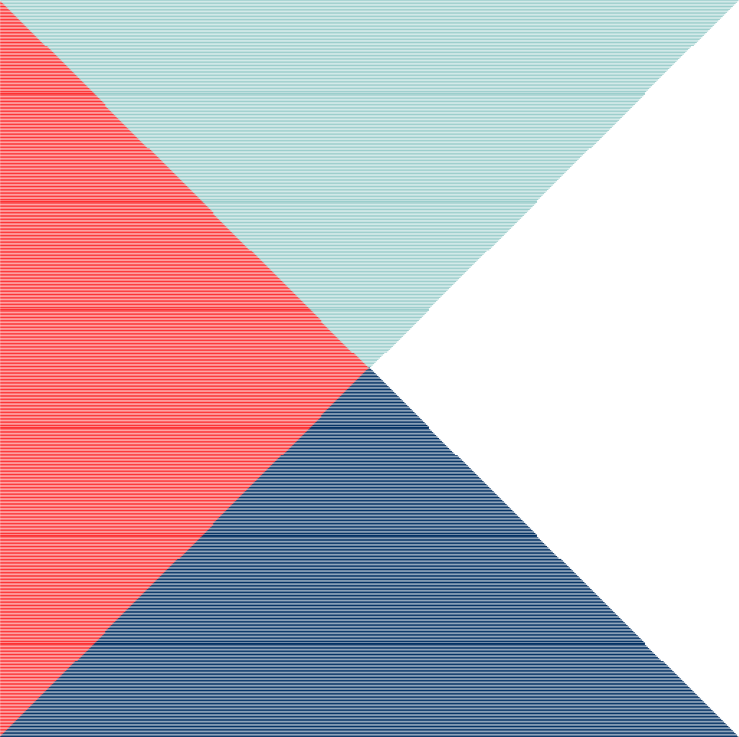
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**Defence Centre of Training Support Training Support Handbook**

**JOB ANALYSIS**

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**DOCUMENT QUALITY RECORD**

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1. **Amendments:** Individual pages that are replaced during the amendment process should be disposed of according to the document security classification in accordance with local instructions.
2. **Re-Issue:** On occasion the entire handbook will be re-issued and under those circumstances the old version of the handbook must be destroyed, without undue delay, upon receipt of the later version.

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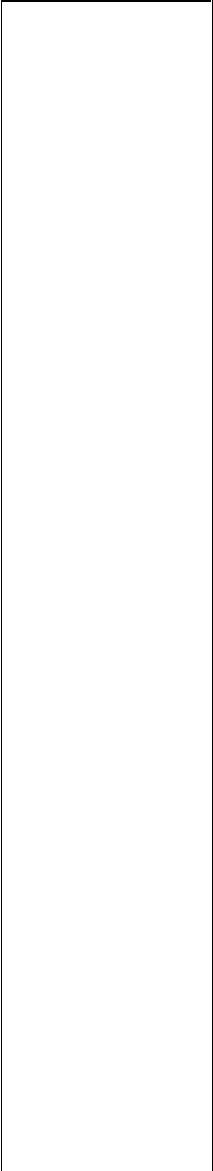
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**FOREWORD**

1. For the purpose of this document, the term “training”1 encompasses all Learning2, Education3 and Personal Development4 that has the objective of developing the knowledge, skills and/or attitudes of an individual towards preparing that individual for their role.
2. **Policy for the Management of Individual Training and Education in Defence.** This policy sets the framework for the management of individual training across Defence and details the key areas of Training Management (TM), Training Requirements Authority5 (TRA) and Training Delivery Authority6 (TDA) roles and Customer Executive Board (CEB) function. It is the high level policy that defines who is responsible for what in Defence Individual Training.
3. **Defence Systems Approach to Training Quality Standard (DSAT QS).** DSAT QS sets out the strategic principles to be applied to all Individual Training provided by, or on behalf of, Defence. The DSAT QS has been endorsed by the Training and Education Policy Group (TEPG) as the quality standard for the management of Individual Training across Defence. Any activity that has the objective of developing the knowledge, skills and/or attitudes of an individual for their current or future role must comply with DSAT QS.
4. **Defence Training Support Manuals (DTSMs).** The DSAT QS is underpinned and supported by DTSMs that direct its implementation. There are 6 DTSMs:

DTSM 1 - The Analysis, Design and Development of Training.

DTSM 2 - The Glossary of Defence Training Terminology.

DTSM 3 - Training Needs Analysis.

DTSM 4 - The Evaluation of Training.

DTSM 5 - Technology Based Training Solutions.

DTSM 6 - The Audit and Inspection of Individual Training.

1. **Defence Centre of Training Support (DCTS) Training Support Handbooks.** In order to further amplify the information contained in DTSMs and in direct support of the training delivered to Training Support specialists, DCTS has developed a series of DCTS Training Support Handbooks. These publications are provided as reference guides for Training Support practitioners to give additional detailed guidance on specific areas
2. An activity that aims to impart the specific knowledge, skills and/or inculcate appropriate attitudes required by an individual in order to perform adequately a task or job.
3. Learning is the acquisition of knowledge, skills and/or attitude.
4. Education encompasses the development of intellectual capacity, the acquisition of general supporting knowledge and inculcation of attitudes, which underpin performance, and engender understanding, commitment and ethos.
5. Personal Development is the enhancement of personal and/or professional attributes arising from a combination of training, education and experience.
6. The TRA represents the end-user of the trained output. It is the ultimate authority for the derivation and maintenance of the Operational Performance Statement (OPS) or the Learning Objectives/elements of the appropriate Competence Framework (CF), and is responsible for the evaluation of the effect of the training and education in achieving that OPS/CF (delivered both in the training school/organisation and the workplace).
7. The TDA is the organisation responsible for the provision of individual training or education, to agreed standards and in accordance with extant and funded Defence and single Service policies, on behalf of the customer(s). It is the conduit through which a Training Organisation/School is commanded/headed, resourced and administered.

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relating to the training delivered by DCTS. DCTS Training Support Handbooks are available on the following topics:

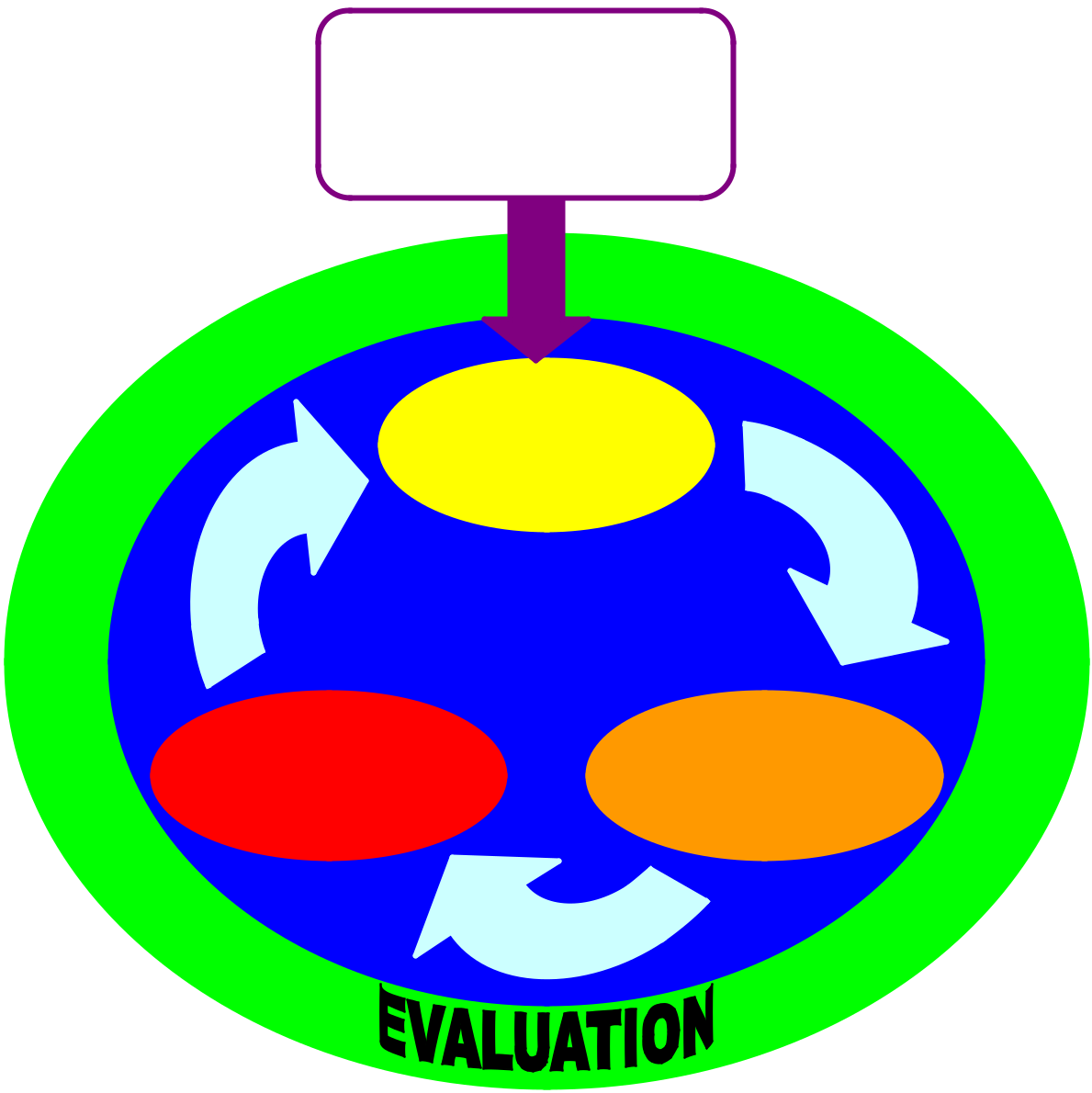
* Job Analysis and Formal Training Statements
* Instructional Design incl Course Programming
* Assessment
* InVal and ExVal
* Training Needs Analysis (TNA)
* Data Gathering and Analysis Techniques
* Audit

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**OVERVIEW OF THE DSAT PROCESS**

1. The DSAT process illustrated in Figure 1 demonstrates how the main process groups are needed for the comprehensive Analysis, Design and Development exercise. These groups are:
   1. Needs Analysis.
   2. Training Design and Development.
   3. Training Delivery.
   4. Evaluation (DTSM 4 deals with the Evaluation of Training).



Change in, or review of,

operations/business triggers

a perceived need for Training

**NEEDS**

**ANALYSIS**

**TRAINING**

**TRAINING** **DESIGN &**

**DELIVERY** **DEVELOPMENT**

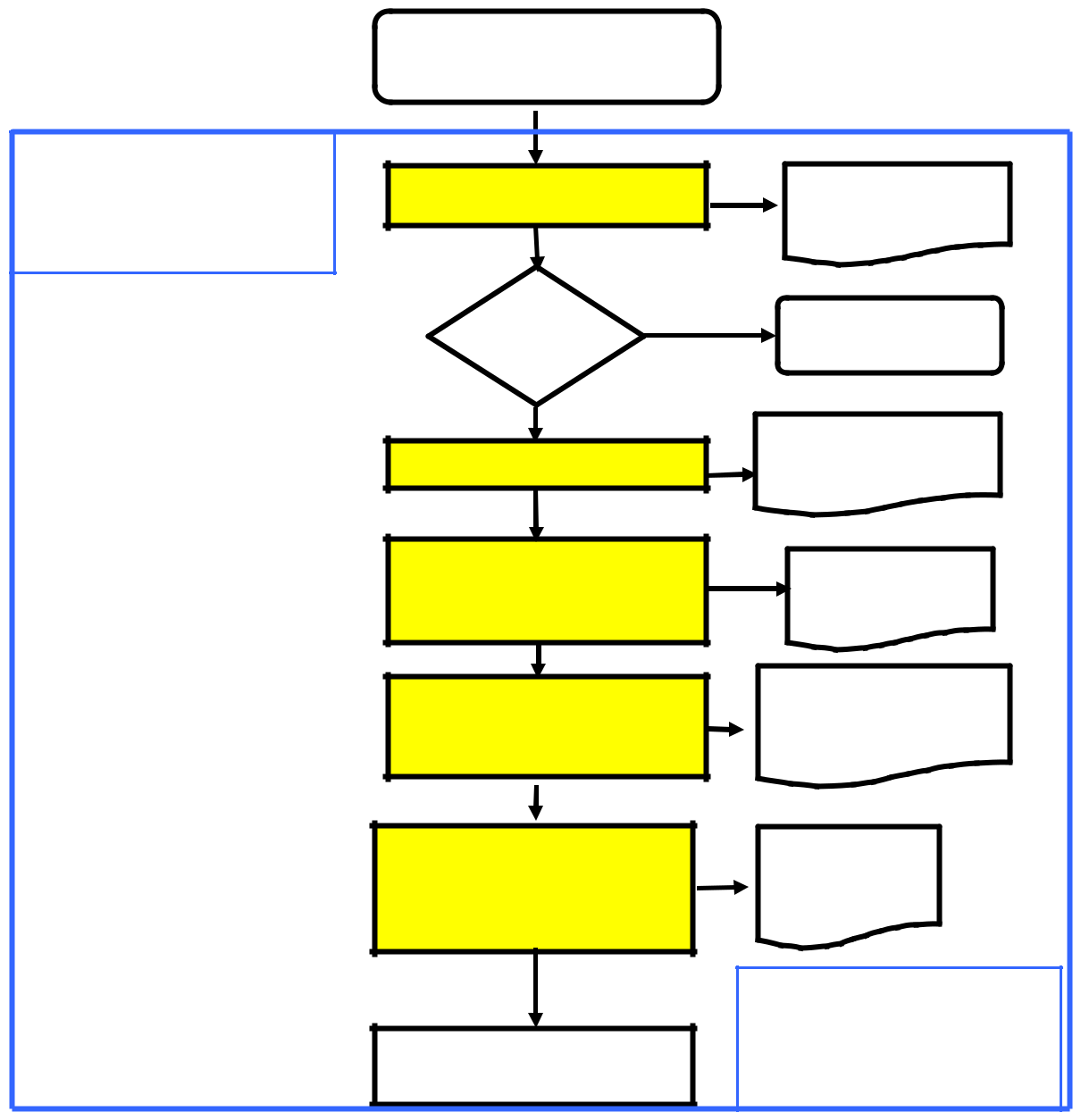
Figure 1 – DSAT Process

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1. This handbook is designed primarily to accompany and to reinforce the training delivered within the Job Analysis course. Defence Training Support Manual 1 (DTSM1) – The Analysis, Design and Development of Training sets out the various processes and tools that may be used in order to meet the requirements of Defence Systems Approach to Training (DSAT QS) regarding activities required for the analysis, design and development of Defence individual training.
2. Figure 2 provides an illustrative process diagram of the analysis, design and

development of training and shows how the production of the key DSAT documentation is linked to the 3 stages of Training Design.



**EVALUATION**

Applied to all stages of the DSAT process as appropriate

A change in, or review of, operational/business practices triggers a perceived requirement for training.

**SCOPING EXERCISE**

Is a training **NO**

intervention

required?

**Scoping Report**

Stop DSAT process.

