

AMQ  
International's

# STRATEGIC # 316 ASSET MANAGEMENT

May 16th 2011

## Getting the Operational Task to Align with the Strategic Vision

*"How do we get the importance of strategic ideas through to those who need to carry them out but who are more attuned to non-strategic, operational issues?"*

### 2-3. Why this is a problem.

#### Some Answers:

#### 3. The City West Water Approach: Teach them the Strategy Requirements.

*Keywords: training; strategic asset management; water; repair/replace decision*

**4-7. The Energy Australia approach: Know your facts, work face-to-face, make monitoring easy (from information provided by Rod Smith)** *Keywords: maintenance, risk management, electricity*

**8-12. The Devonport City Council approach: don't wait till there's a problem, start communicating now - Marcus Lee** *Keywords: communication, councillors, field staff, council newsletters*

**Enjoy!**  
**Penny**

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*This is a problem submitted by a reader. Do you have an answer?  
Do you have another problem?  
I invite you to submit them.*

## **The problem:**

### **GETTING THE OPERATIONAL TASK TO ALIGN TO THE STRATEGIC VISION**

#### **“Talkers” and “Doers”**

“Every organisation is obviously different, but there are the “doers” and there are the “talkers”. Most of the AM managers are typically the latter and it’s a matter of making the messages consistent and meaningful to make a difference in the “doers” approach.



For example (this might be organisation specific) the Asset Manager might describe or better yet introduce a formalised framework/program for condition assessment. A condition assessment program based on service level commitments, risk, and cost which in theory all sounds pretty good. In reality the operations team responsible for actually doing the assessments may not fully buy into the approach because of a variety of reasons. For arguments sake let’s say its because of opposing views of what’s important.

I should say that at the strategic level there is a clear understanding of the services the organisation wishes to provide to customers through engagement and communication and it isn't simply around having assets of a certain condition. I use the condition assessment as an example of how often we get confused

I find the challenge becomes getting the operational level task to align with the strategic vision. Perhaps operations only sees the immediate issues of certain assets. “Why am I over here on this seemingly perfect asset while I know I have a leaky asset in the next block over?”

From an operations perspective intuitively I should be fixing the leak, rather than assessing the non-issue. For them they know they can do an excellent job and fix the leak. What they do not know is if they have properly assessed the condition of the asset in a manner that will maintain or improve **the business** at some point in the future.

In the end what I'm hoping we as Asset Manager's can do a better job of is communicating to all business units how their contributions fit into maintaining / improving the business be they operational, tactical, or strategic decisions / processes.

Thoughts?"

## SOLUTIONS

Here are several ideas for closing the gap that have been successfully adopted by others. What else can you suggest?



### **Solution Suggestion 1: Teach them the Strategy Requirements**

When Melbourne Water was broken up into a headworks company and three distribution companies, City West found itself the owner of the central and oldest part of the network. One of the earliest problems it had to deal with was the repair/replace decision. Clearly it could not afford to replace every ageing asset that was giving it problems.

On-the-ground decisions had to be made taking into account not only the condition of the asset but future rehabilitation programs and a range of other strategic considerations. This meant that maintenance crews found themselves assessing the condition of the asset, determining the problem, but unable to operate until the information had been fed up the line and assessed by the strategic asset managers. This was costly, delayed action and frustrated the maintenance crews.

The Strategic Asset Manager decided that in the 'need to know' context, the maintenance crews needed to be aware of the strategic decisions that affected their

actions. So he ran a series of sessions in which he explained not only the strategic decisions that top management had come to - *but why they had made these decisions.*

Discussion was apparently quite lively. He answered all the men's questions and then went with the men out on site. He asked the crews to assess the situation and then recommend the action required, in the light of top management strategic thinking. Within a short period he found that they were making the decisions that he would have made - and he let them run with it.

On the next few pages are some more detailed accounts of the approaches taken by Energy Australia and by the Devonport City Council.



**Solution Suggestion 2:  
ENERGY AUSTRALIA:  
Know your facts, work face-to-  
face, make monitoring easy**

*This approach by Energy Australia was first published in SAM, Nov 16 2009 but it seems so relevant to the present problem that it is worth re-visiting.*

*And if you enjoy this you may like to read the full Issue - #279 "Reverse Dominoes" where standing up the one domino of maintenance strengthens all other aspects of the business - such as greater asset reliability, lower maintenance costs and better quality data. You will find it in the SAM Archives. There you can see how Energy Australia tackled the Repair/Replace Decision, their avoidance of the AM Robot problem, and their Spares Policy.*

*This was prepared from information supplied by Rod Smith, Energy Australia.*

ENERGY AUSTRALIA had adopted the FMECA/RCM approach which identified what really needed to be maintained and what tasks needed to be carried out. They could now produce a yearly detailed worklist for maintenance. But maintenance did not have a high profile and it was considered that if a 'good attempt' was made to address the list, say 80%, then everything was fine. (After all, 'the lights are still on') Why can an effective KPI of 80% completion be a problem?

