



# srmbok



Security Risk Management BODY OF KNOWLEDGE

**Guide to SRMBOK:** 

**Training in the Security Risk Management Environment** 





#### **Abstract**

This chapter provides a short overview of the training options, strategies and tools that a security risk professional can apply towards implementing security risk management strategies and countermeasures within an organisation. The focus of this chapter is on training general staff rather than security practitioners however the principles described here-in are equally applicable to both groups.





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## 1 Introduction

Australasia is part of a global economy, an economy where advances in communications, technology and logistics have bought cultures and economic systems into close proximity<sup>i</sup>. This internationalisation is affecting education and training in that Australasia needs to become a knowledge economy and a knowledge economy depends on the ability to build, manage and apply knowledge across all industrial sectors.

The reason for training in all industry sectors is the development and maintenance of the skills, knowledge and attitudes (SKA) required by the individual to effectively and efficiently complete their job/task in a fast moving economy. Training can be for people who already have employment or are about to enter the workforce and not only for, security personnel who deal with Security Risk Management (SRM). The aim of the training process is to achieve a behavioural change in learners by giving them new SKA.

Even though learning is a continuous process, training requires having a definite start and finish point, which in turn makes a training program successful. Learning and training are different parts of the same process, in that learning can occur through the process of training but, learning can be achieved by other means.

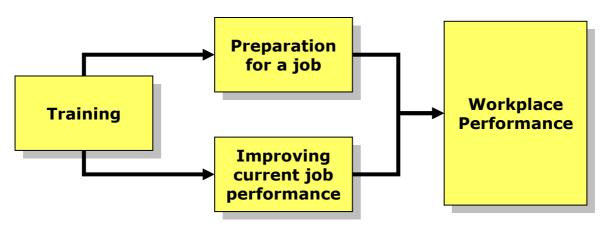


Figure 1: Short term focus of training (Source: Training in Australia)

The training function within an organisation may reside within the Human Resources (HR) Department. As a sub-section of the HR Department, training is not a stand alone entity. Tovey and Lawlor<sup>iii</sup> explain that a training section is one of many processes in an organisation that solve business problems and that training is a process or activity by which learning occurs to enable appropriate SKA to meet defined organisational needs. Security organisations like many other organisations in Australasia have defined organisational needs, and training as one process can assist in achieving these needs. Figure 2 demonstrates the training section as a sub-section of an overall organisation, not necessarily as part of the HR Department.





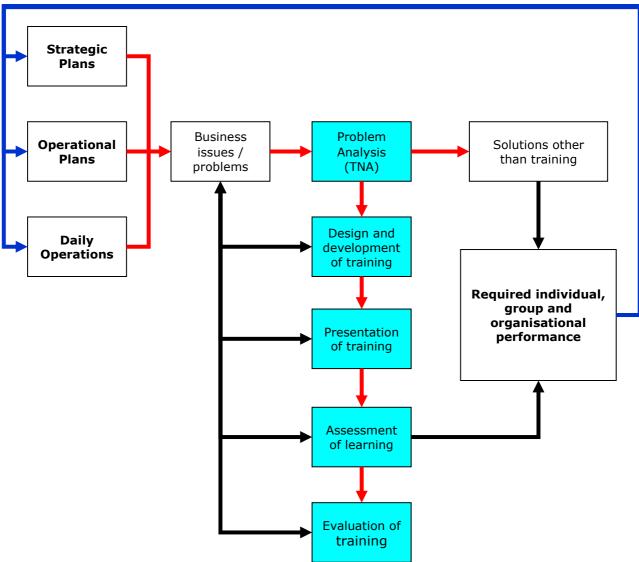


Figure 2: The training sub-section (Source: Training in Australia)iv





# 2 Identifying the training requirement

A Training Needs Analysis (TNA) is a systematic approach to breaking down and analysing business problems, then assessing the problems to identify if training can solve them. In addition, a TNA, if conducted correctly, will identify the nature of specialist training and who within an organisation requires it. Once the TNA is completed, it will assist you in making decisions on what the solution might be and if a training solution is required.

McGehee and Thayer<sup>v</sup> modelled a process on a three-level view of an organisation. These were: organisation analysis, operations analysis and individual analysis.