**YES**

**NEEDS ANALYSIS**

**TRAINING DESIGN &**

**DEVELOPMENT – STAGE 1**

(Determination of Training

Objectives)

**TRAINING DESIGN &**

**DEVELOPMENT – STAGE 2**

**TRAINING DESIGN &**

**DEVELOPMENT – STAGE 3**

(Production of Training and

Assessment Media)

**TRAINING DELIVERY**

**Operational Performance**

**Statement/ Competence**

**Framework**

**Formal training**

**Statement**

**Assessment Strategy**

**(incorporating Assessment**

**Specification)**

**Instructional**

**Specification**

**EVALUATION**

Applied to all stages of the DSAT process as appropriate

Figure 2 – DSAT Illustrative Process Diagram

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1. The diagram shown on the previous page is the DSAT QS process diagram. This illustrates the main process groups that are needed for comprehensive analysis, design and development. These groups are:
   1. Scoping Exercise. This exercise should be triggered when a change in business or operational practices creates a perception that either new training is required or existing training needs to change. The exercise needs to identify if new or modified training is the solution to the problem. Provided that training is deemed necessary then the Scoping Exercise must identify the method of and resources needed for the subsequent steps of Needs Analysis and Training Design and Development. The Scoping Exercise will result in the production of a report and, if required, Terms of Reference (TORs) and Project Plan for the next stages of work.
   2. Needs Analysis. Following a Scoping Exercise that recommends a training solution, a Needs Analysis is required to ascertain the type and scope of the operational/business need. The Needs Analysis may, in its simplest form, be a discussion between the key stakeholders, which will ultimately result in the production of an Operational Performance Statement (OPS) or Competence Framework (CF), which is the documented agreement of the needs to be addressed. Where there is a change in the business/ operational capability that is likely to have a significant impact on the training resources required, a Training Needs Analysis (TNA) should be conducted. The conduct of TNAs is detailed in DTSM 3.
   3. Training Design and Development. The results of the needs analysis phase inform the Training Design and Development process. This process builds on the performance objectives produced by the needs analysis phase and derives achievable Training Objectives (TOs) and training solutions. The Objectives and Solutions must be agreed between the Training Requirements Authority (TRA)7 and the training provider. This process must yield a Formal Training Statement in sufficient detail to allow the training provider to deliver a trainee trained to the standard as close as possible to the operational/workplace performance objectives. This forms the detail of the contract between the TRA and the Training Provider.
2. This handbook is divided into 2 sections; the first section deals with the Job Analysis processes required within the Needs Analysis phase whilst the second half of the handbook considers the Training Design and Development Stage 1 – The Determination of Training Objectives.
3. The TRA represents the end-user of the trained output. It is the ultimate authority for the derivation and maintenance of the Operational Performance Statement (OPS) or the Learning Objectives/elements of the appropriate Competence Framework (CF), and is responsible for the evaluation of the effect of the training and education in achieving that OPS/CF (delivered both in the training school/organisation and the workplace).

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**JOB ANALYSIS**

Section 1 – Part 1 An Introduction to Job Analysis

1.1.1 In a Defence context, the 'job' is the basic unit in carrying out many of the personnel actions of selection, training, classification and assignment. The principal functions, tasks, and task elements performed by an individual constitute 'the job’. Job Analysis (JA) is the process of examining a specific job in detail, in order to identify all the component duties and tasks, the conditions under which the job is performed, and the standards to be achieved when performing the job. JA should examine the following:

1. Main job content
2. Main objective of the job
3. The principal responsibilities involved
4. Duties and tasks
5. Levels of supervision
6. Work conditions
7. Job standards
8. Documentation that lays down job methods and policy
9. Aspects of the job found to be distasteful or unpleasant
10. Frequency of task-performance
11. Percentage of personnel performing the tasks
12. Likely job changes and consequences of inadequate performance

1.1.2 The ‘person in the job’ should also be considered. In this way, it will be possible to identify the attitudes necessary for effective performance. However, there is a danger of concentrating wholly on the job. There is a need to widen the perspective to consider its context. A job does not exist in isolation but within the context of a particular organisation and situation. This context may affect not only the way the JA is conducted but also the eventual design of a training system.

1.1.3 If a JA is conducted the following activities and products, may result:

1. Job Specification. A Job Specification or equivalent may be produced collating all relevant outcomes from JA to accurately identify the job.
2. Analysis of Tasks. An analysis of tasks should be conducted to identify the skills and abilities required by individuals to perform tasks in their jobs. Tasks, sub-tasks and task elements identified by the analysis of should be presented in a format that shows their hierarchical relationship. The hierarchical relationship is usually shown as a Job Scalar. This is an inventory of duties, tasks, sub-tasks and task elements.
3. Operational Performance Statement (OPS). A statement of the operational performance required and its associated conditions and standards should be produced. This is derived, in part, from the Analysis of Tasks.
4. Difficulty, Importance and Frequency (DIF) Analysis. DIF Analysis rates the difficulty, importance and frequency of tasks and sub-tasks and by so doing, assists

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in making early training decisions by suggesting 'Training Categories'. DIF data is usually collected during the JA phase.

1. Early Training Analysis (ETA). ETA allows decisions to be made at an early stage in the training design process concerning ‘train vs. no train’ on individual tasks and the location and duration of training. These decisions are based on the information collated in the JA, trainee entry standard, trainee throughput and training priorities.

1.1.4 JA may be used for a number of different reasons:

1. Training Design. The process of examining a job to identify its component tasks and the circumstances, in which, the tasks are performed is the first step in gathering the information required to design efficient and effective trg.
2. Recruitment of Personnel. JA may be used to determine the personal characteristics essential for a job and therefore, provide objective information on which to base personnel selection decisions.
3. Job Evaluation. Defence pay is based upon an assessment of the responsibilities and working environment of an individual. JA can be used to provide objective and comparative data on responsibilities and working conditions and may therefore be used to help ensure that realistic and appropriate pay assessments are made.
4. Job Restructuring. JA can be used to determine the relationships between jobs to rationalise the distribution of tasks and responsibilities.

1.1.5 Additional benefits of a JA can include the following areas:

1. Resettlement. If a Job Specification is written in sufficient depth then the production of a CV, as part of resettlement, can become more focussed.
2. Civilian Accreditation. The Trg Design function of JA, identifying a job and its component tasks, can be utilised when mapping a Defence course to appropriate civilian accreditation.
3. Duty of Care. Ensuring personnel are effectively and efficiently trained to carry out their duties.

Job Analysis for Training Design

1.1.6 There are a number of reasons why it may be necessary to carry out a JA for Training Design.

* 1. The introduction of new working practices.
  2. The introduction of legislation that directly affects the way that a job is carried

out.

c.A perceived performance deficiency affecting certain jobs or types of jobs.

* 1. A change in threat or doctrine.

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1. External Validation identifying that certain TOs are irrelevant or inadequate.
2. Revision of specialization structures or employment regulations.

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Section 1 – Part 2 - The Conduct of Job Analysis - Planning the Job Analysis

1.2.1 The initial planning of JA is concerned with defining the main aim of the JA, agreeing Terms of Reference (TORs) with the customer, getting the feel of the job and clarifying major issues before undertaking the detailed planning for the main investigation. This initial planning may be formalised with the production of a comprehensive written report or it may simply involve a series of meetings or briefings. TORs for JA are strongly recommended and these are to be agreed and formally issued at this stage. Points to consider during the planning stage include:

1. Aim. Obtain a clear statement of the aim of the JA. For example:
   1. Does it seek to provide on-going feedback to assist in the re-design and modification of a course?
   2. Is its purpose to validate the effectiveness of a trg course to see if it meets the needs of the front line?
   3. What constraints does the project have in terms of cost, time and

quality?

1. TORs. It is imperative that clear and achievable TORs are produced to guide the JA. A considerable amount of resources may be required to carry out the JA and these should be detailed clearly within the TORs. Although the layout of TORs may be adjusted to meet specific circumstances there are a number of areas that should be contained within them:
   1. The scope and size of the analysis task
   2. Deliverables and reporting procedures
   3. Timescales and resources available
   4. The methodology to be adopted
2. Main Job Content. Before a detailed investigation can begin it is essential to have a clear picture of what the job entails. Examples of the sort of general information that might be gathered at this stage are as follows:
   1. The main objective of the job and the principal responsibilities involved
   2. A provisional list of the tasks performed
   3. Conditions under which the job is performed
   4. Identification of the documents that lay down job methods, policy, functions or duties
3. Main Job Context. A job does not exist in isolation but within the context of a particular organisation and situation. This context may affect not only the way the

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JA is conducted but also the eventual design of a trg system. It is important to examine the context of the job at this stage and obtain information such as:

* + 1. The numbers doing the job and where they are serving
    2. The present system of selection and trg
  1. The relationship between the job and other jobs and employments
     1. The principle problems associated with the job
     2. The conditions under which the job is carried out
     3. Anticipated changes in role, equipment or policy

1. Data Analysis Techniques. Before the choice of data gathering tools and target population can be made for the JA, it is important to decide on the eventual methods to be used for the data analysis. There are two main types of data that you may need to analyse, qualitative and quantitative. Qualitative methods tend to be used for smaller samples and quantitative methods are useful for analysing larger samples.
2. Data Collection and Recording Techniques. Data gathering techniques are detailed, including questionnaires, and the use of interviews and observation, in the Data Gathering and Analysis Handbook. These techniques may all be utilised within the data collection phase. However, their usage should have been planned for during the planning of the JA. It is probable that a mixture of methods will produce the most reliable data. Moreover, the choice of methodology will be influenced by a number of factors such as the scale of the analysis, the time and resources available and the locations of the job to be analysed.
3. The following points are worth remembering:
   * 1. A JA should collect data not only regarding job performance but also the conditions under which the job must be undertaken, the standards to which it must be performed and the attitudes that ensure successful completion of the job. An assessment of the relative difficulty, importance and frequency of each task should also be carried out.
     2. Sources of information may include the job-holder but also employers, line managers, external specialists, reference documents and panels of experts.
     3. Data recording may be carried out using various techniques including daily logs, interview notes or a spreadsheet or database.
     4. Sampling may be necessary to ensure that accurate representation of the target audience is obtained.

An example format for the contents of a set of TORs for a JA is shown below.

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**Example Contents of Terms of Reference**

**Contents of Terms of Reference**

Background

Aim

Assumptions

Scope

Constraints

Conduct

Project Management

Methodology

Data Collection

Data Analysis

Consultation/Liaison/Visits

Plan

Activities

Milestones

Timings

Resources

Manpower

Administrative/IT Support

Budgetary responsibility

Reference documents to be made available

Deliverables

**1.6.1 Table 1 Contents of Terms Of Reference**

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Section 1 – Part 3 - The Conduct of Job Analysis - The Analysis of Tasks

1.3.1 The analysis of tasks is the primary method used within the JA process. The main aim of the task analysis is not only to identify the duties, tasks, sub-tasks and task elements (**performance**) that are to be performed, but also the **conditions** under which they are to be performed and the required **standard** of performance. The analysis of tasks is therefore the keystone of the JA process. It identifies the tasks and defines the minimum performance to be achieved in the operational/business environment.

1.3.2 Fundamentally the key output of this process is a description of the tasks that are carried out in the job. These are known as Task Statements. A task can be defined as something that is:

1. A specific action
2. Performed by an individual or group of individuals
3. Recognised by a definite beginning and end
4. Directed towards its' own goal
5. Performed for a relatively short period of time (could be hours but rarely

days)

1. Observable and measurable

1.3.3 A task statement must contain an object, a verb and sometimes a qualifier. An example of a task statement would be: ' *Perform a 1200 hour service on a diesel engine’*. Further details on the writing of task statements may be found under the heading 'Operational Performance Statements, later in this handbook.

1.3.4 The process of Analysing Tasks comprises 4 key areas: Planning the Analysis, Collecting Task Analysis Data, Reviewing and Analysing Data and Production of the OPS.

Planning the Analysis

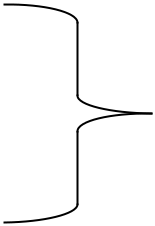
1.3.5 The initial stage in the Analysis of Tasks process must be that of planning and the consideration of what data is required. The aim of the study is to identify not only the duties and tasks that have to be performed but also the conditions under which they are performed and the standard of performance required. The level of detail required should be sufficient to allow for the subsequent DSAT process to take place i.e. the Determination of Training Objectives (TOs). Furthermore it is usual to rate tasks according to the considered **D**ifficulty of each task, the **I**mportance of the task and their relative **F**requency. This activity is known as **DIF** Analysis and it is discussed in detail later in this handbook. In some cases information on other aspects of the job may also be required.

1.3.6 Examples of the types of questions that may need to be asked when analysing jobs and tasks are listed below:

1. What duties, tasks, sub-tasks and task elements are performed?
2. Who performs the tasks?
3. Under what conditions are the tasks performed?
4. To what standards are the tasks performed?

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1. How difficult are the tasks?
2. How important are the tasks?
3. How frequently are the tasks performed?
4. How long do the tasks take?

(Required for DIF Analysis)

1. What written or verbal instructions are available?
2. What equipment is used?
3. What other people help?
4. How could tasks be improved?

1.3.7 When planning the analysis it is very important to identify the most appropriate sources of the data:

1. Documentation. In order to begin identifying duties and tasks it is often possible to consult documentation such as Books of Reference (BRs), Air Publications (APs), Personnel Administration Manuals (PAMs), and MoD/manufacturers’ manuals.
2. SMEs8. The most appropriate Subject Matter Experts (SMEs) are likely to be a mixture of jobholders, line managers, trade managers and manufacturers. At this stage the key stakeholders should be identified. If there are a large number of jobholders and employers then the target population will have to be sampled. In the case of some equipment the manufacturer, or users outside of Defence may be the only sources of data.

1.3.8 Having identified potential sources of data it is equally important to identify and select the most suitable data gathering techniques. The three main methods used under the banner of 'Field Survey' are the questionnaire, the interview and observation. The choice of method will be influenced by a number of factors such as the scale of the analysis, the time and resources available and the locations of the job/training being analysed.

1.3.9 It should be noted that the two main types of data used for analysis are qualitative9 and quantitative10: Qualitative methods tend to be used for smaller samples and quantitative methods are useful for analysing larger samples, although in many Job Analysis projects the two methods are used.

1.3.10 Data recording may be carried out using various techniques including daily logs, interview notes or a spreadsheet or database. Further information regarding data gathering and analysis techniques is available in the Data Gathering and Analysis Handbook.

1. Subject Matter Expert (SME) – an individual whoa has thorough knowledge of a job, functions/tasks, or a particular topic, whi.ch qualifies him/her to assist in the training development process (for example, to consult, review, (Glossary of defence Training Terminology)
2. Qualitative methods permit the study of selected issues in depth and detail. Open ended questions with verbal or written responses. E.g. Do you find anything distasteful about the job? …………………….
3. Quantitative methods require the use of standardised measures for the capturing and the representation of various perspectives and experiences.Whilst this is a true definition does it help the average reader. Each response recorded against a category. E.g. Do you live in your own home? YES NO

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Collecting Task Analysis Data

1.3.11 Having planned the process of obtaining suitable data it is now possible to design and trial the data gathering instruments selected and ultimately collect the data. It is worth noting a trial may result in modification of the data collection instruments.

