



CFITES SERIES

How to Meet Requirements 4 of 7

Analysis

Design

Development

Conduct

Evaluation

Validation

The primary objective of the **Development Phase** is to provide effective instructional materials that preserve the Design intent and prepare for programme Delivery. The following 5 step process is used by the Canadian Armed Forces (CAF) to determine the optimum approach (i.e., develop internally, procure externally or use a blend), run a trial, prepare instructors and assess cost-effectiveness.

Step 1A

Identify Requirements



CFITES Requires

Review of the Qualification Standard (QS) & Training Plan (TP) along with the following:

- Availability of materials & equipment required to deliver instruction
- Anticipated costs, funding available & business planning
- Timeline for acquisition & development
- Training facility requirements – i.e., whether new or modified facilities are required
- Operation & support. This includes maintenance, equipment life cycle, consumable & non-consumable materials
- Overall Instructional Strategy

ADVISOR Added Value

- ✓ Quickly & accurately forecasts budget, personnel, facilities & equipment needed to develop, deliver, support & maintain each course using various blends of delivery options within any time period based on throughput, instructor/trainees' ratios & course length
- ✓ Assesses personnel & resources availability by tracking their utilization time/rates across all courses
- ✓ Optimizes personnel/resource utilization & improves personnel/resource allocation by identifying shortfalls & excess capabilities

Step 1B

Determine Sources of Material



CFITES Requires

Assess the pros & cons of the following four development options:

- Internal development. Pros: Develop CAF resources, expertise & capability. Cons: Expensive to establish & maintain – i.e., capability may be short lived

ADVISOR Added Value

- ✓ Leverages templates to assess & compare the costs & benefits of using internal resources, external expertise or various combinations including build versus buy or purchase versus lease within seconds – i.e., quickly carry out multiple what-if scenarios



Step 1B

Determine Sources of Material



CFITES Requires

- Commercial Contract. Pros: Defined cost when requirements are clear & stable. Cons: Less control of process/outcome & longer lead time required
- Combination of Internal & External. Pros: Makes efficient use of resources. Cons: High planning, coordination & management required
- Commercial Purchase or Lease. Pros: Lower start-up costs in some cases. Cons: Content may require modification & vendor technical support

ADVISOR Added Value

- ✓ Generates comprehensive business case report to support recommendations with the click of a button

Step 2A

Procure Instructional Materials



CFITES Requires

Procure materials using one of the following options:

- Issue a Request for Proposal (RFP) on Buy and Sell (<https://buyandsell.gc.ca/>)
- Use Standing Offer or Supply Arrangement
- Investigate borrowing or purchasing materials from Other Government Departments (OGDs) or allied partners

Step 2B

Produce Instructional Materials



CFITES Requires

Produce instructional materials in-house when equipment, expertise & time are available. Typically, the more complex the training requirement is, the more likely that a blended “procure/produce” or full procurement strategy will be pursued.

Canadian Forces Individual Training and Education System (CFITES) Volume 5 Development of Instructional Programmes provides specific guidance on production of assessment instruments, course time tables & lesson plan development.

ADVISOR Added Value

- ✓ Facilitates instructional material development by exporting Training Plan (TP) & Qualification Standard and Plan (QSP) into html or xml file format that can be easily imported to MS Word or Defence Learning Network (DLN) & AFILE Learning Content Management System (LCMS)



Step 3

Conduct Trials and Revise Materials



CFITES Requires

Use one of the following methods to reduce the risk of procurement or production of ineffective instructional materials:

- **Initial Review.** Review materials to ensure alignment with the learning activity
- **Expert Review.** Verify the accuracy & completeness of content using SMEs
- **One on One Trial.** Assess materials with an individual learner who represents the target population
- **Group or Field Trials.** Trial instructional materials with learners' representative of target population in actual learning environment
- **Pilot Course.** Conduct a full trial of the instructional programme prior to implementation

ADVISOR Added Value

- ✓ Provides top down and bottom up audit trail to ensure that all identified Teaching Points have been addressed; and all Teaching Points within the course are aligned to a specific Enabling & Performance Objective
- ✓ Tracks changes to Teaching Points – i.e., when was the change made, by whom and why

Step 4

Prepare Staff



CFITES Requires

Prepare instructors, standards & support staff for course delivery & pertinent administrative aspects.