# 2.1 Organisation analysis

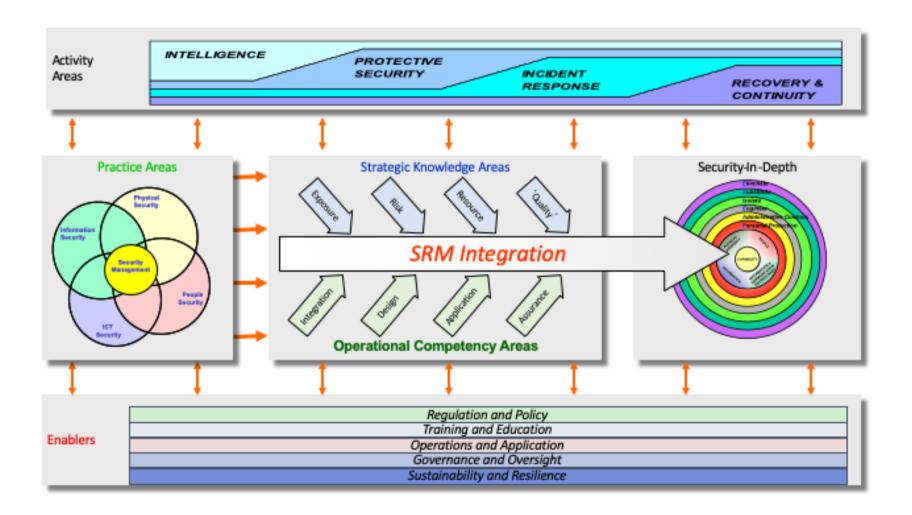
Organisation analysis is concerned with identifying which section/department of an organisation requires training and its view is primarily macro. The primary driver of security risk management training should be a comprehensive security risk assessment and management plan. Some additional sources of organisational material that can be utilised in the analysis are:

- Organisations' strategic plan
- Organisations' marketing plan
- Organisations' mission, goals and objectives
- Organisations' policies and procedures
- Work force metrics e.g. staff turnover, age, gender, language
- Organisational metrics e.g. productivity, injury rates, industrial disputes
- Efficiency metrics e.g. material costs, labour costs, quality control
- Current skills inventory

A useful model for considering training requirements and training needs analysis for the organisation is outlined in Figure 3 below. When considering 'what to train' general staff in with respect to security risk management the activity areas of Intelligence, Protective Security, Emergency Response and Business Continuity provide an insight into what for example needs to be included in induction training or advanced security awareness. Similarly the five Practice Areas (Management, Physical, People, Information and ICT) provide a structure for defining the types of training that different teams and workgroups will require at different times during the life of the organisation.







**Figure 3: SRMBOK Security Framework Model** 





# 2.2 Operations analysis

Operations analysis is concerned with jobs/tasks or a group of jobs/tasks. Sources of organisational material that can be utilised in the analysis are:

- Job descriptions
- Job specification
- Key Performance Indicators (KPI's)
- Performance standards
- Observation of the job/task
- Government job standards e.g. security officer
- Current Skills, Knowledge and Attitudes (SKA's)

Operational analysis can also considered from a number of different areas however the Knowledge Areas (Ref: Figure 3) provide an appropriate framework for implementing training programs which consider (to differing degrees) elements such as Exposure, Risk, Resources and Quality. These of course will vary in detail depending on the level and focus of training required as well as the role(s) of the area/business being considered. Each operating area for example should be adequately trained to ensure that they have the required 'Knowledge' to assess and manage their security risks.

## 2.3 Individual analysis

Individual analysis is primarily concerned with measuring how well the current incumbent is performing in the job or completing the task. Framing the training needs of individuals can be effectively done using the four Competency Areas (Ref: Figure 3) of Business Integration, Functional Design, Application and Assurance. Most individuals will operate primarily within one of these four areas and will benefit most from training which focuses in a particular area. For example, managers and persons with security budget responsibilities will typically require training in all four knowledge areas but with a focus in the area of 'Business Integration'. Similarly technicians or security team members will benefit from training in the areas of Design and Application. General staff typically respond to or comply with security policies and procedures, and accordingly require training which focuses on the area of Application.

Some sources to help gather this information (once the Organisational and Operations analysis have been completed) are:

- Interviews
- Questionnaires
- Surveys
- Analysis of Critical Incidents
- Performance appraisal
- Observation

# 2.4 The diversity of learners vi

There is a recognised need to take positive steps to achieve equality of participation for training activities that engage a diverse range of people who may face learning barriers, including:

• Offenders and ex-offenders





- Migrants
- People with low literacy and numeracy levels
- People with limited previous education
- Long term unemployed people
- Young people
- People returning to training and
- Mature aged learners

Instructional designers will need to consider and draw on a range of strategies to support and encourage the participation of all learners.