Design of Data Gathering Instruments

1.3.12 Advice on the design and trialling of questionnaires and interview schedules and on observation techniques is contained within the Data Collection Pre-Course Package.

Visits Programme

1.313 While work is progressing on constructing the data gathering tools, a visits programme should be planned. If a survey is being conducted the programme should include visits for both the pilot study and the main field survey and should allow sufficient time between them for revision of questionnaires or interview schedules and for printing where required. Wasted time in travelling and in waiting for returns must be avoided by stringent planning.

Data Processing

1.3.14 Task Analysis often generates vast amounts of data gathered over a period of time, ranging from days to months. Processing this data is the most painstaking part of the analysis process and can often take much longer than the gathering phase. It is therefore important to systematically record all the data as soon as possible by entering it into a spreadsheet, relational database or commercial analysis software tool. The data may be stored in a variety of formats so long as it is logical and easy to interpret.

Analysis Software

1.3.15 Analysis software does not de-skill the process of conducting a JA, except in a small class of relatively simple applications. Experience has shown that the validity of a JA will depend primarily upon the expertise of the analysts, the accuracy of the information they are given and the amount of collaboration between all the parties involved, and only, to a lesser degree, upon that of any software used to support it. The principal value of analysis software is in the context of storing data (particularly important when there may be many hundreds of items that require systematic examination and manipulation). Effective storage of data in this manner can aid audit trails.

Job Scalar

1.3.16 One of the primary means of identifying and displaying information on duties and tasks is the Job Scalar. This technique is utilised to break down a job into a series of duties or main areas of work. These, in turn, can be further broken down into tasks, which have to be performed to successfully carry out each duty. Each task can then usually be broken down further into sub-tasks and task elements that have to be carried out to achieve the task.

1.3.17 The action of breaking down the job results in the production of a hierarchy of tasks. There are four levels used to describe a job. These are as follows:

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1. Duties. Duties are the major functions or areas of responsibility of the job. They have no specific start or finish and tend to be general in nature eg. Act as Unit Health and Safety Advisor.
2. Tasks. A major component of a job, that can be produced, compiled, achieved and/or accomplished by itself. Each duty usually contains large segments of closely related tasks.
3. Sub Tasks. Sub-tasks are the component parts of a task.
4. Task Elements. Task elements are the sequenced step-by-step component of a sub-task.

1.3.18 Job Scalar Diagrams. The scalar provides a ‘picture’ of the job in terms of the duties, tasks, sub-tasks and task elements performed by an individual. The purpose of the scalar is to provide an easy to read, comprehensive inventory of the component parts of a job, so that training can be more easily designed to meet the operational requirement. The usual convention for labelling the levels of a scalar is shown in the diagram on the following page.

1.3.19 The Scalar Numbering System. It is essential to employ a numbering system within a scalar, as often the scalar is cross-referenced to other training documentation. The numbering system should indicate the level and relationship of the particular components of the job. An example of a numbering system is also shown on the accompanying diagram.

1.3.20 Scalars are particularly useful tools for the following reasons:

1. They display a structure to the job that may not be apparent in real life.
2. They illustrate the relationship and interdependence of the various parts of the job. The impact of a failure to perform any particular task can therefore be determined.
3. Scalar diagrams of closely related jobs can show areas of commonality and difference thus indicating where rational restructuring could take place.
4. Scalars can be produced for tasks to be performed with new equipment and these can be related to those for existing jobs. They can therefore be used to help assess the impact of new equipment.
5. Scalars are used in the production of OPS and in the production of TOs.

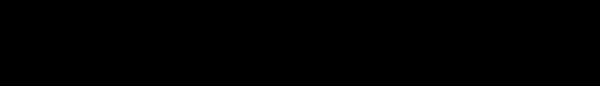
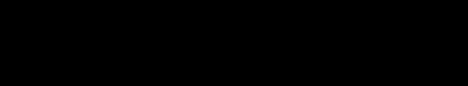
1.3.21 Job scalars do not contain Standards and Conditions and appear to give all tasks an equal importance. They cannot in themselves be used to design training and should be supported by an OPS. The generation of the OPS is detailed within the next section of this handbook.

1.3.22 An important consideration in developing the structure of a job is that we only aim to describe what the jobholder does, or should be capable of doing, and not what they need to know. Determining the knowledge that is required to successfully perform a task happens during Training Design and Development Stage 3.

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|  |  |  | Task 1.1 | | | |  |  |  | Task 1.2 | | | |  | Task 1.3 | |
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|  | Sub Task 1.1.1 | | |  |  |  | Sub Task 1.1.2 | | | |  | | |  |  |  |
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Task Element 1.1.1.1  Task Element 1.1.1.2

Task Scalar with Numbering

Duty 3.0

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**Section 2 – Part 1 – The Job Specification**

2.1.1 A Job Specification (Job Spec) can be defined as a detailed statement of the activities associated with a job and of the qualifications, experience and personal qualities required to carry it out. It may also specify the environment within which the job is performed. A Job Spec may be used not only to inform the training design process, but for other purposes such as personnel selection and the restructuring of a trade or branch. The format and content of a Job Spec may be modified to meet particular needs and circumstances. A typical format that would usually be included is listed below:

1. Job Title. This should be the official title of the job as laid down in the appropriate regulations.
2. Numbers doing the Job. The Job Spec should show the total numbers doing the job. It may also be necessary to break this down further and indicate the numbers in particular appointments or units, if this affects the work they are doing. Sometimes this information may be classified.
3. Main Job Objective. The main job objective is a short, concise statement of the principle purpose of the job, phrased in terms of the performance expected. It should begin with a verb denoting action and vague terms such as ‘to know’ or ‘to understand’ should be avoided.
4. Subsidiary Job Objectives. Subsidiary objectives may either amplify the main objective by showing what must be done to achieve it or indicate additional areas of performance within the total job. They should be written in the same format as for the main objective.
5. Responsibilities. Information on responsibilities should be included under the headings of ‘to superiors’, ‘for subordinates’ and for ‘equipment’. It would also be convenient to include under ‘responsibilities’ information to the degree of supervision exercised over the job–holder and the extent to which he is held accountable for his own work or the work of others.
6. Duties. The bulk of the job spec will be devoted to a comprehensive list of duties involved in the job. These duties can then be broken down into their component tasks, sub tasks and task elements. As an alternative, much of the detail at the lower levels is usually shown in a job scalar (described later in this section) appended to the Job Spec.
7. Standards. Information on the standards necessary for the satisfactory job performance should also be included. However, where they compromise successful completion of lower level components of the job they would be incorporated in the job scalar.
8. Future Job Changes. If major job changes are anticipated, either to the content and scope of the job, or to the equipment used, theses should be recorded in the job spec. This would help ensure that the Job Spec is amended as such changes are implemented. To ensure that the Job Spec is correct and up to date, it should contain the date on which it was prepared or amended.
9. Conditions. The Job Spec should include details of the conditions under which the job is performed. An exhaustive list of every trivial condition is not necessary and only the important conditions should be recorded. The breakdown of conditions into categories of ‘physical’, ‘intrinsic’ and ‘social’ and ‘psychological’ may be used in the job specification.

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* 1. Difficulties and Distastes. The Job Spec should include a statement of the main difficulties and distastes associated with the job. This information can indicate the areas that need to be examined and perhaps modified to remove the problems and where particular emphasis must be given during training.

1. Job Description. The key difference is a job description is usually specific to an appointment and therefore is often different from a job spec rather than an extract from it. The Job Description is a brief and succinct statement, which summarises the main scope and the content of the job. Its purpose is to provide a digest of the job in one short document and is in effect an extract from the Job Spec. It may be useful during the course of job analysis, particularly if it becomes apparent in the preliminary analysis that the purpose of the job is not clearly defined. The job description can be presented as a basis for a policy decision on what the job should be and can help define the scope of the JA. The job description is often used for purposes other than training, e.g. at Careers Information Offices, at Recruitment Selection Centres and in conjunction with Resettlement. There is no laid down format for a job description, and content and layout may be varied to meet the particular purpose for which it is being written. It will normally contain as a minimum, the following information, which may be extracted from the Job Spec: job title, main job objectives, responsibilities and tasks.
2. Personnel Specification. In the course of studying the job, it may become apparent that to carry out the job effectively an individual must possess certain characteristics. If this is so, then it is essential to select and train only those who have these characteristics and who are, therefore, capable of doing the job. Information on the sort of people best suited to do the job will be invaluable to those responsible for selecting or allocating personnel to jobs, employment or particular training courses. It may also be valuable for designing entry tests. The information is recorded in a personnel specification that describes what essential and desirable characteristics an individual must have to be able to perform the job. If required, a personnel specification would usually be attached to the job specification. A suggested format for a personnel specification is shown below:
   * 1. Physical Make-up. The first point to consider is whether the job makes any special physical demands on the people doing it. Examples of the sort of information that might be included are particular requirements for eyesight, manual dexterity etc.
     2. Attainments. This deals with the actual academic or other standards an individual must have achieved before they can cope with the job. Under this heading we may put such items as the examinations they must have passed, their trade/branch, role, rank or previous experience.
     3. General Intelligence. The intellectual demands of jobs will vary and it may be important to indicate either the general level of intelligence, or minimum scores on intelligence tests required.
     4. Special Aptitudes. Some jobs require particular abilities that are not always easy to train for. We recognise these in everyday speech when we talk about somebody having a 'good head for figures' or a 'way with animals'. Many Defence jobs require special aptitudes for dealing with mechanical objects, people, figures or the written word. These may be described in a general way or related to scores on individual tests used in the recruitment selection process. Psychometric tests may be used for specialised duties.

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1. Interests. The ability to do the job, as recorded in attainment tests, general intelligence and special aptitudes, will be modified by the individuals’ interests or motivation. In some cases, interest in the work will only be a minor factor in selection but in others it may be of considerable importance. For example, nursing, policing, or instructing may require personnel who have a definite desire to do that sort of work if they are to be successful at it.
2. Disposition. This deals with the traits/attitudes required to do the job. Some jobs require personnel with initiative while others require someone who can tolerate routine and repetitive work. Sometimes it is essential to have personnel who can work on their own without supervision while, with others, it is more important to have someone who is steady and dependable and can work within a team.
3. Circumstances. In exceptional circumstances, the individuals personal circumstances, would effect their suitability ‘to perform the job’. However, use of this category must be justifiable under equal opportunities legislation.

An example of a Job Specification is given below:

**Notional United Nations Observer**

**Job Title**.

United Nations Observer’s Assistant (UNOA).

**Numbers Doing Job**.

Approximately 2000 worldwide, but not all deployed full-time.

**Rank**.

UNOA’s may be military or civilian (incl ex-military), male or female and of any nationality. Military UNOA’s should be of equivalent rank to UK Sergeant or Corporal.

**Main Job Objective**.

To assist a UN Observer (UNO) in the execution of their duties in any UN theatre of operations.

**Responsibilities**.

1. Responsible to the UNO to whom they are assigned.
2. Responsible for:
   1. Personnel: discipline and management of locally employed civilians (LECs) who may be attached to the UNO team.

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1. Equipment: vehicle, stores, equipment (including radio equipment), rations and local currency cash up to the value of £2000 sterling.

**Tasks**.

1. Administer the UNO team to whom they are assigned when deployed on UN duties:
   1. Maintain issued stores and equipment.
   2. Procure rations and essential stores for two or more UN personnel.
   3. Organise accommodation for UNO and themselves and any others attached, either in buildings or under canvas.
   4. Cook meals.
   5. Carry out basic laundry.
2. Survive outdoors in prevailing terrain and weather conditions.
3. Communicate with local UN Headquarters on UNO’s behalf:
   1. Send/receive messages by radio or telephone.
   2. Operate radio within a net.
   3. Maintain radio equipment.
4. Carry out tasks of UNO’s driver:
   1. Drive 4x4 vehicle (Range Rover or equivalent) on or off roads, by day or night.
      1. Navigate in vehicle by road across country, by day or night.
   2. Maintain vehicle on a daily basis (including carrying out emergency repairs and fault diagnosis).
   3. Self-recover the vehicle.
5. Navigate across country on foot by day or night.
6. Administer Battlefield First Aid.
7. Communicate in the local language to colloquial standard.

**Future Job Changes**.

Not Known.

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**Conditions under which job is Performed**.

1. **Physical**:
   * 1. Though individual UNOAs may be assigned to specific theatres on the basis of language, background or culture, all UNOAs are liable for service anywhere in the world.
     2. Duties may involve a high level of physical effort (i.e. cross country movement on foot and with a back-pack load, stores handling, etc), long and unsocial hours, driving for long distances over difficult terrain.
   1. UNOAs will be expected to operate effectively in local weather conditions and over the local terrain.
2. **Intrinsic**:
   * 1. Possess a high level of commitment, self-discipline and self-reliance.
        1. Able to remain calm and rational in moments of crisis.
     2. Able, either in support of UNO or possibly alone, to deal with angry and distressed local people in a calm, neutral, sympathetic and effective manner.
     3. Possess a sound knowledge of UN principles, rules and practices relevant to their job.
     4. Possess a basic awareness of the political, social, military and geographical conditions of the theatre in which they are operating.
     5. Possess good communication skills with colloquial ability in the local language.
     6. Able to think rationally under pressure and to act on their initiative.
3. **Social/Psychological**.
   1. Member of a two-person team, often isolated from immediate support. Contacts with home base will be limited and at times non-existent.
   2. Likely to be working for a UNO who is from a different nation, background and/or culture.
   3. Possible commitment to supervising one or more locally employed personnel who may have sympathies or involvement in local factions.

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1. **Difficulties**:
   1. Consequences of error of judgement or lack of ‘cool’ could result in acute embarrassment for local UN hierarchy and/or physical threat to UNO team.
   2. Must be on top of the job when fatigued and without prospect of immediate relief.
   3. Emotional stress created by traumatic incidents.
      1. Having to cope with constant threat of physical danger.
   4. Possibly incompatibility with UNO.
2. **Distastes**:
   * 1. Having to accept a subordinate (i.e. servant) position to someone not used to services that a UNOA is expected to provide.
   1. Disruption of social, family and working life. UNOAs are in full-time employment elsewhere and yet on call to deploy with the UN at short notice.

**Selection and Training**.

1. Volunteers for UNOA duties will undergo selection procedures which will identify the following:
   1. Personal characteristics and attributes required to enable the candidate, at the end of trg, to cope with the physical, psychological, social and interpersonal demands of the job.
   2. Physical requirements, including the potential to march 30kms over steep ground with a load of 25kg within 24 hrs.
   3. Medical standards, as required for a potential UK infantry

soldier.

* 1. Attainment of a raw score of 35 on Modern Language Aptitude

Test.

* 1. Competence in First Aid procedures.
  2. Possession of a full valid driving licence.

1. Trg, for those who require it, should normally be carried out under national arrangements under conditions and to standards approved by the appropriate UN authority.
2. In-theatre trg should be carried out to cover the following:

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1. Physical acclimatisation.
2. In-theatre equipment (if different on which the UNOA was trained).
3. Local conditions.
4. Local traffic laws

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**Section 2 – Part 2 - Deriving the Operational Performance Statement**

2.2.1 The OPS as defined in the Glossary of Defence Training Terminology (DTSM2) is derived from the Job Analysis, and is a detailed statement of the tasks/sub -tasks undertaken by an individual to achieve the required operational/workplace performance. However, it also includes the conditions under which the tasks will be undertaken and the standards that must be achieved. The OPS also adds an indication of the training required to achieve the task performance.