- **Instructors:** Ensure that instructors possess Basic Instructional Techniques qualification, as a minimum – Advanced Instructional Techniques qualification are preferable. Train instructors on the new material to ensure that they are completely familiar with course content, & lesson guidance
- **Standards & Support Staff:** Brief Standards & Support Staff on the instructional programme prior to the trial. Attend the trial to evaluate effectiveness

Step 5

Record Development Costs



CFITES Requires

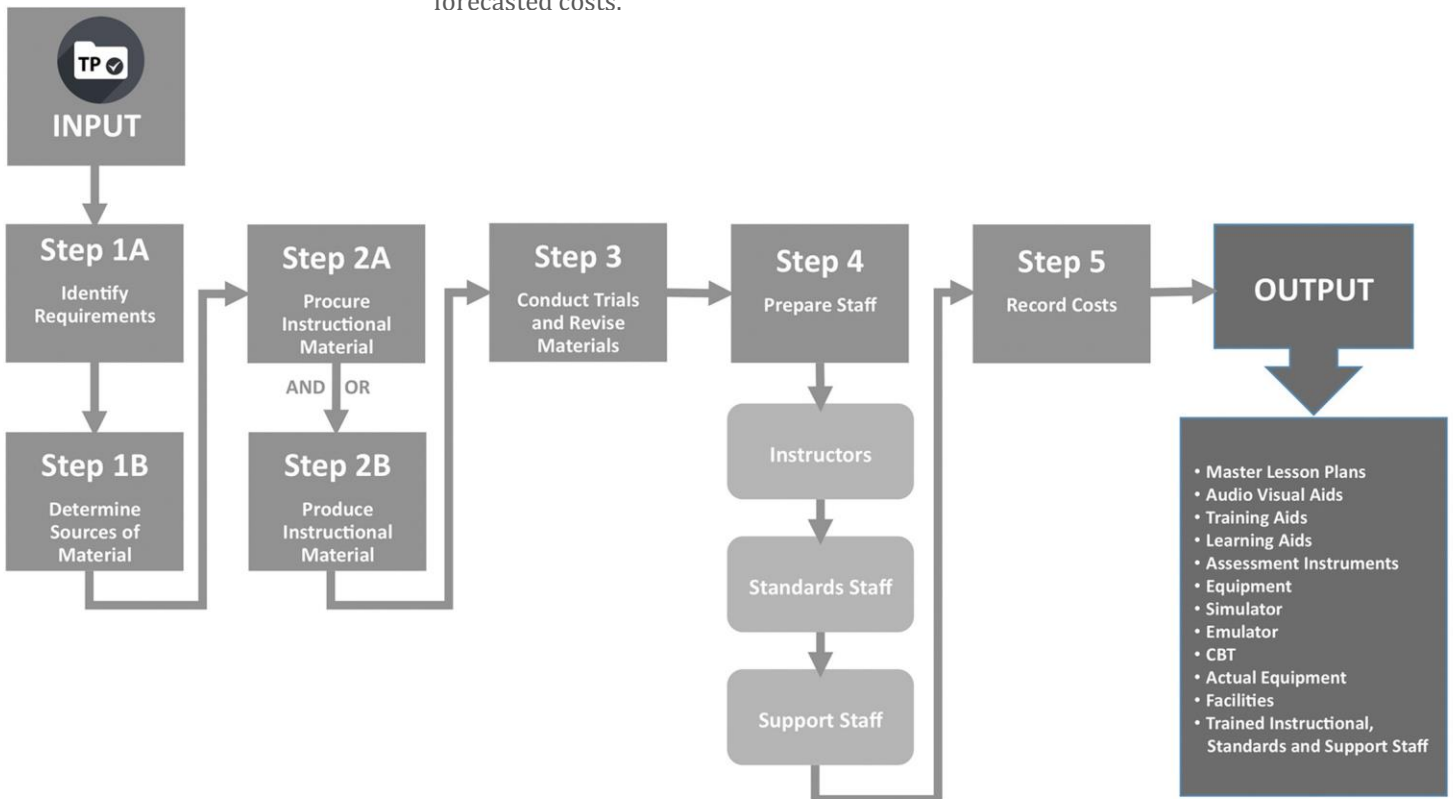
Record costs throughout the development process in order to control expenditures & manage resources. In complex programs cost data is normally detailed in the Business Plan.

Total & combine the costs of each item with overhead, general & administrative expenses, & contract fees to arrive to the final figure. Facilities costs can include design, construction & the installation of utilities. Equipment costs can include development, production, trials & integration. Material costs can include design, production, revisions & translation.

Assess the cost-effectiveness of the development process by comparing actual development costs with forecasted costs.

ADV!SOR Added Value

- ✓ Automatically compiles time & cost data from team members; compares actual time & cost of each task to forecasts; analyzes data; updates project status & communicates results to project manager
- ✓ Minimizes delays & cost overruns by tracking and reporting progress in real time – i.e., hours worked on each Task, costs, items completed and whether or not it is on time/budget
- ✓ Computes and reports discrepancies for each item by comparing actual to forecasted costs



Contact us today to find out how we can assist you in meeting CFITES requirements and drive training efficiency.