## 2.5 Sub-groups

Groups that require instructional design attention when considering the training requirement<sup>vii</sup> include six population sub-groups that are targeted during the instructional design process for equity issues in most sectors of education and training. These are:

- Indigenous people
- People with a disability
- People from low socio-economic backgrounds
- Women and girls
- People from rural and isolated backgrounds
- People from non-english speaking backgrounds (NESB)





# 3 Delivering training programs

The following line diagram indicates the continuum of modes of delivery that maybe considered during the design phase by the instructional designer and/or the trainer.

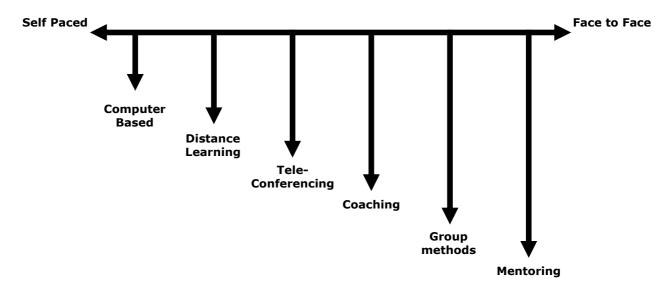


Figure 4: Continuum of modes of delivery (Source: Training in Australia) viii

When choosing a method of delivery Tovey & Lawlor<sup>ix</sup> (2004) recommend that, the trainer needs to select the one that is most suitable for the content, the learners, trainers expertise and the required learning outcomes. There are many modes of delivery as shown in Figure 4 and these options can be used individually or as a combination to enhance learning and to cover the three learning domains.

# 3.1 Training delivery defined

Some elements of training lend themselves to particular types of delivery. Most training objectives can be met through any or all of the following approaches however it is important to understand both the strengths and weaknesses of the following approaches in delivery security risk management awareness or competency training.

# 3.1.1 Self-paced

Learning initiated and directed by the learner. Either for leisure learning or as a result of being informed that we may need additional knowledge for a job, or for higher education. More and more training departments are developing courses that employees go through at their own pace. The term is used by some organisations to include computer-based, web-based and multimedia training.

# 3.1.2 Computer based

Computer-Based Training (CBT) is any course of instruction whose primary means of delivery is a computer. A CBT course (sometimes called courseware) may be delivered via a software product installed on a single computer, through a corporate or educational intranet, or over the Internet as Web-Based Training (WBT). CBT can be





used to teach almost any conceivable subject, but it is especially popular for computerrelated studies.

### 3.1.3 Distance learning

Education/training that takes place when the instructor and learner are separated by space and/or time. The gap between the two can be bridged through the use of technology - such as audio tapes, videoconferencing, satellite broadcasts and online technology - and/or more traditional delivery methods, such as the postal service. Distance learning includes both synchronous and asynchronous instruction. Distance learning requires structured planning, well-designed courses and special instructional techniques and methods.

#### 3.1.4 Teleconferencing

Audioconferencing is most common and least expensive form of teleconferencing. Audio graphic teleconferencing systems involve the use of computer or facsimile technology to transmit visuals to support the audio. Some computer systems allow the transmission of graphics, programs, and data, where each site sees anything on the instructor computer screen, besides hearing the audio. Audio graphic systems are good for classes that involve a lot of illustration, such as equations, or computer applications.

*Videoconferencing* allows learners and instructors to interact face-to-face. Videoconferencing can be transmitted via satellite, cable, or standard telephone lines. It requires compressing the videos and several forms of equipment.

Computer Conferencing allows learners and instructors to interact via a computer network. This interaction can be through e-mail messages, file transfer, chat rooms, real audio and video, and others. With the fast progress in computer technology, computer conferencing is taking its place in educational technology. Computer conferencing provides good quality, easy to use, and cost-efficient way of interaction.

# 3.1.5 Coaching

A technique that can be used for the coach to assist another person to understand or apply a particular skill. It is normally a one-on-one situation.

## 3.1.6 Group methods

Using group methods, such as brainstorming can greatly enhance most training programs. The trainer will need to identify if this method is appropriate for the learning outcomes of the program.

## 3.1.7 Mentoring

An instructional strategy where a more experienced person in the organisation, teaches a person by inviting them to learn from their experiences and examples.





# 3.1.8 Face to face (F2F)

Face-to-face sessions are synchronous. While no communications technologies are required for a face-to-face session, often other technologies, such as LCD cameras and overhead projectors, are used. A face-to-face session or event is a live meeting among learners and trainers. Face-to-face interaction can help to break down barriers and provide real cross-cultural experiences and networking opportunities, thereby assisting in sustaining relationships and encouraging the sharing of knowledge.





