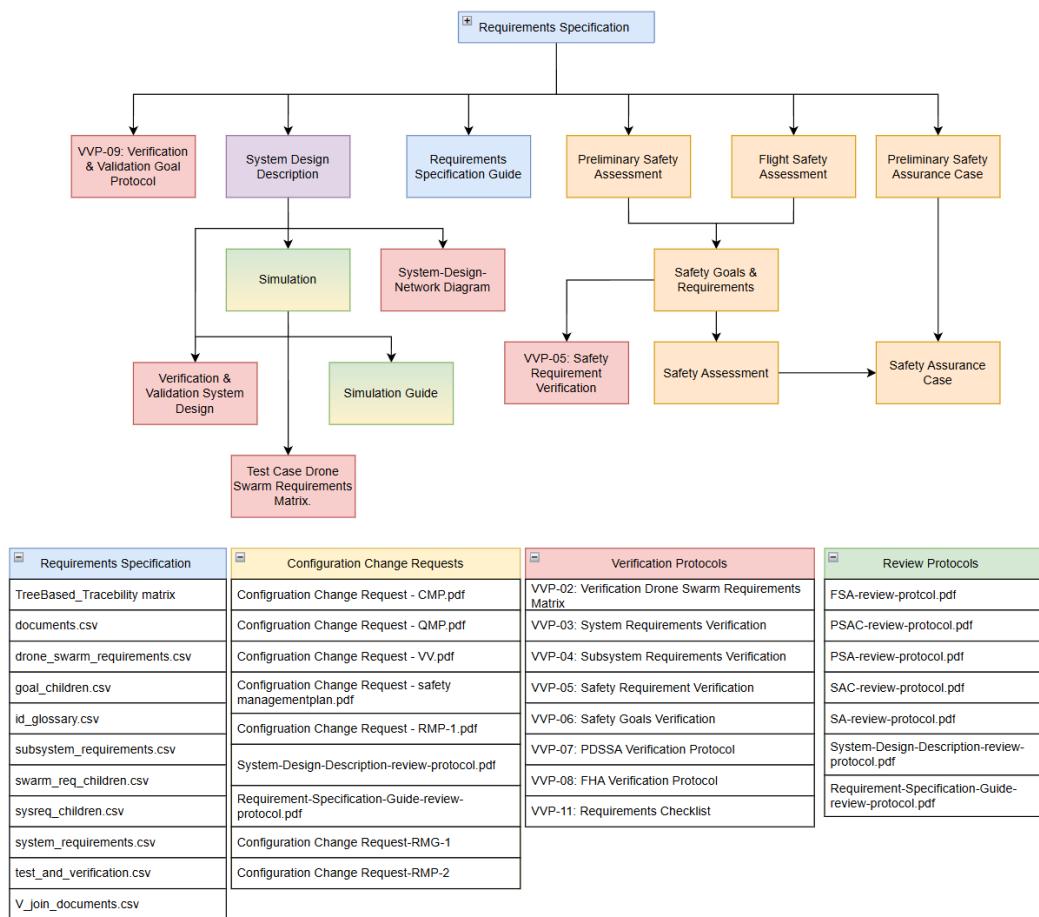


Figure 3: This figure illustrates the dependencies between the deliverables in the second phase, implementation phase.

Reporting Phase

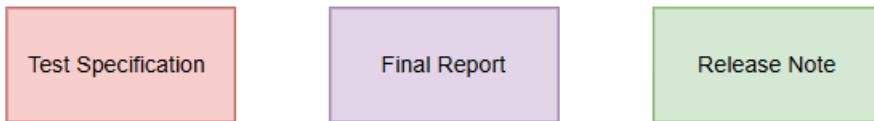


Figure 4: This figure illustrates the deliverables during the reporting phase.

ID	Title	Version	Summary
<i>Pre-study & Planning Phase</i>			
<i>Plans</i>			
CM-01	Configuration Management Plan	1.1	Defines how project artifacts are versioned, controlled, and changed in a structured and traceable manner.
QM-01	Quality Management Plan	1.1	Establishes how quality is ensured, reviewed, and maintained across all project processes and deliverables.
CE-02	Project Plan	1.2	Outlines the project's objectives, timeline, responsibilities, resources, and processes to ensure structured execution and successful delivery.
RM-01	Requirements Management Plan	1.2	Describes how requirements are documented, traced, controlled, and kept consistent during development.
SM-01	Safety Management Plan	1.1	Explains how safety risks are identified, assessed, mitigated, and verified to ensure safe system operation.

VV-01	Validation & Verification Management Plan	1.1	Specifies how the system is checked for correctness and confirmed to meet stakeholder needs through structured V&V activities.
<i>Other deliverables</i>			
CE-01	Pre-study	1.1	Provides an initial analysis of the problem, scope, constraints, and feasibility to define the project direction before development begins.
QM-02	Requirements Review Protocol	1.0	Defines the structured procedure for reviewing, validating, and ensuring the quality and completeness of all system requirements.
CM-02	Configuration Change Request Protocol		Specifies the process for proposing, assessing, and approving changes to established baselines in a controlled and traceable manner.
QM-02	Review Protocol	1.0	Outlines the standardized method for evaluating deliverables to ensure they meet quality criteria, standards, and project expectations.
<i>Execution & Validation Phase</i>			
<i>Requirements Manager</i>			
RM-02	Requirements Specification		Includes a collection of all the elicited requirements, related verification evidence and a tree based traceability matrix