## Where the 80:20 Rule can lead you astray

Well, as Rod Smith points out [1] “A problem with an acceptance of the numbers game was that the 20% not completed were the assets for which “access to work” was difficult to arrange. This meant that for the next year the problems compounded because the bulk of the same difficult assets were again not maintained. But it was OK because the lights were still on and 80% of the work was again achieved. There was an incredible lack of focus on these “time bombs” just sitting there with no inspections being carried out on known failure modes.

We were now producing lots of wonderful worklists, reports and statistics which looked really nice but did not achieve any real change because the overall cultural approach to asset maintenance was still firmly locked-in to the old paradigms [that said that building new was more important than maintaining existing]. We had addressed the technical issue with the introduction of FMECA/RCM, but we still needed a strategy to address the very real issue of company culture with respect to actually completing the maintenance.”

*You will notice that although the ‘maintenance performance’ appeared to be constant at 80% of tasks accomplished, under these circumstances, the assets were actually deteriorating - and those most at risk of deterioration (the 20% that could only be accessed with difficulty) were ignored. Risk was increasing.*

## Changing the Culture

“We knew communication was paramount in whatever direction we took, so the decision was made to meet separately with all involved workgroups by way of 3 monthly “road trips”. The approach used with each of these groups was varied as we thought appropriate, considering their own unique location and history. This is where an appreciation for the variation in culture between certain workgroups became invaluable. Even though many of them became convinced of the credibility of the FMECA/RCM process – after all many of them had been involved in the initial analysis – their hands were tied because they had different drivers, ultimately linked to Management KPIs, being forced on them from within their own Division. It would be less than truthful to say all workgroups embraced the new approach. But at least by talking to the workgroups individually, we became very aware of where we were confronting significant cultural resistance.

The required approach then became a little clearer .... “Encourage” management to focus on maintenance achievement by the inclusion of relevant KPIs into the Performance Agreements of key managers. This simple variation ultimately forced a change to our Internal Service Provider’s management structure to include the vital positions of “Maintenance Managers”. This change has provided a focus on maintenance previously unseen within our company.

## First get their attention!

At this point, continues Rod, EA decided to find a way to keep the monitoring and reporting simple and very relevant to all levels of management. “The 3 main drivers in the development of their reporting were:

- 1. The report format needed to be simple, colourful, relevant and take very little time to absorb .. which is of paramount importance to the higher levels of management.
- 2. The missing compounding 20% needed to be addressed
- 3. The ultimate driver for our actions was to identify and address the highest “RISK” exposure of our assets.

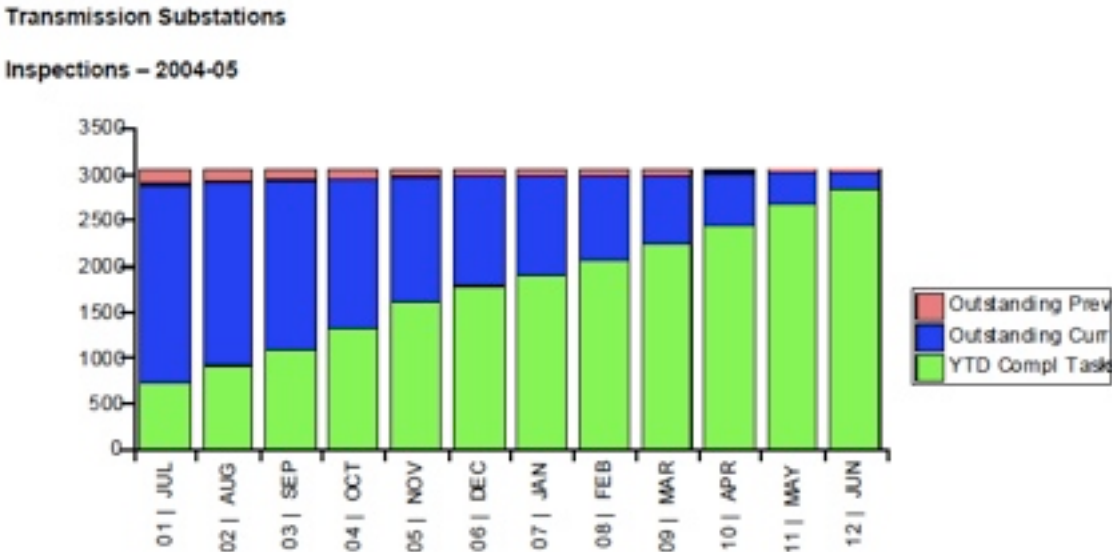
The final outcome was to publish a simple stacked bar chart with no more than 3 colours.

