DSAT Series

How to Meet Requirements 8 of 9

Scope	Analysis	Training Design & Development			Delivery	Evaluation & Validation
		Stage 01	Stage 02	Stage 03		

Following the delivery of training, its impact is assessed in the **Evaluation** phase, to determine what has been achieved, evaluate the effectiveness of training and verify whether the training contributed to the achievement of organizational goals and targets. Furthermore, evaluation:

- Proves value for money spent
- Improves training
- Acts as a control to verify training is working
- Provides feedback to enhance instructors and designers' learning

Validation, on the other hand, ensures that the training processes and products meet Defence requirements.

Step 1

Produce Training Evaluation Strategy

DSAT Requires

Stage 1: Produce training evaluation strategy to outline the activities to be undertaken in the evaluation process in order to assess the total worth of a training activity as follows:

- Identify measures that need to be carried out to ensure robust evaluation of needs analysis, training design processes & training delivery, namely:
  - Collect & interpret evidence systemically, in order to derive a judgment of value & provide recommendations to modify & improve training. Specifically the evaluation strategy should:
    - Be systematic
    - Provide critical analysis of current training
    - Give clear indication of improvements to training
  - State the evaluation stages to be applied to each training activity
  - State the frequency with which each evaluation stage should be applied

ADVISOR Added Value

- ✓ Provides multiple data collection forms to support various methods including individual interviews, focus groups, observations, questionnaires & surveys
- ✓ Facilitates the assessment of performance gaps by providing instantaneous access to the desired standards & conditions for each Mission & Training Objective (TO)

- List sources for obtaining information
- Identify the methods of data recording & analysis
- Identify the reports that will be raised
- Allocate specific roles & responsibilities for each stage of the training evaluation process, namely:
  - State the responsibilities of various stakeholders at each stage
  - Identify staffing chain for addressing report recommendations
- Articulate the rationale behind a decision not to apply a specific evaluation stage, when applicable
- Construct a feedback mechanism that ensures the currency & validity of individual training is maintained through the application of the results of the evaluation
- Determine the level of evaluation to be conducted for a particular training activity by:
  - Utilizing an evaluation matrix to score each criterion
  - Determining the depth of evaluation, Stages 3 to 6

Step 2

Identify Training Needs

DSAT Requires

Stage 2: Evaluate the accuracy & effectiveness of current training requirements, as follows:

- Evaluate training needs identified by the organization. Audit the Needs Analysis processes, as part of a wider audit of the entire training system
- Evaluate training needs identified by or for the individual, and:
  - Verify that both the learning needs of the individual & the objectives of the organisation have been considered. This does not mean that an individual should not attend training that shows no direct linkage with the aims & objectives of the organisation; since many training courses provide benefits that are not directly measurable
  - Determine if training has been undertaken in the most cost effective manner
  - Determine if the most appropriate delivery methods have been chosen to maximise learning transfer, given variation in individual learning styles

ADVISOR Added Value

- ✓ Quickly identifies training courses needed to support specific Missions and/or Tasks
- ✓ Provides top down & bottom up audit trail to ensure that all identified Key Learning Points (KLPs) have been addressed; & all KLPs within the course are aligned to specific Enabling & Training Objectives
- ✓ Minimizes costly errors by assessing the viability of 40+ delivery options through a rigorous decision matrix that maps instructional requirements to the capabilities of each media
- ✓ Quickly forecasts & compares budget & resource requirements of viable delivery options while preserving quality control by storing common measures such as hourly rates of developers, instructors & support staff; per diem & travel costs; equipment start-up & operation cost, etc., in Templates

Step 3

Internally Validate Training

DSAT Requires

Stages 3 & 4: Internally validate training, to ensure training processes & products meet operational training requirement, as follows:

- Define the responsibilities of Internal Validation (InVal) team members including course designers, training mangers, instructors & trainees
- Collect:
  - Data from various sources including course documentation, formative & summative tests, trainee logs, observations, course feedback questionnaires, post-course discussions (PCD), interviews, instructor performance monitoring, unsolicited feedback
  - Data required by InVal team to assess the training process: before training starts, during training (i.e., measure learning transfer/formative & trainee reaction) & at end of training (i.e., measure learning transfer/summative)
- Analyse InVal data quality, by:
  - Measuring data validity
  - Measuring data reliability
  - Checking for triangulation
- Evaluate factors that influence trainees' reaction to training, including:
  - Relationship with their trainer
  - Attitude towards attending the course
  - Influence of peers
  - How hard or easy they found the course
  - Perceived relevance of the training
  - Quality of the delivery of the training
- Determine the efficiency & effectiveness of training delivery, by:
  - Measuring the immediate reaction of an individual to a training event through an After Action Review (AAR)
  - Measuring learning transfer achieved by the training activity
  - Utilizing both qualitative & quantitative data in order to ascertain whether training effectiveness & efficiency has been achieved

