



A U S T R A L I A N M E A T P R O C E S S O R C O R P O R A T I O N

# Workforce planning guide for maintenance engineering managers and staff

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## 1.0 Background

The continuing evolution of technologies and automation of plants has impacted strongly on the staffing needs of maintenance engineering departments in the meat processing industry. These continuing changes have led to the need for more complex and sophisticated skills of maintenance staff to maintain and service the new technologies.

Plants already struggle to resource their maintenance areas due to the limited numbers of skilled and experienced tradespersons and engineers in the regional locations of plants, and the increasing competition from other local industries such as mining and agri-food. The continuing and growing demand for more complex and sophisticated skills makes it even more difficult for plants to source labour with the skills they need.

In spite of this only a few larger plants in the industry take a systematic approach to planning how to go about identifying and meeting workforce requirements. In order to have any chance of meeting critical skills gaps, attracting and retaining maintenance staff, plants need to take a strategic approach to managing their workforce.

This guide is one of three guides designed to assist plant personnel recruit, retain and develop maintenance engineering personnel to meet business needs now and into the future. The other two guides are:

- Guide to competencies and training options for maintenance engineers in meat processing plants
- Recruitment and retention guide for maintenance engineering in the red meat processing industry.

### 1.1 Introduction to the workforce planning guide

The workforce planning guide works through the planning process to ensure plants have:

- The right maintenance personnel
- With the right skills
- At the right time
- To do the work required, and
- The work gets done to industry and plant standards.

This guide works through the steps in the workforce planning process.

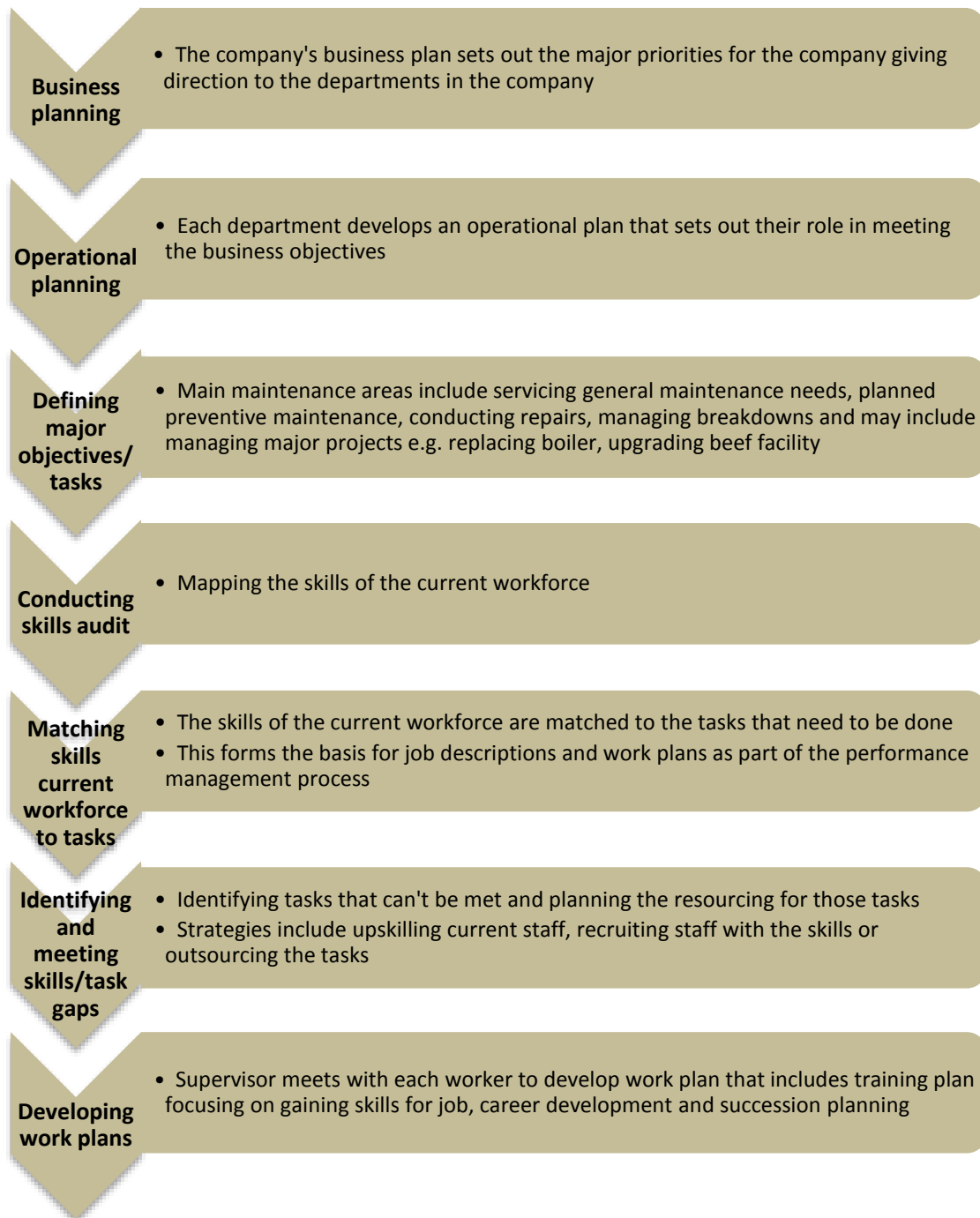
### 1.2 Relevant competencies and training publications

