



Since Module 3 we've been stepping through the Interactive DA Framework. In each phase, we've talked about the activities and documents that are important to the acquisition process. And we've talked about the role of the HSI practitioner throughout the acquisition process. In most of these modules, we've talked about how a *program* moves through the acquisition process. But in an evolutionary acquisition process it's really *an increment of a program* that moves through the process. The screen capture on this slide reminds us of that. This short presentation will provide you with some information about programs with multiple increments and how earlier increments influence later ones. Before going to the next slide, though, remember this: Each increment has to be militarily useful ad supportable!



The DoD preference is for acquisition programs to use an evolutionary strategy. When a program uses an evolutionary acquisition strategy, in many ways, each increment is treated separately.

There are some good reasons why a program would require multiple increments as opposed to building the system in a single increment. We've already mentioned a few of them during the last few modules. You should be able to come up with a list of your own. Here are a few to get you started.

Technology Readiness. We said a few modules ago that if a key technology hasn't reached the readiness level appropriate for that phase of the acquisition process, then the immature technology has to be replaced by a technology that's mature enough. And, the immature technology will have to wait for a future increment.

Cost. The acquisition program may not be given enough money by Congress to build the entire system in one increment. So, the program may be broken up into multiple increments, each of which can be funded separately over several years.

Schedule. It may be that the Combatant Commanders need a capability as soon as possible. They'd rather have something that's less than perfect now than have to wait a few years to get something with all the bells and whistles.

Manufacturing capability. It may be that the personnel or facilities needed to build the number of systems required just aren't available. Let's say we want to acquire a new class of submarines. The number of places in the country that can build submarines is limited. And it would be way too expensive to build a new facility. So, the acquisition of the new class of submarines may be broken into increments and spread over several years.

What other reasons can you think of for why we'd break a program up into multiple increments?



As I said before, when a program is broken up into multiple increments, each increment is treated, in many ways, like a separate acquisition program. This slide gives you an idea of what that means in practical terms.

Typically, there are separate Capability Development Documents and Capability Production Documents for each increment.

Each increment should have its own set of parameters with threshold and objective values that are appropriate for that increment.

There will probably be a separate Acquisition Plan Baseline for each increment.

The Milestone Decision Authority has to formally initiate each increment. But, those increments may start at different phases. For example, the 1st increment may start at Milestone A, but subsequent increments could start at Milestone A, B, or C. What criteria do you think the MDA will use to decide the starting point for subsequent increments?

The Acquisition Strategy should describe the initial increment in detail. The description should include things like how the increment will be funded, developed, tested, produced, and supported. The initial Acquisition Strategy should also give an idea of what the future increments will look like and should discuss how current and future increments will operate with one another. Interoperability is a big deal! The last thing we want is a bunch of increments that aren't compatible with one another. The Navy's LCS program is wrestling with this right now. It's very possible that sailors trained and proficient on one version or increment of LCS may not be able to perform well on another version or increment without significant retraining!



When an evolutionary acquisition strategy is used, the Test and Evaluation strategy should provide an adequate amount of testing and evaluation of each increment. In general, if T&E activities have already confirmed the effectiveness and suitability of some aspect of a previous increment, then there's no reason to test that portion of the system again in future increments. The only things that need to be tested and evaluated are those portions of the system that differ from previous increments.

A PIR is a Post-Implementation Review. PIRs provide important user feedback for each increment. They're a very important part of an evolutionary acquisition strategy. The idea here is that we want to understand how well a recently completed increment meets the needs of users before finalizing the requirements for a subsequent increment. In practice though, the opportunity for this kind of feedback depends on the schedule. It may be that the next increment will be well on its way through the acquisition process before a previous increment has been fielded or deployed long enough to get any useful feedback from the operators, maintainers, supporters or those who train them.