# 4 Implementing training<sup>x</sup>

Implementation of any training program begins during the training needs analysis phase. A training designer needs to use a needs assessment or goal analysis to generate interest and goodwill towards the project. Implementing a training course may require extensive travelling, meetings and additional external training requirements. For some courses that solve real problems, the implementation plan is simple as the employees of an organisation will see the immediate benefit. For a course that conflicts with a current course, organisational values or organisational methods, these typically require the instructional designer to convince the learners of its value to the organisation and also to the individual.

Some concepts that may assist successful implementation of a new program are:

- Placing electronic versions of the program on the organisations intranet
- Brochures and flyers on noticeboards
- Internal emails
- Allow the HR Department to promote and schedule the program
- Adding the new program to the organisations induction package
- Keeping senior management informed of the programs success and support this with data from level 1 and higher evaluations
- Write a feature story for the in-house newsletter
- Maintain a plan for rolling out the new program to remote offices





# **5** Evaluating training

Kirkpatrick<sup>xi</sup> explains that there are three reasons for evaluating training programs.

- 1. The most common reason is that evaluation can tell us how to improve future programs.
- 2. The second reason is to determine whether a program should be continued or dropped.
- 3. The third reason is to justify the existence of the training department.

Evaluation is vital to the continued success of a training course. Evaluation allows the training department to make modifications to a training course so that currency of information is maintained and relayed to learners. Many a training program have met their demise by not conducting sufficient and/or effective evaluations. Kirkpatrick developed a model of evaluation that covered four levels of evaluation:

- Reaction
- Learning
- Behaviour
- Results

#### **5.1.1.1** Level 1 Evaluation (Reaction)

Level 1 measures the reaction of learners to learning programs. This basically determines how well they liked the learning program. This is typically done as a survey handed out to learners at the end of a training course or program. Measuring reaction is important for several reasons<sup>xii</sup>. Kirkpatrick explains, first it gives us valuable feedback to evaluate the program as well as comments and suggestions for improving future programs. Second, it tells learners that trainers are there to help them do their jobs better and thirdly, reaction sheets can provide trainers with quantitative information that can be used to establish standards of performance for future programs.

#### **5.1.1.2** Level 2 Evaluation (Learning)

Level 2 measures whether learning actually has occurred. This is typically done by a test or quiz that is scored. *Optimally* it is best to present the learner with a pre-course test to determine their current knowledge of the content, and a post-course test to measure improvement from before the course delivery<sup>11</sup>. Kirkpatrick explains, it is important to measure learning because no change in behaviour can be expected unless one or more of the learning objectives have been accomplished.

#### 5.1.1.3 Level 3 Evaluation (Behaviour)

Level 3 measures whether the performance or behaviour of the learner has changed as a result of the learner applying the learning content after returning to their job. It is recommended to be done by interviewing each learner, but can also be done by survey. The interview method will get the most detail information, however it will consume much time. Conducting a survey will get sufficient information to make an inferential analysis, but the survey must be designed to acquire the needed information<sup>11</sup>. There are three difficulties in assessing level 3 evaluation. Firstly, learners cannot change their behaviour until they have an opportunity to. Secondly, it is impossible to predict when a change in behaviour will occur and thirdly, the learner even though they have applied the training to their job, might not like how they are to do things and will make a conscious decision not to try the new method.





#### **5.1.1.4** Level 4 Evaluation (Results)

Level 4 measures actual business results from learners applying their newly learned knowledge or skills. In order to determine an improvement in results, we must first define what those metrics are, then determine the current values. The metrics must be quantitative, therefore it may be necessary to assign quantitative values to qualitative data. For example, measuring an increase of productivity in a manufacturing environment would need to be translated to money saved or margin increase as a result of the improvement<sup>11</sup>.





# **6** Training strategy

How do we implement the identified training needs? There are several options to consider. Some of the most widely used strategies for implementing the training needs are described below in Table 1 together with their benefits and potential problems.