This workforce planning guide should be read in conjunction with the 'Guide to competencies and training options for maintenance engineering.' The guide to competencies and training options sets out the competencies and training options for maintenance engineering staff from entry level to senior management. The maintenance management team can use the competencies and training options guide as part of the planning process:

- To help determine the competency needs to perform tasks as part of the planning process
- As a resource in the performance management process to help plan how to meet the training needs of their staff:
  - To perform the tasks in their work plan
  - To support their career development, e.g. to gain more advanced technical skills

- To support development for succession planning, e.g. to gain frontline management skills.

### 1.3 Steps in plant workforce planning process



## 2.0 Applying the planning process

### Business planning

- The company's business plan sets out the major priorities for the company giving direction to the departments in the company

The business plan is a documented set of goals, objectives and financial forecasts that your company aims to achieve over a certain period of time. It gives the business direction, defines objectives, maps out strategies to achieve the goals and helps identify and manage potential risks by learning about the different forces and factors that may affect the success of the business. It provides a roadmap for the business's future and helps give a sense of control over the business. Regularly reviewing the business plan provides the opportunity to review and revise directions, look at what's working and what can be improved and keep the plan up to date.

The business plan is generally developed by senior management and provides guidance for senior management to plan how they can manage their areas to make their contribution to achieving the business goals. The business plan also provides direction to the whole workforce about the company's priorities and more broadly to the customers and public who may be affected by the activities of the business.

Senior managers align the planning for their own department or area with the goals, objectives, schedules and financial forecasts set out in the business plan. Senior managers use the business plan to inform them about the development of the operational plan for their department.

For example, the major goals and targets in a company's business plan and their implications for the maintenance department may be as follows.

**2.1 Sample business plan goals and targets and their major implications for the maintenance department**

Goals in business plan	Targets	Maintenance department role cited in business plan to achieve goal
<p><b>Increase productivity</b> by investing in our people and encouraging innovation and the use of technology</p>	<ul style="list-style-type: none"> <li>• Increase productivity by 5%</li> <li>• Career development plans in place for all staff supported by training plans that are implemented</li> <li>• Succession plan in place.</li> </ul>	<ul style="list-style-type: none"> <li>• Replacement of a boiler</li> <li>• Installation of two new technologies in the beef boning room</li> <li>• Installation and operation of online maintenance management system.</li> </ul>
<p><b>Increase profit</b> by building export markets, increasing sales and reducing expenses</p>	<ul style="list-style-type: none"> <li>• Increase profit by 5%</li> <li>• Increase sales by 10%</li> <li>• Reduce expenses by 5%</li> <li>• Water usage reduced by 10%</li> <li>• Gas usage reduced by 20%.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in water usage through water savings in ammonia refrigeration and other areas of the plant</li> <li>• Biogas retrieval related to covering two waste water lagoons with the gas produced supplying gas in steam raising facility.</li> </ul>
<p>Continue to produce high <b>quality products</b> with food safety of the highest priority but also respecting animal welfare and protection of the environment</p>	<ul style="list-style-type: none"> <li>• No product recalls or customer or client complaints</li> <li>• New stockyards are built that provide shelter for stock</li> <li>• Water usage reduced by 10%</li> <li>• Gas usage reduced by 20%.</li> </ul>	<ul style="list-style-type: none"> <li>• Liaison and support as required for contractors building new stockyards.</li> </ul>
<p>We <b>respect and value our people</b> and are committed to providing a healthy and safe working environment and supporting, training and developing our staff</p>	<ul style="list-style-type: none"> <li>• Career development plans in place for all staff supported by training plans that are implemented</li> <li>• Succession plan in place</li> <li>• Lost time injuries reduced by 50%.</li> </ul>	<ul style="list-style-type: none"> <li>• Career development plans in place for all staff supported by training plans that are implemented</li> <li>• Succession plan in place</li> <li>• Raise the profile of WHS to prevent LTIs.</li> </ul>