2.2.2 Upon its' completion the OPS needs to be endorsed by the TRA11. It forms the basis for all subsequent work leading to the production of Training Objectives. This ensures that the need for training and associated resources is justified by the needs of the job. It also ensures that the training that is undertaken remains focused on the job. Whilst a OPS can be produced covering all the duties associated with a job, an OPS may be written for a specific duty where it is shared across many jobs such as fire-fighting and field-craft. An example of an OPS template is at Annex A to this section.

2.2.3 The OPS is developed from the Job Specification (they have not been introduced to this yet in the handbook) and Job Scalar using the following steps:

1. Transpose the duty, task and, if appropriate, sub-task statements from the task scalar. The numbering system used on the scalar should be used on the OPS to ensure linkage between the two documents.
2. Identify and list the operational conditions under which each of the tasks will be performed. The conditions may be critical in determining training gaps, informing training design and helping to justify resources. The conditions statements should specify the following information.
3. The physical – where, when and with what Location – in barracks, in the field, on ops Day or night

Weather/climate Limitations – Op, Sy, H&S Equipment and stores The Threat

With access to manuals, publications etc

1. The social - with whom

Alone or as a part of team

Supervised or unsupervised

Is there a leadership function

* 1. The physiological stresses, discomforts and distastes

c. Identify and list the operational/workplace standards to which the tasks must be performed. These must all be identifiable and measurable. The standards will be either:

1. Training Requirements Authority. The end user of the trained output, being the ultimate authority for the operational performance requirement, who is both qualified and resourced to evaluate the total forming training delivered against the Operational Performance Statement.

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* 1. Product Standards. Minimum absolute standards e.g. time, accuracy and safety limits that are extracted from job analysis and supporting references or a description of the finished product or result of the task.
  2. Process Standards. It may be important that certain procedures are followed in a particular sequence in order to successfully achieve the performance. Often these will be listed in a technical manual and the standard may include a reference to this. If not, these steps may be given as process standards and are the essential sub tasks and task elements from the scalar.
  3. Combination of Process and Product Standards. Where standards are defined in more detail in other documents the references should be in full and include the issue number and date. Where standards are defined in more detail in other documents the references should be in full and include the issue number and date. Where publications change frequently reference may be made to the most recent issue.

1. Training Category. This describes the training required to achieve task performance in terms of the training priority and the balance between training to be conducted in a training establishment and training conducted in the workplace. Tasks not requiring any training should also be identified. This is based upon the outcome of the DIF analysis and (usually Early Training Analysis) and is described in more detail later in this Section. The Training Category that is assigned at this stage is only provisional and may be altered upon further analysis.
2. Comments may be added to the OPS in the ‘notes’ column to amplify special training requirements e.g. to amplify the range or limitations of the task, or to define links with other training or jobs.

2.2.4 Performance, Conditions and Standards. It is essential that the Performance, Conditions and Standards identified reflect the realities of the job as shown in the example below:

**JobTitle: Basic firefighter (RN)**

**Task 1.7: Act as Breathing Apparatus Attack Party number**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task | Performance | Condition | Standards | Trg Cat | Notes |
| No. |  |  |  |  |  |
| 1.7.1 | Attack the fire | Given: | 1.Individuals to be ready in all | 1 |  |
|  |  | An RN vessel | respects to attack fire within 2 mins |  |  |
|  |  | of alarm being raised. |  |  |
|  |  | 1.At sea and in | 2.Health & Safety and Equal |  |  |
|  |  | harbour throughout | Opportunities & Diversity are |  |  |
|  |  | the world. | applicable to all Duties and Tasks. |  |  |
|  |  | 2. In all weather and |  |  |  |
|  |  | sea states. | 3.Doctrine IAW BRs 2170 and |  |  |
|  |  | 3.In all NBCD states. | 4007,current DCI/RNTMs and other |  |  |
|  |  | 4.During night or day. | publications. |  |  |
|  |  | 5.In times of peace, |  |  |  |
|  |  | conflict or war. | 4.Demonstrating instinctive actions |  |  |
|  |  | 6.For all Fire Types: | and accurate Whole Ship Knowledge |  |  |
|  |  | oil based, | in relation to Fire-fighting, particularly |  |  |
|  |  | carbonaceous, | regarding general firefighting |  |  |
|  |  | electrical. | hazards and specific hazards within |  |  |
|  |  | 7.Using appropriate | each compartment. |  |  |
|  |  | First Aid firefighting |  |  |  |

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equipment for type of

fire.

1. Wearing basic

firefighting clothing.

5.Demonstrating awareness of all roles and responsibilities of the teams and i/c within both the Harbour Fire Organisation and Standing Sea Fire Party.

2.2.5 Training Category. Job Analysis should be wide ranging and the data gathered, in conjunction with information such as trainee entry standards, throughput and knowledge of the likely training environment, can lead to conclusions regarding the balance between a formal training course and workplace based training (the debate continues. This suggests that you cannot have a formal training course in a unit as all workplace training should be informal) The categories used in the DSM are still wrong as they take no accont of formal training distruted and conducted in units. E.g. Our DIT fanchise means that ny training is informal and does not need management and also the priority that should be allocated to training for particular tasks. These conclusions are expressed through the use of Training Categories.

2.2.6. The two main analytical tools used in deriving Training Categories are the Difficulty-Importance-Frequency (DIF) Analysis and the Early Training Analysis (ETA) . These techniques involve looking in some detail at the nature of the job in terms of the Difficulty, Importance and Frequency of tasks and sub-tasks (DIF Analysis) and then considering other factors relating to the job, for example; level of supervision and numbers doing the job (ETA).

2.2.7 The Training Categories used within Defence training are described in the table below. DIF Analysis and ETA are described later in this handbook.

|  |  |
| --- | --- |
|  | **An Explanation of Training Categories** |
|  |  |
| **Category** | **Descriptor** |
| 1 | By the end of the formal training course the trainees will have performed the |
| whole task several times, to the full job standard, and under realistic scenarios |
|  | and conditions in which the operational physical, functional and environmental |
|  | fidelities were accurately reproduced. The trainee will be able to perform the |
|  | task competently immediately on arrival in the operational workplace. |
| 2 | By the end of the formal training course the trainee will have performed the |
| whole task at least once to full job standards, under realistic physical, |
|  | functional and environmental conditions and in a realistic scenario. The trainee |
|  | should be able to perform the task on arrival in the operational workplace. |
| 3 | By the end of the formal training course the trainee will have performed the |
| whole task in a training environment to a lesser standard than required in the |
|  | job (safety standards to be met in full). |
| 4 | By the end of the formal training course the trainee will have demonstrated an |
| adequate level of underpinning knowledge and principles required but will not |
|  | have applied it to develop the skills required to perform the task. |
| 5 | All formal training delivered in, or under the auspices of the workplace. |
|  |
| 6 | Trainees do not require any formal training. |
|  |

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**Section 2 – Part 3- DIF Analysis**

2.3.1 DIF analysis is a method of analysing job information through the difficulty, importance and frequency of tasks and sub-tasks within a job, with the aim of suggesting Training Categories. DIF Analysis provides an indication of the priority and standard to be applied to the training i.e. it assists in the decision of where the training should lie on a continuum ranging from ‘no-training’ to ‘over training’.

2.3.2 The DIF Analysis assesses the Difficulty, Importance and Frequency of tasks using a simple algorithm. However, as DIF Analysis relies on subjective opinions it is essential that each level is clearly defined to try and increase the reliability of the data. Suggested definitions used within the DIF Analysis are as follows:

1. **Difficulty.** Assesses the chance of performance error by asking the question: “What is the possibility of inadequate performance from the average job holder?” The range can be defined by using two extreme statements, namely, ‘The task is easily performed once learnt’ to ‘The task requires constant practice and supervision’.
2. **Importance**. Assumes that performance error is made and assesses the impact of the error by asking the following question: “What is the impact/consequence to operational capability, safety, lost revenue and public relations if the task is performed inadequately?” Once again the range can be defined by using two extreme statements, for example, ‘Failure is unlikely to have any impact upon operational capability or well being of personnel or equipment’ to ‘Failure will have an immediate and severe impact upon operational capability or risk of severe injury or damage to equipment’.
3. **Frequent** tasks may or may not be **Important** or **Difficult** and scales may range from ‘Once or more a day’ to ‘Never’. Task frequency becomes significant, however, when considering retraining, since frequently performed tasks do not require retraining if performance is adequate. High frequency reduces the risk of skill-fade.

2.3.3 An example of a DIF Algorithm is shown in the table below. An example of how to apply the algorithm follows that.

|  |  |
| --- | --- |
|  | **1.6.2 Task Performance** |
|  |  |
| **Difficulty** | **Importance** |
|  | Very Important |
| Very Difficult |  |
| Moderately Important |
|  |  |
|  | Not Important |
|  |  |
|  | Very Important |
| Moderately Difficult |  |
| Moderately Important |
|  | 23 |

**Frequency**

****

Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



**Training Category**

2

1

1

2

2

1

3

3

2

2

2

2

3

2

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|  |  |
| --- | --- |
|  |  |
|  | Not Important |
|  |  |
|  | Very Important |
| Not Difficult |  |
| Moderately Important |
|  |  |
|  | Not Important |
|  |  |

Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



2

3

4

5

3

3

2

3

4

4

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6

6

2.3.4 The above table is applied in the following manner:

1. If a task/sub-task is rated as **Very Difficult** and **Very Important**, but performed I**n-frequently** then it must be trained for, but its infrequency means that there will be little opportunity for practice on the job. Therefore, it should be given a high training priority and trained to a high standard to ensure skill retention. This is indicated in the diagram below:

|  |  |
| --- | --- |
|  | **1.6.3 Task Performance** |
|  |  |
| **Difficulty** | **Importance** |
| Very Difficult | Very Important |
|  |  |
|  |  |

**Frequency** Very Frequent Moderately Frequent Infrequent



**Training Category**

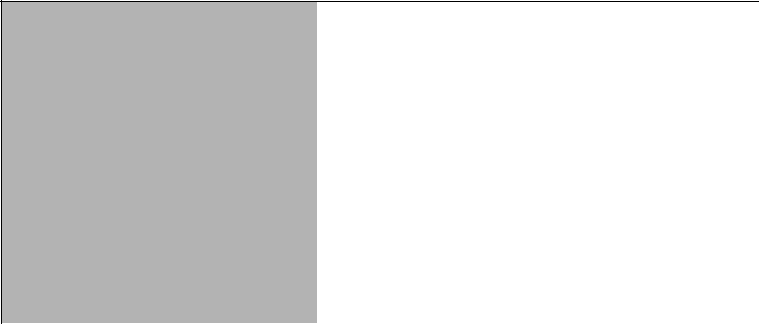
2

1

1

1. A task/sub-task that is rated as **Not Difficult, Not Important**, and performed **Moderately Frequently** may require no training or is best learnt throughexperience whilst on the job. This is indicated below:

Not Difficult



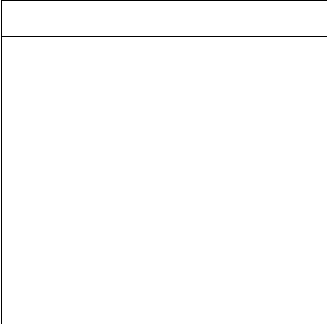
Very Important

Moderately Important



Not Important

Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



3

3

2

3

4

4

5

6

6

2.3.5 The following examples demonstrate how the DIF process and trg categories may be applied:

**Task : Exercising a dog.**

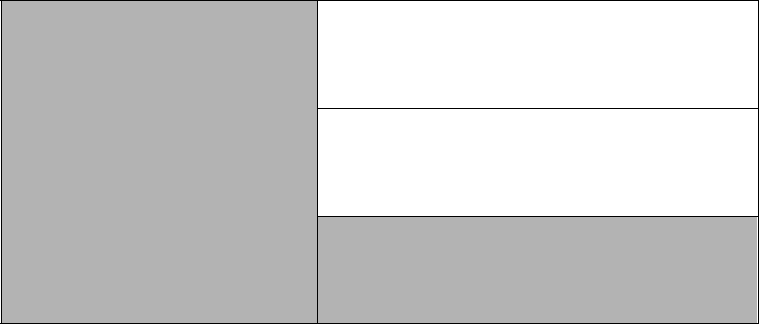
24

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A dog handler exercising a dog at work is a **Very Frequent** occurrence i.e. twice daily. It is **Not Difficult**, **Not Important**. This would be an example of a trg category 5 as little training would be required to achieve and maintain the required standard

Not Difficult

Very Important



Moderately Important

Not Important

Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



3

3

2

3

4

4

5

6

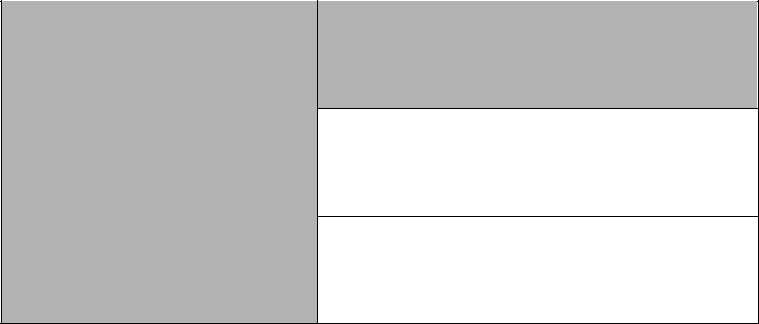
6

**Task: Preparing a dog for Air Transport.**

A dog handler has to prepare the dog prior to Air Transport. This involves documentation checks and feeding the dog a specific number of hours prior to flight. The dog also has to be washed and the identity tattoo checked against documentation and the aircraft manifest. The dog has to be wormed and given medication to assist in the smooth transportation of the dog by air. This would be an example of a **Moderately Difficult** task that is **Very Important** yet carried out **Infrequently**. This would therefore merit a training category 2 i.e. the dog handler may be expected to perform this task on arrival at their unit. As such it is a high trg priority and needs to be designed into and delivered on a trg course. The trainee dog handler should be able to perform this task to the required standard at least once on the trg course.

Moderately Difficult

Very Important



Moderately Important

Not Important

Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



Very Frequent



Moderately Frequent



Infrequent



2

2

2

3

2

2

3

4

5

2.3.6 Other Criteria Influencing Training Categories. Once a suggested training category for a task has been identified using DIF analysis, it should be subject to further review as other factors may result in an increase or decrease in category. Other criteria that influence the training categories that relate to the job environment are listed below:

1. How many personnel perform the task? This may determine the need for training and the priority given.
2. Amount of time spent on the task. This factor can sometimes be more important than frequency.
3. Realism and safety. These considerations may make it impossible to conduct any training. Tasks falling into this category and how they are to be dealt with are discussed later in this handbook - Residual Training Gap Statement.

