

Inspection and Approval Requirements

for

**Federation Architecture for
Composed Infrastructure
Services (FACIS)**

Convoy Demonstrator (CD)

FACIS.CD

Purpose

The inspection and approval process follows a twofold approach: verification during the software development process and validation through software testing.

Verification is an ongoing, community-driven quality assurance process that focuses on architectural and code design and ensures that the software is built according to the specified requirements. The verification process includes reviews, walkthroughs, and inspections. Validation is a dynamic process that tests and confirms whether the resulting product meets the specified requirements. The validation process includes unit testing, integration testing, system testing, and user acceptance testing

Project Plan

The contractor must submit a project plan for approval within the first week after project's start. The project plan must include:

- Plan as GANTT Chart with at least the 5 milestones:
 - Delivery of Integration Note (SRS Section 3)
 - Plan approval
 - Submission of BDD documentation (no later than one month after project plan approval)
 - Code ready for QA
 - Final validation
- Project team
- DevOps management and tools
- Related open-source packages to be included as runtime components (pre-checked according to license requirements)
- A mapping of the acceptance criteria of the SRS to their planned evidence (demonstration scenarios M1–M5 and R, edge checks, unit tests, integration tests, inspection from SRS Section 10); acceptance criteria and expected test results are taken from the SRS Sections 5, 6 and 10.

Inspection and Approval Gates

After submission, the plan will be reviewed within one week with the client's team for approval.

The following gates must be reflected in the project plan:

- Client review of the project plan.
- Client rebuilds and deploys the tagged release and witnesses health and the demo-ready state in the FACIS cloud environment.
- Integration tests of SRS Sections 10 and 11, executed in the FACIS cloud environment
- Demonstration of the product's functionality in the scenarios M1–M5 and R, witnessed by the client, including a nominal run by a client operator from the runbook.

Validation & Acceptance

Validation will be performed against the acceptance criteria defined in the SRS document of the FACIS Convoy Demonstrator. The client will carry out the final assessment and approve the software based on these acceptance criteria.

The contractor shall inform the client at least two weeks before the software is expected to be ready for QA planning. Upon notification, the client shall coordinate the approval procedure.

The scenarios used for validation are the demonstration scenarios M1–M5 and R with the edge checks, together with the unit tests in CI and the integration tests (SRS Section 10); the

evidence for each requirement is named in its acceptance criteria and traced in SRS Section 12.

Assumptions & Dependencies

Main assumptions are the following:

- the OCM W-Stack and PCM Cloud and all their components are provided by the client
- the FACIS cloud Kubernetes environment (namespace with ingress, TLS certificates, Helm deployment rights and a namespace-scoped service account) is provided by the client
- the further conditions of SRS Section 4 (ORCE base images, test credentials for CD-V1 ... CD-V3 and the traffic light with the related OCM W-Stack authorisation, FACIS UI Builder package, access to the client-designated repository and to the FACIS trust list) are provided by the client after project start and remain available until project end; an unmet condition precedent is handled under change control (SRS Section 11.1)

A final QA report referencing:

- the SRS document
- the Technical Development Requirements document
- the approved project plan
- the acceptance criteria of the SRS (Sections 5, 6 and 11.2)
- the evidence bundle per gate (hashes, reports, PDFs, logs, JSON outputs, trace matrix, CI test reports)

will be prepared by the client and communicated to the contractor.