


Figure 4.3.3.3.F1. Systems engineering-related steps during the System Design effort of Engineering and Manufacturing Development


 Test Readiness Review


T&E is key part of SE Process.

T&E permeates entire life cycle.

TRR:

- Multi-disciplined technical review
- Ensure system is ready to proceed to formal testing
- Assesses test objectives, methods, procedures, scope, and safety
- Ensures traceability to program requirements and user needs.
- Assesses maturity, cost, schedule, and risk.
- Responsibility of PM and T&E WIPT.




 Test Readiness Review

Test plans completed and approved.

Test resources identified.

Prior results sufficient to proceed.

Level of risk acceptable.



 Flight Readiness Review

FRR a sub-set of TRR.


Only for aviation programs.

Assesses readiness of program to begin flight tests.

Requires:

- Flight clearance
- Approved test plans
- Ability to track discrepancies
- Ability to track program risk



 System Verification Review

A multi-disciplined review.


Flows from SFR in TD phase.

Ensures system meets functional requirements found in CDD and CPD.

Establishes final product performance.

Ensures system is ready to proceed to LRIP.

- Within budget
- On schedule
- Within acceptable risk
- Within other constraints

 System Verification Review

Does status of the technical effort and system indicate operational test success?

Can the system satisfy CDD and draft CPD?

Are adequate processes and metrics in place for program to succeed?

Are the risks known and manageable?


Is program schedule executable within cost and technical risks?

Are system requirements understood to level appropriate?

Is program properly staffed?

Is program's engineering requirement executable with existing budget?

Is system producible within production budget?

 Functional Configuration Audit

Conducted concurrently with SVR.

Examines characteristics of hardware and software.

Verifies that system complies with requirements in functional baseline.

Verifies system meets SPS.

Success is when FCA verifies that system can proceed to LRIP.



Production Readiness Review

Determine if program is ready for production.

PM convenes PRR when appropriate.

Examines traceability.

IPT reviews manufacturing processes, quality management system, and production planning.

Successful PRR means system is ready for LRIP and FRP.