The list of tasks to be carried out during the year was split into 2 groups. The first was the number of tasks falling due in the current year. For this we picked a non-threatening “Blue” colour.

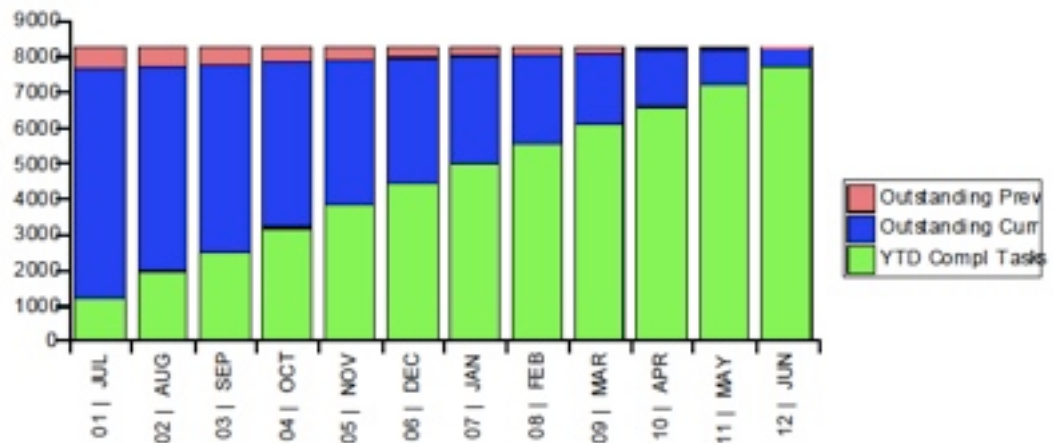
The second, and this turned out to be the cruncher which primarily addressed the missing 20% and our highest risk exposure, was the number of tasks carried over from previous years. The colour for this group became our now infamous and much dreaded “REDS”.

The third colour representing the number of completed tasks was of course Green.” If this sounds confusing, let’s look at the final product. As you look at these charts [next page] remember .. Green is Good ... Blue is OK and still within the periodic latitude for maintenance ... but Red is considered potential risk.

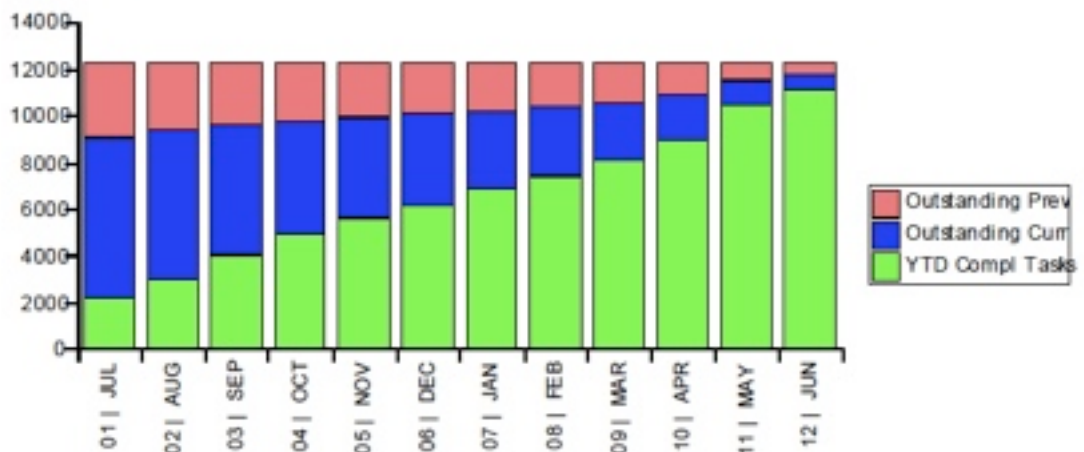
Look at the following three graphs.  
Which area would you be most concerned about?



**Zone Substations**  
Inspections – 2004-05



**Distribution Substations**  
Inspections – 2004-05



You probably did not attempt to read off the axis in order to determine that the problem area was in the third graph. Like the maintenance folk in Energy Australia, you probably just looked at the pattern. And that is all you need to do. The pattern tells the story.

### Having got their attention, keep it!

The next step was to make sure that this monitoring information was kept in view. Energy Australia developed a dashboard version, showing the maintenance status as it applied to each individual work group on their desk top. They saw only their own, not the others. Nevertheless a certain amount of healthy, unofficial, competition developed between work groups.