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1. Degree of supervision in the workplace. If closely supervised when performing a task the training category may be reduced since the supervisor can detect errors on the job and then correct them.
2. Time interval between training and first performing the task. The training standard may deliberately be higher than the required operational standard in terms of timing or accuracy to avoid skill/knowledge fade.
3. Legislation, regulations and Government policy. Regardless of training category, a task may have to be included in training if those trained are to be authorised to carry out the task.
4. Civilian accreditation. The inclusion of training for a task originally allocated
5. low category may be critical for obtaining civilian accreditation.

**Section 2 – Part 4 - Early Training Analysis (ETA)**

2.4.1 Although DIF is the primary means of assigning provisional Training Categories the training environment may well also be a factor that requires consideration when attempting to derive a Trg Category for a task. For example, constraints on training resources and the availability of real equipment for training may force the emphasis towards workplace training. The same would be true if it is not possible to replicate critical OPS conditions in training establishments. Alternatively expensive and scarce training equipment, or qualified instructors may only be available in training establishments. These types of considerations constitute the ETA.

2.4.2 The emphasis placed upon ETA will depend upon the level of knowledge the job analysts possess about the training environment and the level of flexibility the training deliverers have in meeting training needs. A checklist giving a list of possible factors to be considered in an ETA is shown below. This checklist is not exhaustive and covers many possible training factors, but should be used with discretion and common sense. It may be that a job analyst does not have sufficient knowledge/information to carry out a meaningful ETA and provide a firm recommendation regarding the Trg Category at this stage. Instead a provisional recommendation can be made and a final decision on where training is to take place is delayed until later in the training design and development process.

2.4.3 The following list details the aspects that may be considered as part of an Early Training Analysis. This 'checklist also provides areas to record specific data and the implications on training.

|  |  |  |
| --- | --- | --- |
| **Training Analysis Criteria** | **Data** | **Implications** |
|  |  | **on Training** |
|  |  | **Comment** |
| Trainee Profile |  |  |
| • What is the professional experience/start point of trainees? |  |  |
| • What is the academic ability/start point of trainees? |  |  |
| • What trainee characteristics are needed for training and the job? |  |  |
| • What age/sex will trainees be? |  |  |
| Training Load |  |  |
| • How many trainees per year? |  |  |
| • How many courses per year? |  |  |
| • How many trainees/per course? |  |  |

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* How long is course? Instructors
* How many instructors are available?
* What is the trainee/instructor ratio?
* What instructor qualifications are needed?
* What academic ability do instructors need?
* What practical ability do instructors need?
* What professional experience do instructors need?
* What additional training might instructors need? Learning Spaces
* What classrooms, workshops, training areas are available?
* What desks/benches etc. are available?
* What condition are these spaces in?
* Where are these spaces located?
* Will above create a timetable problem?
* What heating, lighting, power etc. do spaces have?
* What toilet/changing/coffee etc. facilities do spaces have? Learning Equipment
* What learning aids required?
* What learning equipment required?
* What training hardware/software required (i.e. CBT)? Constraints
* Are there any time constraints?
* Are there any funding constraints?
* Are there any policy constraints?

Early Training Analysis Checklist

2.4.4 Course designers may use Training Categories during stages of the Training, Design and Development to inform the selection of appropriate methods, allocate trg time and determine the assessment strategy.

2.4.5 Trg categories can also be employed to determine which elements of trg should be removed from a course if trg time/resources are reduced. (only if they are priorities and not categories) The categories and preferably the DIF results should be sent to the trg establishment responsible for course design.

2.4.6 Having analysed a job and task sufficiently to produce an OPS it is now possible to carry out the Determination of Training Objectives – this is dealt with in Section 3 of this handbook.

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OPERATIONAL PERFORMANCE STATEMENT TEMPLATE

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **PROTECTIVE MARKING** | |  |  |  |  |  |
| **JOB TITLE(S):** |  |  |  |  |  | **JOB NUMBER (S):** | |  |  |
| **PRINCIPLE** |  |  |  |  |  | **PRINCIPLE** | |  |  |
| **FUNCTION/DUTY TITLE:** | |  |  |  |  | **FUNCTION/DUTY NUMBER:** | | |  |
| **JOB SCALAR REFERENCE:** | |  |  |  |  | **OPS REFERENCE:** | |  |  |
| **CUSTOMER:** |  |  |  |  |  | **ISSUE STATUS:** | |  |  |
| **Task/** | **Performance** | | **Condition** |  | **Standard** | | **Training** | **Notes** | |
| **Sub Task** |  |  |  |  |  |  | **Category** |  |  |
| **Number** | (b) | | (c) |  | (d) | | (e) |  | (f) |
| (a) |  |  |
|  |  |  |  |  |  |  |  |  |  |
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**OPERATIONAL PERFORMANCE STATEMENT ENDORSEMENT**

ENDORSED BY

ANALYSING ORGANISATION

ENDORSED BY (NAME)

ENDORSED BY (RANK)

ENDORSED BY (POST TITLE)

ENDORSED BY (SIGNATURE)

DATE

ENDORSED BY

(EMPLOYING/SPONSOR

ORGANISATION)

ENDORSED BY (NAME)

ENDORSED BY (RANK)

ENDORSED BY (POST TITLE)

ENDORSED BY (SIGNATURE)

DATE

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**Section 3 - Part 1-The Determination of Training Objectives**

3.1.1 Training Design and Development is the process that derives achievable training objectives and training solutions from the outputs of the Needs Analysis and Job Analysis process that have been agreed between the sponsor and the training provider. Stage 1 of Training Design and Development is the determination of Training Objectives (TOs).

3.1.2 TOs ensure that the training is focussed with a definite purpose such that the operational/business need is met. They help ensure that management, instructors and trainees have a clear understanding of what trainees are required to learn, and what is expected of them on completion of the learning experience. TOs form the basis of the detailed design and planning of the training sessions, as well as identification of training resources. They may also be used in support of documented cases for the award of civilian accreditation. Therefore, the development and maintenance of accurate TOs is essential.

3.1.3 Once agreed, the TOs represent a contract between the organisation requiring trained manpower and the relevant agency that is to conduct the training.

**Section 3 – Part 2 - The Composition and Derivation of Training Objectives**

3.2.1 TOs are precise statements of what a trainee should be able to do after training. A TO is measurable and has three constituents: the Performance required, the Conditions under which the trainee must perform and the Standard to which the trainee must perform12. These statements must be in the form of observable and measurable behaviours that allow the achievement of the TOs to be confirmed through assessment.

3.2.2 A TO defines what a successful learner is able to do at the end of a period of training: at the end of a lesson, series of lessons, or a course or training activity. It does not describe the learning process or any learning experience.

3.2.3 Following Job Analysis phase of the DSAT, the design and development of training can commence. TOs should be derived from each Operational Performance Statement (OPS) or stated sponsored requirement. Superficially there is little difference between the OPS and the TO. The principle difference lies between what is expected during the execution of the task (stated in the OPS) and the specification of what is to be achieved on completion of training (specified in the TO). All operational/business objectives should have a corresponding TO(s) unless the job-holder has the appropriate skills on entry. Identifying the relationship between the OPS or statement and TOs can be difficult since it is not always possible to replicate all of the operational conditions and standards in the training environment. The effect on the individuals’ operational performance must be minimised or, preferably, eliminated.

The three component parts of a TO are detailed in the table below:

1. DTSM2 Glossary of Defence Training Terminology.

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**Training Objectives (Three Part Format)**

|  |  |  |
| --- | --- | --- |
| ***Performance*** | ***Conditions*** | ***Standard*** |
| **What the trainee should** | **with WHAT and** | **and HOW well.** |
| **be able to DO after** | **WHERE....** |  |
| **training....** |  |  |
| Use an observable and | Specify the circumstances | State the standard to be |
| measurable action verb | of the performance | achieved for the |
|  |  | performance |

3.2.4 Performance Statement. The Performance Statement of a TO states what a trainee should be able to do at the end of training and should be derived from the task or competence from the OPS and therefore has an active verb as the first word in the performance element.

3.2.5 The following points should be considered when writing a TO performance statement for any task:

1. Does the wording of the task have to be reviewed for the performance statement? The wording may need to be adjusted:
   1. If the task wording is not precise.
   2. If the task has more than one objective.
   3. To make the performance absolutely clear.
   4. To state what needs to be trained for that task.

3.2.6 The choice of verb for the performance statement of a TO is critical. To ensure the trainee has achieved the desired behaviour, a response must be witnessed. Just as in a task statement on the job scalar, OPS or performance statements need to use action verbs. Verbs such as know or understand do not adequately define an action on the part of the trainee and are not observable or measurable. ‘Diagnose’, ‘assess’, ‘select’, ‘identify’, ‘distinguish’ are much more readily witnessed and can be assessed more easily. A list of useful verbs is at Annex A.

3.2.7 An example of a Performance statement is as follows:

**Training Objectives (Three Part Format)**

|  |  |  |
| --- | --- | --- |
| *Performance* | *Conditions* | *Standard* |
| **Administer pain-** | - | - |
| **inhibiting drugs** |  |  |

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3.2.8 Further examples of acceptable Performance verbs are as follows:

|  |  |
| --- | --- |
| Design | Select |
| List | Identify |
| Describe | Distinguish |
| Evaluate | Order |
| Participate | Specify |
| State | Construct |
| Assess | Solve |
| Explain |  |

3.2.9 Examples of performance expressions that are to be avoided because they are not measurable and observable, are below.

|  |  |
| --- | --- |
| Know | Obtain a working knowledge of |
| Understand | Appreciate |
| Really know | Acquire a feeling for |
| Fully understand | Realize the significance of |
| Be familiar with | Be aware of |
| Become acquainted with | Give information about |
| Have a good grasp of | Believe in |
|  | Be able to get to the root of |
|  |  |

3.2.10 The skill required in producing Training Objectives is in identifying a performance verb that accurately reflects the behaviour required of the student. Examples of verbs that can be used in the performance element of objectives for practical skills are shown below.

|  |  |  |  |
| --- | --- | --- | --- |
| Adjust | Finish | Overshoot | Roll |
| Assemble | Fit | Perform | Select |
| Climb | Hold | Practise | Turn |
| Cause | Keep | Prepare | Take |
| Carry out | Lower | Position | Test |
| Check | Lift | Raise | Use |
| Draw | Make | Recognize | Weigh |
| Diagnose | March | Re-adjust | Write |
| Demonstrate | Maintain | Reassemble |  |
| Ensure | Monitor | Recover |  |

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**Conditions Statement**

3. 2.11 The conditions statement of a TO, specifies the actual conditions, or circumstances, in which the performance statement will take place. Ideally the training environment will closely match the conditions that are normally experienced in the job, e.g. using the real equipment. However, this is not always possible, so the conditions statement must clearly indicate what the training environment can provide.

3.2.12 The conditions element should fully describe the environment in which the trainee should carry out the task/skill. Conditions can be considered in the following broad categories.

1. Limitations to the range of performance – i.e. security, safety or legislative.
2. Equipment – e.g. tools, job aids, clothing, equipment that are provided or denied.
3. General Situation - indication of location, terrain, weather, climate, the threat, psychological physical and social factors under which the training performance is delivered.
4. Support – personnel, agencies, orders, standard and emergency operating procedures, manuals, references, check lists that are available to the trainee.

3.2.13 The Conditions element appropriate to the required Performance is detailed as follows:

**Training Objectives (Three Part Format)**

|  |  |  |
| --- | --- | --- |
| *Performance* | *Conditions* | *Standard* |
| **Administer** | **Given:** | - |
| **pain-inhibiting** | **Simulated casualties-** |  |
| **drugs** | **Field First Aid equipment and simulated morphine** |  |
|  | **injectors** |  |
|  | **In an environment simulating the noise of battle** |  |

3.2.14 Further examples of Conditions are given below:

|  |  |
| --- | --- |
| **Category of Condition** | **Type of example** |
| Limitations to the range | a. ‘By day’. |
| of performance. |  |
| Tools, equipment and | a. ‘Using only the tools in the vehicle’. |
| clothing that are provided | b. ‘Given the test equipment listed in..... |
| or denied. | c. ‘Wearing an NBC suit and respirator’. |
| Manuals, reference | a. ‘Without reference to....... |
| documents that are | b. ‘Using ......... |
| provided or denied. | c. ‘With reference to...... |
| Environmental conditions | a. ‘In all UK weather conditions’. |
|  | b. In a simulated workshop’. |
|  | c. ‘In a moving vehicle’. |

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**Standards Statement**

3.2.15 The Standards statement specifies the standard that should be achieved by the trainee at the end of training. This should be as close as possible to the standard required in the job and as stated in the OPS. The statement must be detailed enough to accurately assess if a trainee has achieved the standard or not. As for the derivation of the OPS, standards can either be product standards (minimum absolute standards) or process standards (certain procedures that need to be followed in a particular sequence) or a mixture of the two, see paragraph 42c.

3.2.16 Determining the standard required for both the operational/work-place performance and in the training environment is difficult. The nature of the performance (which could be dangerous, critical or an emergency task), consequences of not meeting the standard and the Training Category should be considered, as the standard required would ultimately affect how that performance is taught and how the trainee is tested. For example, if a very high standard is required, the trainee receives a large amount of training for the performance (possibly over-trained) and is subject to testing, i.e. no mistakes.

3.2.17 The standard must be accurate and some performances may be subject to external rules and regulations, i.e. the standard is dictated to us. Some examples of topics where this applies are:

1. Health and Safety.
2. Nuclear.
3. Weapons handling.
4. Flying regulations e.g. Civil Aviation Authority.
5. Legal requirements, both national and international.

3.2.18 If a performance is affected by such factors, the document or regulation should be clearly referenced in the standards statement, e.g. in accordance with Publication/Law/Act, Section X, Paragraph Y, Date and Version.

3.2.19 It should be noted that any restrictions in conditions might impact on the standards. Differences may occur if the standard cannot be achieved without actually conducting the task, compliance with different standing orders, or differing conditions that cannot be simulated. Standards in TOs should not be confused with the standards of examinations and tests. Whilst examination standards should be set as closely as possible to those stated against the TO, there are certain areas where compromise may be necessary when setting examinations standards.

3.2.20 The identification of standards relating to personal qualities and attitudes is perhaps the most challenging part of TO development. This is because attitudes cannot be observed directly and hence the precision associated with other standards is rarely possible. For subjective judgements objective criteria should, where possible, be used to support the decision. Defining the negative, what is unacceptable behaviour, can result in a simpler and more precise standard.