**Operational planning**

- Each department develops an operational plan that sets out their role in meeting the business objectives

The operational plan is the next step in the business planning process after the business plan has been developed. The goals identified in the business plan become the starting point for the operational plan. In reality, a business plan has limited value unless an operational plan follows. It is the operational plan that ensures that things get done.

The operational plan includes detailed information that directs people to perform the day-to-day tasks required in their area of the organisation. The operational plan includes the what, who, when and how much for specific areas of the organisation:

- **What** – the tasks and activities that must be undertaken
- **Skills** – the skills required to do the tasks
- **Who** – the persons who have responsibility of each of the tasks
- **When** – the timelines when tasks must be completed
- **Costs** – the cost of each task.

A sample template for the development of an operational plan follows.

**2.2 Template for operational plan**

Major tasks or objectives	Activities	Skills required	Time-frame	Who?	Costs

**Defining major objectives**

- The major objectives are identified in line with the business goals

Once the business plan has been developed the maintenance engineering manager needs to use the business plan to develop the operational plan for the maintenance engineering department. The implications for maintenance of the goals of the business plan become the major objectives or tasks in the maintenance engineering operational plan.

**2.3 Example of major tasks or objectives in an operational plan aligned with a business plan**

Major tasks or objectives	Activities	Skills required	Time frame	Who?	Costs
Meet servicing and maintenance needs for all plant and equipment in plant					
Meet planned preventive maintenance for all plant and equipment					
Conduct repairs and manage breakdowns for plant and equipment					
Manage the replacement of a boiler					
Manage the installation of two new technologies in the beef boning room					
Review the ammonia refrigeration processes and implement measures to reduce water usage					
Conduct an audit of water usage in the plant and identify and implement measures to reduce water usage					
Work with the environment coordinator on the installation of the biogas technology					
Liaise with contractors building new stockyards					
Install and operate online maintenance management system					
Implement the performance management process with all staff including work plans, training and career development plans and succession planning					
Raise the profile of WHS to prevent LTIs	<ul style="list-style-type: none"> <li>• Conduct weekly toolbox meetings</li> <li>• Train safety rep</li> <li>• Safety rep conducts regular inspections</li> <li>• Conduct task risk assessments</li> </ul>				



### Conducting skills audit

- Conduct a skills audit to identify the skills/competencies of the current staff

Once the major tasks, objectives and activities that the maintenance department needs to do have been identified then people need to be identified who have the skills to perform the tasks. A skills audit needs to be conducted to identify the skills or competencies each member of the maintenance engineering staff have currently. A skills audit would generally be conducted by the plant's training officer or other member of the HR team. A skills audit involves meeting with each individual staff member and identifying, recording and/or storing:

- Copies of formal qualifications such as trade certificates
- Copies of certificates of attainment for any other training undertaken such as confined spaces entry, working at heights, forklift driving etc
- Copies of certificates of competency in any units of competency that have been completed in addition to the qualifications certificates already cited
- Information on any other skills that the staff member feels they have and how and when they acquired those skills.

A meeting should also be conducted with the supervisors of each of the personnel to verify that the personnel have current competencies in the areas identified and to identify additional skills areas that the supervisor feels they have.