RM-03 Requirements Specification Guide	1.1	Highlights key information on how to navigate the requirements specification.
<i>Safety Manager</i>		
SM-02 Preliminary Safety Assurance Case	1.0	Description of what is needed from the safety assurance case.
SM-03 Preliminary Safety Assessment	1.0	Summary of preliminary activities from ARP.
SM-04 Flight Safety Assessment	1.0	Summary of activities from SORA.
SM-05 Safety Assessment	1.0	Safety assessment based on safety goals.
SM-06 Safety Goals & Requirements	1.0	Goals and requirements derived from SM 02 and 03.
SM-07 Safety Assurance Case	1.0	Safety assurance case based on the system and safety documents.
<i>Chief Engineer</i>		
CE-04 System Design Description	2.0	This document provides a comprehensive overview of the system's architecture, components, interfaces, and design decisions that define how the system is structured and operates.
<i>Verification & Validation Manager</i>		
VV-02 VVP-11: Requirements Checklist	1.0	Matrix with executed requirement checks based on predefined criteria.

VV-03	VVP-05: Safety Requirements Verification	This matrix includes the executed verification evidence demonstrating that all Safety Requirements are met.
	VVP-07: PDSSA Verification Protocol	This matrix contains the performed verification checks ensuring PDSSA outputs are correct, complete, and consistent.
	VVP-08: FHA Verification Protocol	This matrix presents the verification evidence confirming correctness and completeness of the FHA outputs.
VV-04	VVP-06: Safety Goals Verification	This matrix documents the verification results that confirm each Safety Goal has been satisfied.
	VVP-09: Verification & Validation Goal Protocol	This matrix presents the executed V&V activities showing that high-level system goals and mission objectives are met.
VV-05	VVP-02: Verification Drone Swarm Requirements Matrix	This matrix documents the completed verification activities and evidence for the Drone Swarm Requirements.
VV-06	VVP-03: System Requirements Verification	This matrix provides the executed verification results showing compliance with all System Requirements.

VV-07	VVP-04: Subsystem Requirements Verification	1.0	This matrix shows the performed verification activities and outcomes for subsystem-level requirements.
VV-10	System-Design-Network Diagram.png	1.0	Showing how the drones send out information, when a drone is lost. (Rumor Mill)
VV-11	VVP-01: Test Case Drone Swarm Requirements Matrix	1.0	Defines all verification test cases derived from the Drone Swarm Requirements. This document matrix ensures that each functional requirement has a corresponding objective and measurable test.
VV-12	VVP-10: Verification & Validation System Design	1.0	This matrix provides the verification and validation results demonstrating that the system design meets all allocated requirements.
<i>Simulation</i>			
	Simulation Guide		This file contains the simulation guide. It shows how to use the simulation and how the simulation files are connected.
	Simulation Code (find on GitHub)		This is the simulation. All the code and relevant files for the simulation are stored on GitHub.
<i>Quality & Configuration Manager</i>			

QM-02 Quality Protocols		This file is the quality protocol template that we, the QCM and CE, use when reviewing the deliverables.
FSA-review-protocol		This is the review protocol for the Flight Safety Assessment.
PSAC-review-protocol		This is the review protocol for the Preliminary Safety Assurance Case.
PSA-review-protocol		This is the review protocol for the Preliminary Safety Assurance.
SAC-review-protocol		This is the review protocol for the Safety Assurance Case.
SA-review-protocol		This is the review protocol for the Safety Assurance.
System-Design-Description-review-protocol.pdf		This is the review protocol for the System design description.
review-protocol-Test_Specification		This is a review protocol done on the Test Specification by V&V.
review-protocol-Pre-study		This is a review protocol done on the Pre-study.
review-protocol-Project-Plan		This is a review protocol done on the Project Plan.
review-protocol-System-Design-Description		This is a review protocol done on the System Design Description.
Requirement-Specification-Guide-review-protocol.pdf		This is the review protocol for the requirement specification guide.

CM-02 Configuration Change Request	This is the template for the configuration change request that managers must fill in when they want to change a delivery's baseline.
Configuration Change Request - CMP	Change request for the Configuration Management Plan.
Configuration Change Request - QMP	Change request for the Quality Management Plan.
Configuration Change Request - VV	Change request for the Verification & Validation Management Plan.
Configuration Change Request- safety managementplan	Change request for the Safety Management Plan.
Configuration-change-request_CE-01_pre-study	Change request for the Pre-study.
Configuration-change-request_CE-02_project-plan (2)	Change request for the project plan second feedback from supervisor.
Configuration-change-request_CE-04_system-design-description	Change request for the System Design Description.
Configuration-change-request_CE-02_project-plan (1)	Change request for the project plan first feedback from supervisor.
Configuration Change Request -RSG-1	Change request for the Requirement Specification Guide.
Configuration Change Request -RMP-2	Change request for the Requirement Management Plan.
<i>Reporting Phase</i>	
CE-05 Final Report	<p>1.0 This report contains a short summary of the project, its main results, lessons learned, and future work.</p>

CE-07 Release Notes

This file lists all the deliverables along with other relevant information, and it also includes maps showing the dependencies between them.

VV-13 Test Specification

1.0

This file defines the test cases, methods, environments, and results used to verify that the system meets its highest-priority requirements.