**Table 1: Common Training Strategies**xiii

Option	Benefits	Potential problems		
Workplace Training (on-job- training (OJT))	<ul> <li>Learning in the workplace</li> <li>Provides an example and standard to copy</li> <li>Useful for job skills training</li> <li>Can focus on specific skills</li> <li>Problem solving</li> <li>Low cost</li> </ul>	<ul> <li>Interruptions from the workplace</li> <li>Trainers capability</li> <li>Bad habits can be passed on</li> </ul>		
On-job coaching	<ul> <li>Learning in the workplace</li> <li>Individuals solve their own problems</li> <li>Meets individuals needs</li> <li>Useful for management skills development</li> <li>Problem solving</li> <li>Personalised active participation</li> <li>Low cost</li> </ul>	<ul> <li>Interruptions from the workplace</li> <li>Recognising suitable opportunities</li> <li>Capabilities of the coach</li> </ul>		
Off-job courses	<ul> <li>Group can exchange ideas</li> <li>Useful for job skills training and management development</li> <li>Safe environment to make mistakes</li> </ul>	<ul> <li>Disruption to workplace</li> <li>Unreal environment</li> <li>Can be costly</li> </ul>		
Secondments and projects	<ul> <li>Learning in the workplace</li> <li>Combines with onjob coaching</li> <li>Observation of real work situations</li> <li>Opportunities for development clearly identified</li> </ul>	<ul> <li>Capabilities of the coach</li> <li>Fitting into an existing team</li> <li>Authority and responsibility must be clearly defined</li> </ul>		





Option	Benefits	Potential problems		
	<ul><li>Deepens the understanding of learning</li><li>Low cost</li></ul>			
eLearning	<ul> <li>Learning at own pace</li> <li>Supports other methods</li> <li>Brings everyone to the same level of knowledge</li> <li>Large scale training</li> <li>Good for geographically dispersed organisations</li> <li>Guided learning through complex issues</li> </ul>	<ul> <li>Requires a high level of self-motivation</li> <li>Can be very costly initially</li> <li>May need specialist program</li> </ul>		

Training strategy choice may reveal additional training needs. For example, if the organisation decides that on-job coaching is the best method, then there is a need to ensure that someone is available with the necessary job and coaching skills. These issues will need to be taken into account when all the data from a Training Needs Analysis is conducted to formulate the organisations training strategy.





#### Training framework

The SRMBOK security risk management framework provides a model for organisations to provide security training but equally the framework is a useful tool for developing security specific training and education programs.

To this extent it needs to be aligned with an existing framework such as the Australian Quality Training Framework (AQTF) which offers pathways to develop competency based training which articulates upwards via the Australian Qualifications Framework (AQF).

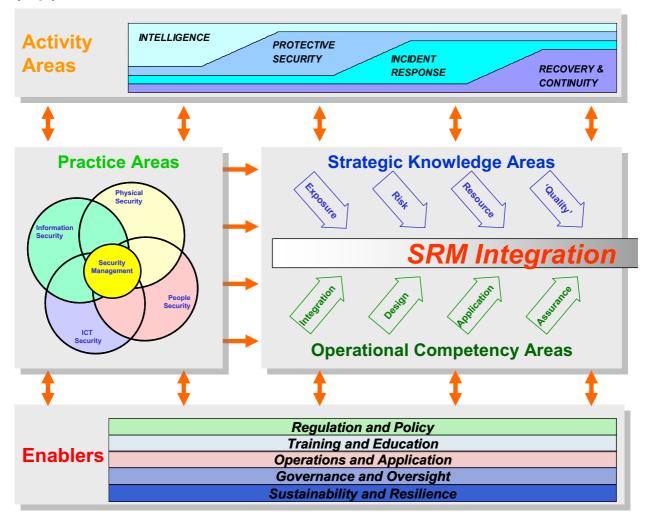


Figure 5: SRMBOK Security Framework for Security-In-Depth

AQF provides a training and educational pathway through 11 levels as listed below:

- 1. Certificate I
- 2. Certificate II
- 3. Certificate III
- 4. Certificate IV
- 5. Diploma
- 6. Advanced Diploma





- 7. Bachelor degree
- 8. Graduate Certificate
- 9. Graduate Diploma
- 10. Masters degree
- 11.Doctorate

Using these 11 levels in combination with the alignment of Practice Areas and Activity Areas as illustrated in Figure 6 suggest a number of qualification pathways. The examples provided below are merely one subset of the many personnel involved in each or many of the areas.

Combining this with the 8 elements of the Knowledge and Competency Areas (Ref: Figure 3) offers a consistent model for training development. For example, training programs at Certificate I level might be built around offering a single unit of training which offers general awareness of all 8 elements (Exposure, Risk, Resources, Quality, Integration, Design, Application and Assurance) albeit with a particular focus on the required area (eg: Emergency Response or Information Security).