### Matching skills current workforce to tasks

- The skills of the current workforce are matched to the tasks that need to be done
- This forms the basis for job descriptions and work plans as part of the performance management process

The next step is to match the current workforce's skills to the tasks. Once this has been done you will have a list of tasks for each member of staff. You need to look at the list of tasks for each staff member and assess whether this is a realistic number of tasks for them to perform or whether there are insufficient or too many tasks for one position.

The list of tasks can be used as the basis for job descriptions and work plans as part of the performance management process. Once you have the list of tasks for each person and have thought through their career development potential, bearing in mind succession planning you will be in a position to be able to meet with each member of staff to develop their work plan including discussing:

- Their **work plan** which includes tasks, activities, timelines
- Their **training plan** which includes technical training progression in line with the skills needs and the worker's development preferences
- Their **career progression plan** which may include incorporating training in frontline management or gaining advanced technical skills

- **Succession planning** and any training and development plans associated with succession.

#### Identifying and meeting skills/task gaps

- Identify tasks that can't be met and planning the resourcing for those tasks
- Strategies include upskilling current staff, recruiting staff with the skills or outsourcing the tasks.

Once the skills of the current workforce have been matched to tasks there may be gaps in your operational plan where you have tasks that you cannot resource either because no-one on your team has the skills you need or because you have insufficient staff with the skills you need. This is likely to be the case if the business plan includes projects in addition to the usual maintenance engineering workload. Where you have tasks that haven't been allocated to staff you have a number of options to resource the area. The options include:

- Upskilling your current staff to gain the skills they need
- Recruiting additional staff with the skills needed
- Outsourcing the tasks.

In making your decisions you need to consider:

- Career and succession planning for current staff members
- Whether your staff can access the training they need to gain the skills and whether you have staff with the availability to supervise them until they are competent in the area
- How likely it is that you will be able to recruit staff with the skills you need
- How critical the tasks are that need to be resourced, for example if there are regulatory requirements for tasks to be done or they are preventive maintenance tasks, then it may be more appropriate for them to be outsourced to ensure they are done and other more 'urgent' matters don't keep stopping staff from doing the tasks.

You should now be in a position to complete your operational plan with resourcing identified for every task in your operational plan. You should also be in a better position to be able to cost the tasks and have a more realistic budget.

#### Developing work plans

- Supervisor meets with each worker to develop work plan that includes training plan focusing on gaining skills for job, career development and succession planning

You now have the completed operational plan for the maintenance engineering department. You know what you are going to do, how you are going to do it, who will do it, by when and how much it costs. The next step is to let your staff know their roles in achieving the operational plan. Each staff member needs to know:

- Their job responsibilities
- How they go about meeting those responsibilities

- What training they need to do their jobs
- Who they report to
- What their priorities are
- How much time they should spend on different areas
- When they have important milestones such as completion of a project.

The maintenance manager needs to work out the reporting lines for staff in their team. All staff need to be clear about who they report to. This is especially important when maintenance staff are placed in production departments. In this case there needs to be a clear decision about whether they are reporting to the area's production manager or the maintenance manager.

The maintenance manager then meets with each member of their maintenance management team and jointly:

- Go through the operational plan
- Identify the staff that report to each manager
- Discuss the main roles and responsibilities of the manager
- Discuss the main roles and responsibilities of each member of their team
- Review each team member's job description
- Explains that the manager must now commence the performance management process with each member of their team by meeting with them:
  - To review their roles and responsibilities in their job description
  - To develop their work plan.

Each supervisor or manager then meets with each member of their team and completes their work plan. The work plan includes:

- Tasks/objectives
- Activities to complete each task or objective
- Targets that reflect achievement of the tasks/objectives
- Timelines for progress and achievement of the tasks/objectives
- Training needs to be able to do the tasks
- A career plan with a pathway to achieve the career progression including training
- A succession plan (as appropriate) with a pathway and training
- Discussion of how frequently they'll meet to discuss progress.

The outcome is that the supervisors and workers are absolutely clear about the role, priorities and timelines for each worker and they are also working towards career development. The entire workforce is now aware of the company directions and priorities and the whole workforce is aligned and all working together to make their contributions to achieving the business goals and achieving their own aspirations in the company.