

Initial Technical Review (ITR)

One of the key technical reviews in the Materiel Solution Analysis phase is the Initial Technical Review (ITR). The ITR is a multi-disciplined technical review to support a program's initial Program Objective Memorandum (POM) submission. The ITR should be held well in advance of the actual cost estimate submission to allow time for issue resolution and proper executive level concurrence on process and results. This review ensures that a program's integrated (e.g., research, development, logistics, engineering, T&E, in-service support) technical baseline is sufficiently rigorous to support a valid cost estimate (with acceptable cost risk), and enable an independent assessment of that estimate by cost, technical, and program management subject matter experts. The ITR assesses the capability needs and conceptual approach of a proposed program, and verifies that the integrated (e.g., research, development, logistics, engineering, T&E, in-service support) technical baselines for the program reflect the complete spectrum of technical challenges and risks. Additionally, the ITR ensures that historical and prospective drivers of system cost have been quantified to the maximum extent, and that the range of uncertainty in these parameters has been captured and reflected in the program cost estimates.

The ITR is conducted to assess that:

- A program's technical baseline supports a valid cost estimate which can be independently assessed
- Requisite research, development, test, engineering, logistics, and programmatic basis adequately reflect the complete spectrum of technical challenges and risks
- Historical cost drivers have been quantified with appropriate uncertainty estimates are included in program cost estimates

Typical ITR Exit Criteria include affirmative answers to the following:

- Does the Cost Analysis Requirements Description (CARD)-like document capture the key program, cost drivers development costs (all aspects of hardware, test, human integration, and software), production costs, and operation and support costs? Is the CARD-like document complete and thorough?
- Are the underlying assumptions used in developing the CARD-like document technically and programmatically sound and complete?
- Have the appropriate technical and programmatic competencies been involved in the CARD-like document development, and have the proper subject matter experts been involved in its review?
- Are the risks known and manageable within the cost estimate?
- Is the program, as captured in the CARD-like document, executable?

The ITR risk assessment checklist is designed as a technical review preparation tool, and should be used as the primary guide for assessing risk during the review. This checklist is available via the "Checklist for Technical Reviews" in the Reference Tab of this course