3.2.21 The Standards element appropriate to the Performance required and Conditions stipulated is detailed as follows:

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**Training Objectives (Three Part Format)**

|  |  |  |
| --- | --- | --- |
| *Performance* | *Conditions* | *Standard* |
| Administer | Given: | In accordance with |
| pain-inhibiting | Simulated casualties- | Army Code No 71371 |
| drugs | Field First Aid equipment and simulated | – 'Battlefield First Aid' |
|  | morphine injectors |  |
|  | In an environment simulating the noise of battle |  |

3.2.22 Further examples of Standards are given in the table below:

|  |  |  |
| --- | --- | --- |
| **Nature of** | **Remarks** | **Typical Example of Standards** |
| **Performance** |  |  |
|  |  |  |
| A skill that can only | One single error leads to a wrong result | ‘Without error’ |
| be carried out | or no result at all. | ‘Correctly and in accordance with the |
| correctly or incorrectly |  | reference’ |
| A sequence of | One error in any of the actions leads to | ‘In the correct sequence’ |
| actions that can only | a poor result or no result at all. | ‘In the correct sequence and in accordance |
| be carried out |  | with the reference’ |
| correctly or incorrectly |  |  |
| An action that can be | Involves units of: | a. Where tolerances are permitted: |
| measured as follows: | a. Time. | ‘At least 50 metres’ |
|  |
| a. With no tolerance |  | ‘Within 20 seconds’. |
| allowed. | b. Magnitude. | ‘A minimum of 10 repetitions in one |
| b. With tolerance | c. Rate. | minute’. |
| b. Where no tolerance is permitted: |
| allowed. |  |
|  |  | ‘At a speed of 16wpm for 5 minutes with a |
|  |  | maximum of 4 errors’ |
| An action that cannot | Marginal cases only require an element | ‘To the standard of the test piece described |
| be assessed | of personal judgement. | at Ch 12 of AP\*\*\*\*\*\*\*’ |
| absolutely as correct |  | ‘To the standard of the photograph at |
| or incorrect, but can |  | Appendix \*\*\*\*’. |
| be judged by |  | ‘Of a smooth, shiny appearance, free from |
| reference to tangible |  | bumps, tails and sharp ends’. |
| standards. |  |  |
| An action that cannot | Mainly objectives which require a | ‘Smartly’ |
| be measured or | certain frame of mind, such as drill, | ‘With controlled aggression’ |
| assessed as correctly | social skills, PEd. Subjective | ‘Firmly but politely’ |
| or incorrectly | judgement involved, but suitably |  |
| performed, but which | worded standards criteria useful to |  |
| can be judged by | assessor |  |
| reference to |  |  |
| intangible standards. |  |  |

**Complete Training Objectives**

3.2.23 Having considered the 3 elements of a Training Objective independently it is important to realise that a TO cannot be said to be complete unless all 3 elements are present, i.e. the Performance, Conditions and Standards. An example of a complete Training Objective is given below

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|  |  |  |  |
| --- | --- | --- | --- |
| **TO** | **Performance** | **Condition** | **Standard** |
| **No.** |  |  |  |
| 3.1 | Carry out user | As an individual. | In accordance with |
|  | maintenance for the | From memory without reference materials. | References: |
|  | respirator. | In the prevailing weather conditions. | Army Field Manual |
|  |  | By day or by night. |
|  |  |  | Volume 1, Part 5, |
|  |  | Given: | Operations in Nuclear, |
|  |  | A serviceable respirator. | Biological and Chemical |
|  |  |  | (NBC) Environment. |
|  |  |  | Joint Warfare Publication |
|  |  |  | 3-61, NBC Defence in |
|  |  |  | Joint Operations. |
|  |  |  | Joint Warfare Publication |
|  |  |  | 3-61.1.1, Joint Manual of |
|  |  |  | NBC Defence. |
|  |  |  | BR 2170(2) Ship NBCD |
|  |  |  | Manual – NBC Defence. |
|  |  |  | RAF Common Core Skills |
|  |  |  | and Deployment Skills |
|  |  |  | Aid Memoire, AP 3242B |
|  |  |  | Volume 5. |

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**Section 3 – Part 3 - The Audit Trail for Training Objectives**

3.3.1 To ensure that training has been assigned to all tasks, the link between OPS task statements and the TOs must be shown through an auditable numbering /identification system. One way this can be achieved is by using the task numbers from the OPS to identify the related TOs. An example is shown below.

|  |  |
| --- | --- |
| Original task number: | 2.1 |
|  |  |
| Single TO derived from one task: | TO 2.1 |
|  |  |
| Multiple TOs derived from one task: | TO 2.1a |
|  |  |
|  | TO 2.1b |
|  |  |

3.3.2 To avoid constant repetition codes may be used for the conditions and standards.

However, these should be clearly explained at the start of all the relevant documents.

**TAGGING OF TOs**

3.3.3 It is possible to apply tags or codes to TOs to enable them to be identified as a Core (C ) training requirement, (L) Legal requirement and/or (A) Accreditation requirement. This can be useful in helping identify TOs for accreditation purposes when reviewing courses. It can also be used to highlight potential issues if the TO or its corresponding conditions and standards are amended e.g. does a change in standards for a particular TO still ensure it meets the legal requirements. Tagging can be denoted using the letter (C, L, A) or a mark in the relevant column on the training documentation with amplifying comments as appropriate. It may be useful to tag enabling objectives rather than TOs (see Instructional Design Handbook)

**Section 3 – Part 4 - TOs and the Residual Training Gap**

3.4.1 Safety, legislation and/or resource constraints may prevent training taking place to achieve the performance, conditions and standards required by the Operational Performance Statement (OPS). The difference between each OPS and the delivered training is known as the Residual Training Gap.13 This defines what is not possible during training in terms of realism and availability of resources.

3.4.2 A residual training gap may arise for the following reasons:

1. It may not be possible to exactly replicate the conditions and standards of the operational/business requirement in training.
2. The degree of risk in training has to be kept within the limits of what is politically, morally and socially acceptable.
3. Limitation of resources.
4. Operational experience may be the only way only close the gap.
5. DTSM2- Glossary of Defence Training Terminology.

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3.4.3 An accurate assessment of the resource implications of a TO will only be possible at the completion of course design process and therefore any Residual Training Gap Statement would be provisional until a course has been fully designed.

3.4.4 It is essential that the Residual Training Gap is recorded in a Residual Training Gap Statement (RTGS). The RTGS14 is the difference between the formal training delivered and the OPS. It is expressed in terms of performance, conditions and standards, or any combination of these. The RTGS also states the consequences of any identified RTG. The Residual Training Gap must be agreed between the TRA and the TDA.

3.4.5 It is important to be precise in explaining the consequences of not achieving the operational task. It needs to be more specific than stating the individual ‘may not perform under the pressures of combat for psychological reasons’ since this is applicable to all situations. The consequence of the residual training gap is aimed at defining specific activities that the individual may not be able to perform completely, perhaps with significant impact on the outcome.

Example of a Residual Training Gap Statement

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Task** | **Performance** | **Operational** | **Operational** | **Reason for** | **Consequence of Gap** |
| **No.** |  | **Condition** | **Standard** | **Gap** |  |
| 1.1 | Administer | Given: | In | No real | May not identify correct |
|  | pain- | Battle casualties | accordance | casualties. | signs and symptoms of real |
|  | inhibiting | Field First Aid | with Army |  | casualty prior to treatment. |
|  | drugs. | equipment | Code No | Use of real | Hence incorrect treatment |
|  |  |  | 71371 – | drugs not | of casualty, including the |
|  |  | In an | “Battlefield | permissible. | use of drugs.15 |
|  |  | environment | First Aid”. | Lack of |  |
|  |  | which is |  |  |
|  |  | dangerous, |  | danger, noise |  |
|  |  | probably very |  | and stress |  |
|  |  | noisy and highly |  | inherent in |  |
|  |  | stressful. |  | real situation. |  |
|  |  | Possibly without |  |  |  |
|  |  | assistance. |  |  |  |

**Section 3 – Part 5 - Training Documentation – the Formal Training Statement**

3.5.1 Having generated Training Objectives, considered Training Categories and produced a RTGS it is now necessary to record these within the Formal Training Statement (FTS).

3.5.2 The FTS forms the basis of the agreement between the TRA (who may be represented by the Intelligent Customer/Customer’s Agent) and the TDA identifying what Training Objectives (TOs) will be achieved (in terms of Performance, Conditions and Standards) and where the training will be conducted.

3.5.3 Where the training delivered by the TDA is unable to fully meet the performance requirements stated in the OPS the Workplace Training requirement, which may include On-Job-Training (OJT), Distance Learning (DL) or Distributed Training (DT), is to be

1. DTSM2 – Glossary of Defence Training Terminology.
2. Consequence of residual training gap not confirmed by qualified medical practitioner.

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specified in the WTS. Additionally, where the totality of the formal training delivered cannot meet the OPS, the shortfall is to be specified in the RTGS. Therefore, the FTS will comprise 3 distinct sections:

1. Section 1: Training Performance Statement (TPS). The TPS is a statement in the form of a list of Training Objectives (in terms of Performance, Conditions and Standards) that describe the end product of a training event. These TOs are to be delivered under the auspices of the Training Establishment.
2. Section 2: Workplace Training Statement. A statement of the TOs, in terms of Performance Conditions and Standards, to be achieved by OJT, DL, DT or other means of delivery in the workplace/operational environment or under the auspices of the employer.
3. Section 3: Residual Training Gap Statement (RTGS). In the context of the DSAT the RTGS is the difference between the totality of the formal training delivered and the OPS. The Residual Training Gap (RTG) can be expressed in terms of performance, conditions or standards, or any combination of these. The RTGS is also to state the reasons for and the consequences of any identified RTG.

3.5.4 The Formal Training Statement is to contain the following:

1. General:
   1. Protective Marking.
   2. Job/Principle Function/Duty Title.
   3. Job/Principle Function/Duty Title.
   4. Course Title/Course Number.
   5. Module Title/Module Number (If Applicable).
   6. Training Sponsor/Training Authority.
   7. Course/Module Aim.
   8. Issue Status.
2. Training Performance Statement:
   1. List of Training Objectives, derived from the OPS, (written in terms of Performance, Conditions and Standards) which are to be delivered under the auspices of the Training Establishment.
   2. Each Training Objective can be identified and tagged against a Core Training Requirement, Legal Requirement or Accreditation Requirement.
3. Workplace Training Statement:
   1. List of Training Objectives, derived from the OPS, (written in terms of Performance, Conditions and Standards) which are to be delivered under the auspices of the Employer.
   2. Each Training Objective can be identified and tagged against a Core Training Requirement, Legal Requirement or Accreditation Requirement.
4. Residual Training Gap Statement:

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1. List of tasks, derived from the OPS, that can/will not be delivered as part of the TPS or WTS, either in part or in whole.
2. For each of these TOs a statement why it can/will not be met.
3. For each of these TOs a statement of the consequences of not delivering this training objective.

3.5.6 Additional notes or references may be annotated in the notes column.

3.5.7 An example template for a FTS is given at Annex A to this section.

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FORMAL TRAINING STATEMENT TEMPLATE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **PROTECTIVE MARKING** | | |
| **SECTION 1 TRAINING PERFORMANCE STATEMENT1** | |  |  |  |
| **OPS REFERENCE:** |  |  |  |  |
| **JOB TITLE(S):** |  |  | **JOB NUMBER (S):** |  |
| **PRINCIPLE FUNCTION/DUTY** |  |  | **PRINCIPLE FUNCTION/DUTY** |  |
| **TITLE:** |  |  | **NUMBER:** |  |
| **COURSE TITLE:** |  |  | **COURSE NUMBER:** |  |
| **MODULE TITLE (IF** |  |  | **MODULE NUMBER (IF** |  |
| **APPLICABLE):** |  |  | **APPLICABLE):** |  |
| **INTELLIGENT** |  |  | **ISSUE STATUS:** |  |
| **CUSTOMER/CUSTOMER’S** |  |  |  |  |
| **AGENT/SPONSOR (S):** |  |  |  |  |



**TO**

**Number**

(a)

**Training Objective**

**(Performance)**

(b)

**Condition**

(c)

**Standard**

(d)

**Requirement2**

(e)

|  |  |  |
| --- | --- | --- |
| **C** | **L** | **A** |
| (f) | (g) | (h) |
|  |  |  |

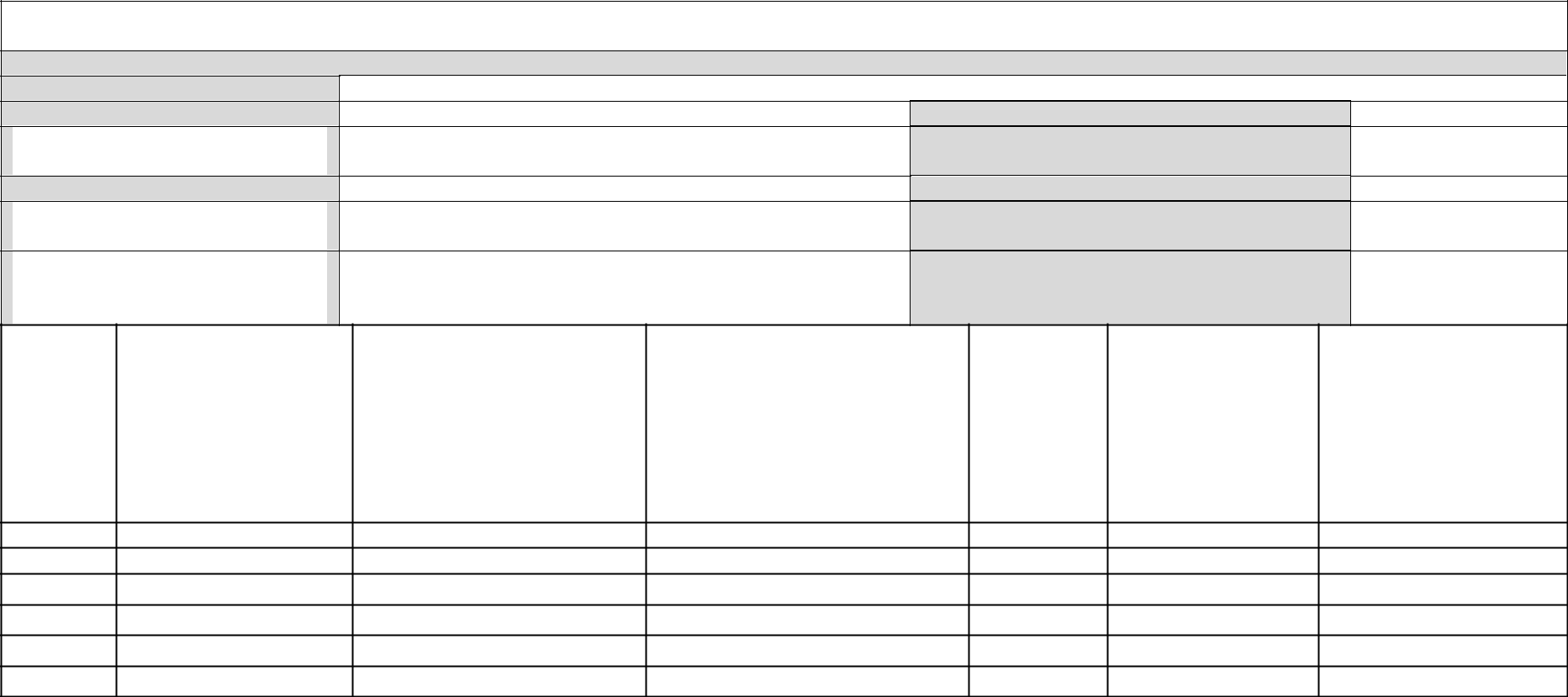
**Notes**

(f)

1. This section is to be used to identify the total training to be undertaken at, or under the auspices of, the Defence Training Establishment, in terms of Performance, Conditions and Standards.
2. Tag each Training Objective to indicate whether it is a Core (C) Training, Legislative (L) and/or Accreditation (A) requirement.