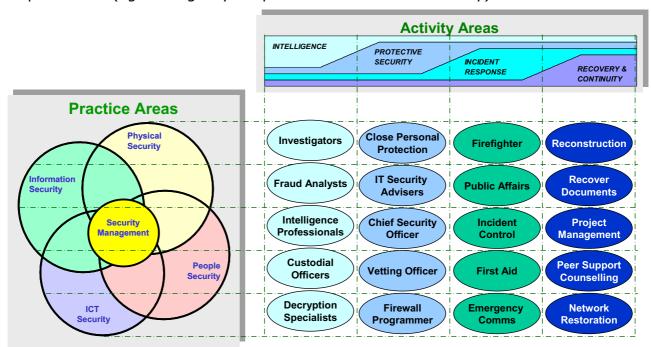


Figure 6: Examples of roles at nexus of Activity and Practice Areas

Table 2 below offers an example of how an SRM training program might be built to provide consistency of areas covered.





**Table 2: Example of Potential SRM Qualifications Framework** 

	Exposure	Risk	Resources	Quality	Integration	Design	Application	Assurance	Specialisation	Elective	Elective	Elective
Certificate I	1 unit											
Certificate II	1 Unit				1 Unit				1 Unit			
Certificate III	1 Unit				1 Unit	1 Unit	1 Unit	1 Unit	1 Unit			
Certificate IV	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit				
Diploma	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	One Unit		
Advanced Diploma	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	One Unit	One Unit	One Unit
Bachelor degree	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	As appropriate to the subject			
Graduate Certificate	1 Unit	1 Unit								One Unit	One Unit	
Graduate Diploma	1 Unit	1 Unit	1 Unit	1 Unit					1 Unit	One Unit	One Unit	One Unit
Masters degree	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	1 Unit	Thesis or Four Electives			
Doctorate									Thesis			





Applying this concept to the Practice Areas of Physical, ICT, Information, People and Security Management for example might lead to the following examples within the 'Protective Security' Activity Area.

- Certificate I Fire Warden
- > Certificate II in Security Guarding
- Certificate III in ICT Security
- Certificate IV in Vetting
- Diploma of Security Risk Management
- > Advanced Diploma in Intelligence
- Bachelor of Security Engineering
- > Graduate Certificate in Risk Management
- Graduate Diploma of Human Resources
- Master of Security Science
- Doctorate

Each of the above would include articulation pathways and electives from each others areas using learning outcomes based on the four Knowledge Areas and four Competency Areas.

Similarly aligning the Australian Qualifications Framework (or a similar pathway) might assist SRM Professionals to identify career pathways and training requirements. Perhaps even more importantly such a pathway might assist clients and employers to understand what skill set they need to engage for a particular role or task. An example of how this might be done is included below in Table 3.

**Table 3: Aligning the AQF with security Practice Areas** 

AQF	Qual	Physical	People	Management	Information	ICT			
11	PhD	Technical Specialist or Senior Consultant							
10	Masters Degree		Chief Security Officer (CSO) or Senior Consultant						
9	Graduate Diploma	Chief Security Officer (CSO) or Senior Consultant							
8	Graduate Certificate	Physical Security Consultant	Personnel Security Consultant	Security Risk Management Consultant	Information Specialist	ICT Security Specialist			
7	Bachelor Degree	Security Manager	Vetting Manager	Security Manager	Intelligence Manager	ICT Security Manager			
6	Advanced Diploma	Operations Manager	Vetting Manager	Security Manager	Intelligence Analyst				





AQF	Qual Phys		People	Management	Information	ICT
5	Diploma	Agency Security Adviser	Vetting Supervisor	Team Leader	Intelligence Collector	ICT Security Adviser
4	Certificate IV	Installer	Senior Vetting Officer	Supervisor	Intelligence Operative	Security Admin
3	Certificate	Control Room Operator	Vetting Officer	Team Leader		
2	Certificate II	Guards				





## 7 Conclusion

This chapter dealt expressly with aspects of training. It has documented various aspects of training within an organisation ranging from identifying the training requirement to delivering training and to evaluating training. Training within an organisation will only be effective if it meets the organisational requirement at the right time. This can only be achieved if an effective TNA has been conducted, before instructional design or training has commenced.

Understanding organisational, individual and even national learning needs will assist in the successful implementation and completion of a training program. Without this understanding, a trainer can negate the training design of a training program and the learning process will be ineffectual. Increasingly, adult learners (employees) will not accept poor or half-hearted training. They need to feel that the training will help them directly in their job or future job.





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