ADVISOR Added Value

- ✓ Provides multiple data collection forms to support various methods including individual interviews, focus groups, observations, questionnaires & surveys
- ✓ Automatically compiles time & cost data from team members; compares the actual time & costs of each task to forecasts; analyses data & communicates results to project manager

- Present InVal findings as follows:
  - Course internally valid, if it can be positively stated that:
    - All standards have been transferred from TOs in Training Performance Statement to the ISpecs
    - Trainers are instructing in line with ISpecs
    - Instruction is being delivered to the correct Standards & Conditions
    - TOs are being tested to the correct Standards & Conditions
    - Trainees have assimilated the skills & knowledge to achieve the required performance
  - Course not internally valid, if any of the stipulations above have been met

Step 4

Externally Validate Training

DSAT Requires

Stages 5 & 6: Externally Validate training to determine how well training prepares people for their jobs, as follows:

- Define the terms of reference (TOR), to manage processes under which an External Validation (ExVal) study is to proceed
- Define the responsibilities of External Validation (ExVal) team members including ex-trainees, employing officers, subject experts, training analysts & developers
- Measure changes in the behaviour of individuals as a result of a training activity & how well the enhancement of knowledge, skills & attitudes prepared individuals for their role by:
  - Performing Stage 1 ExVal to determine the continuing validity of course Training Objectives - i.e., relevance to job. In other words, determine the impact of training on performance & how well it prepared individuals for their role
  - Selecting the timing of Stage 1 ExVal by considering time elapsed since the completion of training course, opportunity provided for ex-trainees to apply learning in work environment, as well as the length & complexity of the course being validated
  - Selecting methodology to collect & analyse data

ADVISOR Added Value

- ✓ Provides multiple data collection forms to support various methods including individual interviews, focus groups, observations, questionnaires & surveys & facilitates data collection, compilation & analysis
- ✓ Quickly assesses course content validity through a top down & bottom up audit trail that aligns Key Learning Points (KLPs) within the course to a specific Training Objectives (TOs), Tasks & Missions
- ✓ Facilitates the assessment of performance gaps by providing instantaneous access to the desired standard & conditions for each Mission, Training Objective (TO) & Enabling Objective (EO)
- ✓ Provides comprehensive performance improvement model with root cause analysis function that quickly zeros-in on the source of the problem, & identifies Plausible Solutions including Training, Job Aides, Improved Feedback/Communication, Improved Policies/Procedures, Improved Tools/ Equipment, Improved Management/ Supervisory Skills, Incentives, Job/ Process Redesign, etc., to achieve the desired outcome

- Perform Stage 2 ExVal, as required, to investigate & address any shortfalls in performance, subsequent to a training activity
- Determine the type of Stage 2 ExVal - i.e., a. specific focus analysis (informal/follow up) or b. comprehensive
- Identify triggering circumstances - i.e., a. identification of problem during Stage 1 ExVal or b. initiated by training sponsor
- Select the timing of Stage 2 ExVal by considering time elapsed since the completion of training course, opportunity provided for ex-trainees to apply learning in work environment, as well as relevance & accuracy of feedback
- Select methodology to collect & analyse data
- Evaluate factors other than training that influence job performance, such as, working conditions, management policies, personal circumstances & individual motivation
- Assess the influence of these factors on job performance to determine the relevance of training to the job
- Determine the impact of training on performance & how well it prepared individuals for their role
- Utilize both qualitative & quantitative data to determine how well training prepares people for their jobs

- Measure the contribution of training to the achievement of operational and/or business goals, as follows:
  - Assess added value to the organization
  - Measure increases in income/revenue or reduction in costs
  - Assess improvements in effectiveness

✓ Minimizes waste & maximizes impact by forecasting the costs & benefits of Plausible Solutions & focusing resources on initiatives with highest value