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**PROTECTIVE MARKING**

****

**SECTION 2 WORKPLACE TRAINING STATEMENT3**

**OPS REFERENCE:**

**JOB TITLE(S):**

**PRINCIPLE FUNCTION/DUTY**

**TITLE:**

**COURSE TITLE:**

**MODULE TITLE (IF**

**APPLICABLE):**

**INTELLIGENT**

**CUSTOMER/CUSTOMER’S**

**AGENT/SPONSOR (S):**

**JOB NUMBER (S):**

**PRINCIPLE FUNCTION/DUTY NUMBER:**

**COURSE NUMBER:**

**MODULE NUMBER (IF APPLICABLE):**

**ISSUE STATUS:**

**TO**

**Number**

(a)

**Training Objective**

**(Performance)**

(b)

**Condition**

(c)

**Standard**

(d)

**Type of**

**External**

**Training4**

(e)

**Requirement5**

(e)

|  |  |  |
| --- | --- | --- |
| **C** | **L** | **A** |
| (g) | (h) | (i) |
|  |  |  |

**Notes**

(j)

1. This section is to be used to identify the total training to be undertaken in the workplace, or under the auspices of the Employer, in terms of Performance, Conditions and Standards. As external Training may comprise traditional On Job Training (OJT), Distance Learning (DL), Distributed Training (DT), Commercial/Outsourced Training, or any combination of these (or other means).
2. Indicate whether training is to be achieved through On-Job-Training (OJT), Distance Learning (DL), Commercial/Outsourced Training, etc.
3. Tag each Training Objective to indicate whether it is a Core (C) Training, Legislative (L) and/or Accreditation (A) requirement.

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **PROTECTIVE MARKING** | | |
| **SECTION 3 RESIDUAL TRAINING GAP STATEMENT6** | |  |  |  |
| **OPS REFERENCE:** |  |  |  |  |
| **JOB TITLE(S):** |  |  | **JOB NUMBER (S):** |  |
| **PRINCIPLE** |  |  | **PRINCIPLE** |  |
| **FUNCTION/DUTY TITLE:** |  |  | **FUNCTION/DUTY NUMBER:** |  |
| **COURSE TITLE:** |  |  | **COURSE NUMBER:** |  |
| **MODULE TITLE (IF** |  |  | **MODULE NUMBER (IF** |  |
| **APPLICABLE):** |  |  | **APPLICABLE):** |  |
| **INTELLIGENT** |  |  | **ISSUE STATUS:** |  |
| **CUSTOMER/CUSTOMER’S** |  |  |  |  |
| **AGENT/SPONSOR (S):** |  |  |  |  |



**TO**

**Number**

(a)

**Performance**

(b)

**Condition**

(c)

**Standard**

(d)

**Reason(s)7**

(e)

**Consequences8**

(f)

1. This section of the TPS is to be used to state which Performance, Conditions and/or Standards, specified in the Operational Performance Statement, will not be achieved during Formal Training and the reason(s) why the TO can/will not be achieved, and the consequences of not providing this training. Not all courses/modules will require a Residual Training Gap Statement. A Residual Training Gap16 is to not be confused with a Training Deficiency, which is a shortfall in the intended formal training that was not agreed by the Intelligent Customer/Customer’s Agent/Sponsor.
2. State the reason why the Training Objective will not be achieved as part of the formal training (eg Resources).

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**ENDORSEMENT OF THE FORMAL TRAINING STATEMENT**

TRAINING AGENCY

ENDORSED BY (NAME)

ENDORSED BY (RANK)

ENDORSED BY (POST TITLE)

ENDORSED BY (SIGNATURE)

DATE

CUSTOMER/SPONSOR ORGANISATION9

ENDORSED BY (NAME)

ENDORSED BY (RANK)

ENDORSED BY (POST TITLE)

ENDORSED BY (SIGNATURE)

DATE

1. State the consequences of not delivering the formal training for this Training Objective.

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**COMMON PERFORMANCE VERBS**

Accounts for. Explains; tells the cause; accounts for an action.

Accomplishes. Brings to fulfilment; accomplished periodic checks of equipment.

Acknowledges . Recognises as true or pertinent; admits obligation; reports receipt of; acknowledges receipt of supplies.

Acts. Performs in lieu of or in substitute capacity for; operates for another, as in assuming responsibility and authority or a superior; acts for supervisor in their absence.

Adjusts . Settles difference or discrepancies; fits to meet regulations or requirements; adapts in accordance with situation.

Administers. Manages or directs execution, conduct or application of; performs offices of an administrator; administers a programme.

Advises. Consults with; gives advice to; counsels; gives information or notice to; recommends course of action (particularly applicable to staff and technical fields); advises a course of action.

Aligns. Adjusts, forms, or brings to, a line.

Allocates. Plans an apportionment or allocation of funds, materials or equipment; allocates funds in line with budgetary recommendations.

Amends. Corrects, brings up to date.

Analyses. Studies parts, elements, or factors of a situation or problem in detail to determine course of action, solution, or outcome; examines critically for understanding the organisation or nature of; analyses malfunction of a system.

Annotates. Furnishes with critical or explanatory notes; annotation of a report.

Applies. Places in contact with; puts to use, employs; applies to a situation.

Appraises. Estimates, judges, such as, organisational efficiency, effectiveness or losses.

Approves. Confirm officially, such as plans and recommendations of subordinates; endorses, such as reports or replies of subordinates to higher authority.

Assesses. Determines the importance, size.

Assigns. Appoints, prescribes a course of action; specifies, selects or designates; assigns responsibilities to personnel.

Assists. Aids, helps, supports; assists in performing a task.

Assumes (duties). Takes over the authority and responsibility of another, usually as a temporary substitute, in the absence of the other person.

Assures. Ensures: confirms: makes certain.

Attends. Is present at and may participate in; conferences, ceremonies.

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Audits. Assures adherence to standard practices; checking the accuracy of accounting records.

Authenticates. Renders authentic; given authority to; by the proof, attestation or formalities required by law; proves authentic, confirms, verifies as to genuineness.

Authorises. Permits, empowers, establishes by authority of position.

Balances. Weighs in a balance; compares in relative force, importance, or value; settles and adjusts (as an account); computes the difference (as an equation); comparing debits and credit accounts ensuring equal totals.

Calculates. Determines by mathematical processes, implies highly intricate processes as against computes, which implies simple arithmetical process and exact results; forecasts consequences or results, as in taking risks.

Calibrates. Ascertains the calibre of, determines, rectifies or marks established the graduations of; adjusts in accordance with a previously defined standard; calibrates equipment.

Carries out. Takes action on basis of order, regulations, directives, policies, approved plans.

Catalogues. Makes a list, inserts in a list; catalogues information for filing.

Censors. Examines correspondence, news dispatches, speeches, to suppress or delete whatever; if communicated, might damage public relations.

Certifies. Assures; makes certain, verifies; endorses authoritatively; testifies to, in writing.

Charts. Draws or exhibits on, a chart; map or graph; charts statistics.

Checks. Reviews, controls, tests, verifies, investigates, by means of checks.

Clarifies. Makes more readily understandable;

Classifies. Places in categories, as personnel, position, supplies.

Closes. Stops or fills up, as an opening, shuts; brings to an end; unites, consolidates.

Collaborates. Works or acts jointly with others.

Collates. Examines and compares critically to verify arrangement, parts, often to arrange in order; collates a summary report prepared in separate portions by several individuals.

Collects. Gathers together, assembles, accumulates, compiles, calls for and/or receives payment; collects data on structure and functioning of organisations.

Communicates. Gets in touch with others through letters, messages, or orally; used in sense of maintaining communication with.

Compares. Examines for likeness or differences; compares performance against established standards, actions taken as against regulations.

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Compensates. Counterbalances, makes up for; gives an equivalent to, adjusts makes equal return to, usually with the preposition “for”; compensates for loss or for an action performed.

Compiles. Collects into proper or designated form; compiles data into a report. Composes out of materials from other documents, reports and statistical summaries, from other reports.

Composes. Forms a combination, makes up, constitutes; puts together in ordered format; makes coherent and integral; adjusts or settles, as to compose differing opinions, or reconciles, as reconciles contending factions.

Compounds. Makes an aggregate of, puts together, mixes or combines elements of; compounds interest on the sum of the principal and accrued interest.

Computes. Determines by calculation; reckons or counts; takes account of, makes up a count; computes by payroll.

Concurs. Agrees; acts jointly on corresponding opinion.

Conducts. Supervises and personally performs work necessary to accomplish the results desired; to perform; does not imply management.

Confers. Consults; compares views, hold conferences; confers with; obtaining opinion, recommendations, advice.

Confirms. Makes firm or firmer, recording verbal order into written form; verifies and makes valid by formal assent.

Considers. Gives thought to accepting or adopting a possibility, or a course of action.

Consolidates. Unites into one mess or body; brings together in close union.

Constructs. Puts together, systematically; builds, devises, as a bridge, theory, triangle.

Contributes. Gives or supplies, along with others, as information or advice, a selection, a plan.

Controls. Checks or regulates; keeps within limits; exercise directing, guiding or restraining power over; controls deployment of materials and equipment.

Co-operation. Acts or operates jointly with another or others; implies voluntary action rather than under orders or implicit direction.

Co-ordinates. Brings into common action with others, generally with equal ranks, not subordinates, as in co-ordinating staff functions to obtain a result that requires action on the part of several staff sections. To bring into common action, condition, or harmony; to produce a smooth operation; to co-ordinate work to meet production schedule deadlines: co-ordinate activities but with the authority to control them. When the term co-ordinate is used, it must be followed by the activities or elements being co-ordinated.

Copies. Duplicates an original as nearly as possible.

Corrects. Makes or sets right; alters or adjusts to bring to a required condition; rectifies; indicates errors, faults, discrepancies to be amended.

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Counsels. Advises, gives advice to; recommends as action; also, take advice from others.

Creates. Makes, plans, designs, or generally brings about something new and original in thought and imagination.

Decides. Arrives at a solution that ends uncertainty or dispute; makes a choice of judgement.

Defines. Determines or sets down the boundaries of, sets down or shows the precise outlines of; determines and states the limits and nature of; describes exactly; gives the distinguishing characteristics of; states or explains the meaning of.

Delegates. Appoints as a delegate; entrusts authority to a person acting as an agent or representative.

Delineates. Traces the outline of, sketches out; describes; delineates data or information.

Demonstrates. Gives evidence of, displays; shows with the intent of proving; explains or illustrates; demonstrates results an analysis.

Describes. Tells or writes about; gives a detailed account of; describes symptoms of a problem.

Designs. Plans, sketches a pattern or outline for; contrives; designs cards and report forms.

Detects. Discovers the presence or existence of something previously hidden or unclear; detect air pollution.

Determines. Sets bounds or limits to, fixes conclusively or authoritatively, comes to a decision concerning, as the result of investigation, reasoning; obtains definite and first hand knowledge of; determines title to property.

Develops. Unfolds more completely, evolves the possibilities of, makes active something latent, advances further, promotes the growth of; unfolds gradually, forms or expands by a process of growth; makes more available or useable; develops patterns and templates. To obtain a new method or produce by combining, and/or expanding various existing ideas.

Devises. Contrives; forms new methods or possibilities of; implies using ingenuity under difficult circumstances when regular technical assistance or standard materials are not available.

Diagnoses. Recognises, analyses and identifies usually a disease by examination and observation; diagnoses the causes of a problem.

Differentiates. Perceives or expresses the difference; distinguishes between.

Digests. Condenses for brevity; abstracts; arranges methodically.

Directs. Regulates the activities or course of; controls; guides; gives an order or instruction to; directs individuals during operations. Assign, guide, and review the work of others. Does not imply complete supervision.

Disciplines. Punishes or penalises for the sake of control; brings a group under control; imposes order upon; enforces obedience.

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Discusses. Talks with others, particularly in considering a question of problem requiring examination and debate preparatory to decision because of uncertainty and lack of precedence.

Dispatches. Sends of quickly or promptly; dispatches information.

Dispenses. Deals out in portions; distributes; dispenses pharmaceutical preparation.

Disposes. Gets rid of; disposes of obsolete files and publications.

Disseminates. Diffuses, distributes, spreads by dispersion, circulates.

Distinguishes. Recognises or discriminates one thing from another; perceives clearly.

Distributes. Divides, deals out, portions; administers, dispenses; distributes information to divisions.

Drafts. Makes a preliminary sketch or composition of; drafts correspondence.

Edits. Sets in order for publication; examines for corrections and content.

Effects . Brings to pass; accomplishes by performance; makes possible by execution; effects authorised organisation changes.

Encourages. Inspires with courage and spirit; fosters esprit de corps.

Enforces. Gives force to, strengthens, invigorates; executes with vigour; enforces regulations, safety precaution.

Ensures. Gives assurance guarantees; makes sure.

Enters. Goes or comes into a place or condition; makes a beginning; begins as a participant; inscribes, enrols, records; enters changes in publications.

Establishes. Makes firm, sets on a firm basis, as in establishing specific procedure to be followed; sets up as an order of precedent.

Estimates. Forms a judgement about, gauges, determines or calculates approximately; estimates the need for supplies and equipment.

Evaluates. Determines value or worth or, appraises, evaluates inspection forms, work orders, and discrepancy reports.

Examines. Tests by an appropriate method; interrogates closely; subject to inquiry or inspection.

Executes. Follows out or carries out; does, performs, fulfils; creates or produces in accordance with an order, plan, blueprint; executes the flow of work.

Exercises. Puts into action, uses, employs; practices, activates for the purpose of training or developing; exerts, wields, or has influence, control, authority; exercises control over departmental operations.

Exhibits. Presents or exposes to view; show, displays; gives evidence of, reveals.

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Expedites. Speeds the process or progress of; facilitates; carries through with dispatch.

Explains. Makes something clear or intelligible; interprets to assure understanding.

Exposes. Lay upon to, or sets out for, inspection or examination; subjects a sensitive plate or film to radiation.

Expresses. Puts into words, represents by language, states; makes known, shows; pictures, represents, symbolises; signifies; expresses multiplication.

Extracts. Draws out, pulls out; deduces, derives, manages to obtain; copies out, makes a selection or quotation; extracts portions of a plan.

Fabricates. Makes, builds, puts together, frames manufactures, as by assembling parts connotes processing over a period of time, rather than relatively instantaneous construction; fabricates assemblies.

Files. Lays away documents, papers, in a methodical manner; sets in order.

Finishes. Arrives at the end of, brings to an end; completes, accomplishes, perfects; finishes a surface.

Follows through. Takes action in sense of control measure to assure completion or compliance; usually implies corrective action.

Follows up. Makes a renewed, repeated or supplementary action, based on action previously initiated, to prompt a desired response.

Forecasts. Estimates beforehand.

Forges. Forms by heating or hammering; beats into a shape; forges metal.

Formulates. Expresses or puts in systematised statement, formulates plans, policies, procedures.

Forwards. Transmits; sends onward, as a report through channels.

Functional direction. The determination and maintenance of standards and methods of operation within a function for individuals or groups in an organisation outside of the “chain of command”. Implies authority to obtain conformance.

Furnishes. Supplies, provides, equips; furnishes program reports to central agency.

Grades. Rates, as efficiency reports, on basis of performance.

Guides. Regulates; manages; directs in a certain way; orders instructs, superintends training.

Handles. Manages, controls, directs; deals with, performs a function with regard to; treats, manipulates; touches.