Step 5

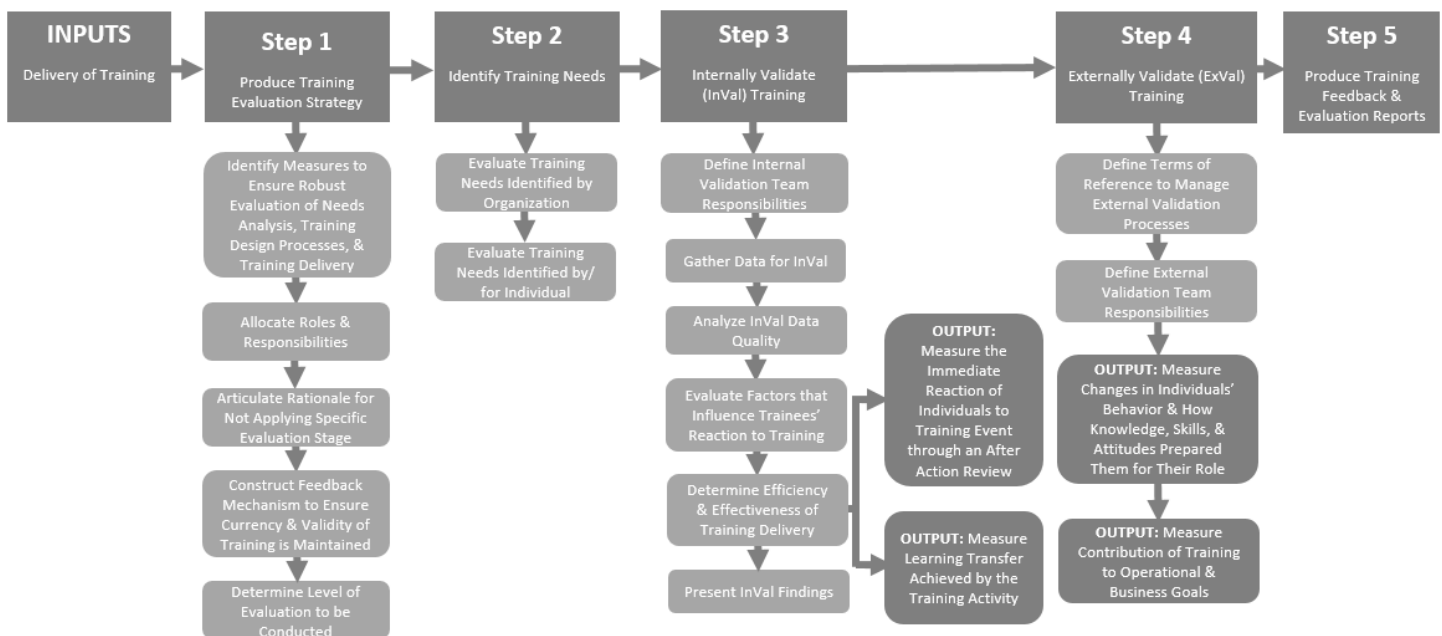**Produce Training Feedback & Evaluation Report**

DSAT Requires

Produce Training Feedback/Evaluation reports, to convey information to help with subsequent decision-making. The report should indicate:

- Whether employees have learned new skills
- Whether employees newly learned skills have benefited the organisation
- What the training has contributed to the organisation & what needs to be done differently in the future

ADVISOR Added Value

✓ Generates comprehensive Performance Analysis report that documents findings and identifies - i.e., whether trainees can perform Tasks to the desired standard under the prescribed conditions; performance gaps, if any; additional interventions needed to achieve the desired outcomes as well as their cost & benefits in a single click

INPUTS	Step 1	Step 2	Step 3	Step 4	Step 5
Delivery of Training	Produce Training Evaluation Strategy	Identify Training Needs	Internally Validate (InVal) Training	Externally Validate (ExVal) Training	Produce Training Feedback & Evaluation Reports

Step 1:
- Identify Measures to Ensure Robust Evaluation of Needs Analysis, Training Design Processes, & Training Delivery
- Allocate Roles & Responsibilities
- Articulate Rationale for Not Applying Specific Evaluation Stage
- Construct Feedback Mechanism to Ensure Currency & Validity of Training is Maintained
- Determine Level of Evaluation to be Conducted

Step 2:
- Evaluate Training Needs Identified by Organization
- Evaluate Training Needs Identified by/ for Individual

Step 3:
- Define Internal Validation Team Responsibilities
- Gather Data for InVal
- Analyze InVal Data Quality
- Evaluate Factors that Influence Trainees' Reaction to Training
- Determine Efficiency & Effectiveness of Training Delivery
- Present InVal Findings

OUTPUT: Measure the Immediate Reaction of Individuals to Training Event through an After Action Review

OUTPUT: Measure Learning Transfer Achieved by the Training Activity

Step 4:
- Define Terms of Reference to Manage External Validation Processes
- Define External Validation Team Responsibilities

OUTPUT: Measure Changes in Individuals' Behavior & How Knowledge, Skills, & Attitudes Prepared Them for Their Role

OUTPUT: Measure Contribution of Training to Operational & Business Goals

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