Holds. Maintains authority over, as holds subordinates responsible for attainment of desired results. Carries on or joins in, as ‘holds’ meeting.

Identifies. Establishes the identify of; distinguishes, discriminates.

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Illustrates. Makes clear, explains, demonstrates, as by figures and examples.

Implements. Accomplishes, fulfils, completes, carries out, puts into effect; implements plans and policies.

Incorporates. Unites with, or introduces into, something already existing; blends, assimilates; combines into a structure or organisation; embodies, includes.

Indicates. Points out; suggests; intimates or shows indirectly.

Indoctrinates. Instructs rudiments or principles of.

Informs. Gives knowledge to, tells; acquaints with a fact.

Initiates. Brings into practice or use, introduces by first doing or using; initiates routine correspondence.

Inserts. Puts or thrusts in; sets in; introduces; inserts a punch card.

Inspects. Looks at carefully, examines critically; examines or reviews officially. Examine to test against established standards, usually a physical comparison or measurement.

Installs. Sets up or fixes for use or service; establishes in a place.

Instructs. Imparts knowledge systematically; forms; furnishes with directions; directs or commands; trains or indoctrinates.

Integrates. Unites; combines; unifies; consolidates; organises; systematises; puts together to form a whole.

Interprets . Examines or tells the meaning of; understands or appreciates in the light of individual belief, judgement, or interest; construes. Makes inferences from ambiguous information to provide meaning or make relevant.

Interviews. Meets with personally; sees; consults formally with; usually implies questioning or obtaining information, as interviews applicants to determine qualifications.

Inventories. Makes an account of goods or stock, usually at regular intervals and sometimes including the worth of the items listed; inventories of materials.

Investigates. Follows up or makes research by patient examination of facts, inquiry and observation. To systematically collect data usually with a single purpose or problem in mind.

Isolates. Sets apart from others, places alone; isolates defective components of system.

Issues. Gives out officially, as order and directives, supplies, and equipment.

Lays out. Prepares materials for a subsequent work operation; lays out elementary designs.

Leads. Directs in action or opinion; guides or conducts; precedes and directs in movement, as leads men.

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Localises. Limits or confines to a place, area, or locality; determines the origin or place of, as an organic or mechanical malfunction; localises a malfunction.

Locates. Designates the site or place of, defines the limits of; stations someone in a place; searches for and discovers the position of.

Machines. Planes, shapes, turns, mills, etc., by machine; machines a surface.

Maintains. Holds or keeps in a state or condition, especially in a state of efficiency, newness, validity or cleanliness; keeps property to not let it fail or decline; supports, sustains, upholds, defends. To keep in a prescribed state or condition as, to maintain records by keeping them up-to-date.

Mans. Supplies with men; staffs.

Manages. Controls; directs; conducts; guides, administers. Plan, organise, staff, direct and control efforts of subordinate organisational units through intermediate levels of management or supervision. Sometimes this term is used to donate final responsibility for an organisational function whether or not supervision of supervisors or employees is involved.

Manufactures. Makes by hand, machinery, or other agency; works into suitable forms for use; fabricates, manufactures a product.

Marks. Puts a mark on, fixes or traces out the bounds or limits of, affixes a significant identification to; indicates by marks or symbols; marks boundaries.

Masks out. Covers or conceals, as by surfacing over with tape; masks areas.

Measures. Ascertains the extent, degree, quantity, dimensions or capacity of, by a standard.

Monitors. Keeps watch over; reports on; keeps in order.

Motivates. Provides with ideas, incentives, goals, reasons that stimulate and prompt action.

Negotiate. Confers with another so as to arrive at the settlement of a matter.

Notifies. Informs; makes known, gives notice of.

Observes. Adheres to, follows, keeps or abides by law, duty, rule, custom; celebrates; notices or perceives; pays special attention; examines scientifically; observes safety precautions.

Obtains. Procures, gets possession of; obtains data for inclusion in a survey.

Opaques. Makes opaque, so as not to admit light; paints over to blot out portions of opaques lens.

Operates. Puts into or continues in operation or activity; manages, conducts, carries out or through; drives, as to operate a vehicle; operates a radio.

Orders. Commands; gives and order to; commissions someone to purchase, sell or supply goods, orders supplies.

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Organises. Arranges; systematises persons or things into proper places, especially in relation to each other; gives structure to; puts in proper order.

Orients (orientates). Puts into correct position or relation, acquaints with an environment, conditions or situation; sets or arranges in position; fixes direction.

Originates. Begins, produces as new; procedures, plans, techniques.

Outlines. Summarises more significant features of, or gives preliminary or general sketch of, as systems, regulations.

Overhauls. Examines thoroughly and checks for needed repairs; makes repairs and adjustments needed to restore working order; overhauls equipment.

Oversees. Supervises; superintends; inspects; examines. Checks the work of others for performance, without supervisory responsibility or authority over their efforts.

Packages. Wraps or boxes as for selling, carrying, disposing, or storage; packages items.

Participates. Takes a part or shares with others in some activity, enterprise; participates in group discussions.

Performs. Carries out or executes some action; accomplishes, achieves, effects.

Places. Sets or arranges to establish in a certain position, as rank, order, condition; disposes of in a desired or selected way; places survey stakes.

Plans. Represents as by a diagram; devises or projects as a method or course of action; prearranges the details of, as to plan a campaign; intends, proposes to do; plans an assignment.

Plots . Makes a plan or map of something, marks the position of something on a map or plan; delineates, draws, outlines an action in advance, lays out, devises.

Posts. Transfers or carries from a book of original entry to a ledger.

Predicts. Tells or declares beforehand; foretells.

Prepares. Adapts or qualifies beforehand for a purpose, and or condition; makes ready, puts into a state for use or application, prepares a request for survey.

Prescribes. Lays down or sets as a guide, direction or rule of action, procedures, regulations.

Preserves. Keeps from harm, damage, danger, evil; protects; keeps from spoiling or rotting; maintains; preserves equipment.

Prevents. Forestalls, averts; generally implies taking immediate and effective measures, or establishing appropriate controls to keep from happening.

Processes. Prepares by or submits to a special treatment or process.

Procures. Obtains, secures, gets, purchases through appropriate channels, procures equipment.

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Programmes. Works out a sequence of operations to be performed.

Projects. Protrudes, especially as part of a structure; causes light or shadow to fall into a space, or an image upon a surface; locates or places upon as in the phrase “projects construction sites on a topographical map”.

Promotes. Furthers; contributes to growth or activity of something; also, advances in rank.

Promulgates. Publishes, makes known; spreads knowledge of and information on through established channels.

Pronounces. Utters or speaks aloud, especially with reference to articulation or correct sound or accent, gives proper phonetic utterance to; pronounces numbers and phonetic alphabet.

Provides. Supplies for use, furnishes; equips in preparation.

Purges. Cleanses or ride of impurities, foreign matter, or undesirable elements; clears away, off or out; drains out water or air nautical; purges air from air-conditioning systems.

Qualifies. Is qualified; is fit; as for an office or employment; is capable; fits, as for an office, place, character or privilege.

Readies. Makes ready, puts in a state of order or preparation.

Re-babbitts. Re-applies Babbit metal, a soft, silver-coloured alloy of tin, copper and antimony used to reduce friction in bearings; loosely, re-applies any anti-friction alloy.

Receives. Takes or comes into possession of.

Reclaim. Gets back, purifies for re-use; reclaims used material.

Recognises. Perceives a person or thing previously known, recovers or recalls knowledge of.

Recommends. Advises; counsels; offers or suggests course of action; recommends a survey.

Reconciles. Makes congruous; adjusts, settles; checking items.

Records. Writes, enters, registers for purpose of evidence or reproduction, records data in a record book.

Reduces. Diminishes, especially in a bulk, amount, or extent; bring into certain order, arrangement, or classification; brings from one form to another; reduces survey notes.

Refers. Sends or directs to some person or place, as for treatment, aid, decision, information.

Registers. Enters in a record or list, enrols, records officially; indicates on a scale; safeguards by having a record made, as registered mail; registers assignments.

Releases. Sets free, unfastens and lets go, as something snagged) permits to be shown, issued, published; release data on employment.

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Regulates. Directs in accordance with regulations; brings under control of assigned authority.

Rejects. Refuses to accept, generally because considered unsatisfactory as to condition or status against standards.

Relays. Passes on, as messages, through communication systems.

Relieves. Frees from, wholly or in part, as relieves supervisor from administrative duties; also, releases a person from a duty, post, station.

Remedies. Provides or serves as a remedy for; cures, relieves, corrects; repairs something broken or out of order, or corrects a malfunction.

Removes. Changes the location of by taking off, out of, or away from, lifting, pushing aside; removes an object.

Renders. Causes to be or to become; represents or depicts; furnishes, as an account of money or actions; gives; delivers, or transmits, as to render a message, or renders artificial respiration.

Repairs. Restores to working condition, as equipment; repairs equipment.

Replaces. Restores to a formed place or position; takes the place of; supplies an equivalent for.

Reports. Gives an account of; relates; tells; repeats; prepares an account of, orally or in writing; presents conclusions reached, makes, issues, or submits formal report; presents oneself, as reports for duty.

Represents. Fills place of, be substitute for; represents supervisor.

Requests. Asks for something or some action desired.

Requisitions . Makes a formal request, application or written order, as for equipment, tools, paper, food, supplies, requisitions materials.

Researches. Conducts investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws, in the light of few facts or practical application of such new or revised theories or laws.

Rescues. Fees from any confinement, violence, danger or evil; rescues someone.

Resolves. Analyses, determines, decides, settles, solves, explains, convinces, assures, implies position and authority for making a decision.

Resuscitates. Revives, brings back to life or consciousness; resuscitates a victim.

Retrieves. Recovers, regains, brings back.

Reviews. Examines again; makes formal or official examination of the state of, as inspection of men, equipment.

Revises. Look at or over again and corrects or improves as estimates, plans; makes new, improved, up-to-date version of, as procedures.

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Routes. Sends, forwards, or transports in an established manner; arranges the course of; fixes the order of procedure in a series of operations; routes classified matter.

Scales. Arranges in a graduated series, scales a test; makes or patterns in regularly graded proportions; hence, regulates; rises in a graduates series; as of steps or notes.

Scans. Looks over to pick out certain pertinent items for details.

Schedules . Designates fixed times for accomplishment of, as training programs, mail deliveries, courier service.

Screens. Passes through standardised test for sorting out candidates; subjects to interviews or tests; also, reviews to determine security classification.

Searches. Looks for, hunts through, examines, goes over, explores, inquiries, scrutinises.

Secures. Makes safe; guards, protects; makes certain, guarantees; ensures as with a pledge; secures a loan; makes firm, fast, tight; gets hold or possession of, obtains, acquires.

Selects. Takes by preference from among others; picks out or from; selects portable power tools for maintenance of equipment.

Serves. Is assigned to a position; fulfils the obligations or discharges the requirements of a duty or position.

Serves. Is assigned to a position; fulfils the obligations or discharges the requirements of a duty or position.

Services. Performs maintenance, supply, repair, installation, distribution, etc., for or upon.

Sets up. Brings into operation or use; institutes, establishes, arranges; puts together; erects.

Shifts. Changes the place, position or direction of, moves or removes, as from one place or person to another; transfers; shifts to alternate controls.

Shows. Explains; teaches; instructs; demonstrates.

Solves. Finds or provides a satisfactory answer or explanation for, makes clear, explains.

Sorts. Puts in a certain place or rank according to kind, class or nature.

Specifies. Names or states explicitly or in detail; includes as an item in a specification.

Sponsors. Presents and assumes responsibility.

Stacks. Piles up; arranges in a pile whose sides are relatively uniform, so as to prevent collapse of the structure; stacks cargo.

Standardises. Places within, prescribed limits or procedures.

Sterilises. Frees from living germs; sterilises dental instruments.

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Stores. Furnishes or provides, particularly for a future time or need; accumulates; deposits, as in warehouse or depot.

Stows. Places or arranges in a compact mass; puts in its proper, or in a suitable and/or convenient place; fills by packing closely.

Studies. Reads and examines so as to learn or understand, such a regulations.

Submits. Refers; offers or puts forward as an opinion; defers to the opinion or authority of another, as submits reports or recommendations for approval.

Suggests. Advances as opinion or recommendation.

Superintendent. Have management of; arranges and inspects work.

Supervises. Gives directs orders and instructions followed up by personal observation of activities of subordinates. Carry out assignments through subordinates, usually time card employees; or direct supervision of small numbers of exempt supervisors.

Surveys. Examines with reference to condition, situation, value, etc.; inspects; also, technically determines and delineates the form, extent, position of a tract of land. A brief but comprehensive search to locate information applicable to a problem.

Sutures. Joins together with, gut, thread, wire, for the purpose of stitching up a wound or incision; sutures minor wounds.

Sweats. Causes to perspire, as by drugs, exercise, heat; causes to give forth moisture as pipes, vegetables; heats a metal in order to extract an easily fusible constituent; heats solder until it melts; unites metal parts by heating at the point of contact; sweats a watertight or airtight flange, joint, stud or lead.

Synchronises. Causes to be or appear synchronous; arranges, or tabulates so as to indicate coincidence or co-existence; renders synchronous in operation.

Takes action. Assumes a task or duty, performs a function, does something to accomplish a desired end as a result of a condition, requirement, directive, frequently qualifies by “follow up” or “remedial”; takes follow-up action - pertaining to corrective action.

Tempers. Brings steel, glass or the like to a degree of hardness and toughness; tempers springs.

Tests. Examine critically or tries out material; measures skills, knowledge, capacities, or aptitudes of an individual or group.

Traces. Follows the path, development, process or history of, especially by proceeding from the latest to the earliest evidence; finds or determines by this procedure; draws the lines, delineates; makes a diagram; notes and marks a course on a map.

Trains. Forms or imparts proficiency by teaching, drilling, instructing, discipline.

Transacts. Carries on, performs, conducts or completes a piece of business; negotiates.

Transcribes. Makes a written or typewritten copy of shorthand notes, speech; arranges or adapts a piece of music for an instrument, voice of ensemble other than that for which it was originally composed records for rebroadcast.

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Transfers. Conveys from one place, person or thing to another, transports, removes or causes to pass to another; prints or otherwise copies from one surface to another; takes over the possession or control of, conveys; transfers circuits for normal and emergency conditions.

Transmits. Sends, forwards, transfers from one place to another; implies passing on to others through established channels.

Transports. Carries from one place to another, especially over relatively long distances.

Transposes. Changes the usual, normal, or relative position of; writes or plays a musical composition in a different key.

Treats. Subjects to some action or process to improve appearance, taste, usefulness; processes, brings or puts a person or thing into a specified or implied condition by treating; treats chemically a closed cooling system of an internal combustion engine.

Troubleshoots. Corrects, removes, or mitigates a problem or deleterious condition; troubleshoots a control system.

Uses. Employ; partakes of; exploits.

Validates. Proves, confirms; authenticates.

Verifies. Proves, confirms, substantiates, authenticates; checks or tests the accuracy or exactness of, verifies by comparing items.

Welds. Unites or consolidates metallic parts by heating to a plastic or fluid state the surfaces or the parts to be joined and then allowing the metal to flow together with or without the addition of other molten metal, or by hammering or compressing with or without previous softening by heat; welds section.

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