**For more see SAM Issue # 279 “Reverse Dominoes” available in the Archives.**



**Solution 3:  
The Devonport City Council approach: don't  
wait till there's a problem, start  
communicating now - by Marcus Lee**

**A NEW OCCASIONAL SERIES**

This is the first of a series of newsletters that the Services and Asset Management team in Devonport City Council have produced for their councillors and their field workers.

Marcus has generously invited others to adapt and adopt as they see fit. So feel free to substitute your appropriate assets or to use the approach for different assets.

Each of the newsletters does three things: (1) it relates the theory of asset management to concrete examples familiar to the audience (2) it introduces and explains terms 'in plain english' that are useful for understanding asset management and (3) it carries a short story about SAM, a teenage boy and relates AM decisions to his everyday decision making.

We will be bringing you more of these newsletters and we hope you enjoy them, and get practical value out of them. Why not try them out on your field workers and councillors!

**THE DEVONPORT CITY COUNCIL SERVICE AND ASSET MANAGEMENT  
NEWSLETTER**

**GREETINGS**

Welcome to the first edition of "SAM Update", an information sheet designed to help keep you informed about Service & Asset Management issues. If you have any ideas or suggestions please contact Council's Asset Management & GIS team.

## NEW ASSETS in focus



By now most people will have seen the new exercise equipment near the cycleway/walking path along Victoria Parade. Council applied for and received a grant for \$25,000 in order to purchase and install the equipment. The equipment is there to aid the health and well being of the community – but what long term implications does the installation of the equipment have?

Council has a responsibility to manage the equipment in accordance with Council's documented Service Levels.

Council is obligated to maintain it to meet Australian

Standard requirements and keep it in good condition so that

each item remains useful. The environment the equipment is in is harsh – close to the sea where the salt in the air could corrode it and within an open space where everyone, young and old, can access it. Council would hope that the equipment would be available for use, in good condition, over a period of at least 10 years. The equipment will become part of Council's Asset register, which records the date any assets become useful items for Council, the value and at what age the items are deemed to be no longer useful. The equipment will have depreciation recorded over the length of its expected life to make allowance for its future replacement. In order for the equipment to last for the expected time it will need to have regular inspections by a suitably qualified person and maintenance will need to be carried out. The inspections and maintenance will need to be paid for and so the equipment will need an appropriate amount of funds allocated to the annual maintenance budget.

There are many things that must be taken into consideration when something new is added to our City's stock of assets. The initial purchase does not end the financial and physical responsibility Council has for new assets. So while you are puffing your way through your exercises, Council is quietly getting on with taking care of the equipment you are using so that your regular routine is not interrupted.

## ROAD RESERVE INSPECTION

Council is currently undertaking a full inspection of road reserve assets such as footpaths and wearing surfaces in the municipality. The inspection project started last year and will be carried out on a cyclic basis according to timeframes set out in the Service Level documents. Data collected in the field is directly entered into a handheld computer and downloaded into the GIS (Geographic Information System) and a



database at the end of each day. This is used to determine priorities for maintenance, rehabilitation and replacement. The data gathered also helps point out problem areas that are beyond the normal operations budget and need to be included in future capital works. Dave Wallace from the Civil Works team is doing the inspections. Council's Software Developer Hamish Murphy who programmed the handheld computer unit based on specifications from the Operations department has been giving ongoing technical support to the project. Hamish (left) and

Dave (right) are pictured discussing the new functionality of the road inspection handheld computer following a recent upgrade.

## WHAT IS AN ASSET?

In everyday terms we use the word "asset" to refer to a person or thing that is useful or valuable. From a Service & Asset Management perspective "assets" are things that Council has control of and is able to receive benefits from for more than one year.

In the DCC Asset Register assets are assigned to an Asset Class (eg Building, Plant & Equipment, Roads etc) which is a high level classification for identification purposes. There are detailed definitions for each Asset Class and whether an item is considered an asset or not will depend on what Class it belongs to.

Some things that are not registered as assets by Council include items of minor value such as small tools (eg hammers, screwdrivers, secateurs), furniture and office equipment with a value of less than \$1000.00 and consumable items (eg staplers, nails, glue).



When an item, like the new backhoe in the photo, is defined as an asset, its financial and technical details are recorded in the Asset Register.

### LEARNING THE LINGO – “GPS”

Service & Asset Management here at Council is diverse and involves staff from every division. In each edition of SAM Update we would like to introduce you to some words and phrases that are used by staff involved in Service & Asset Management at DCC. This month’s key word is “GPS”. A GPS (Global Positioning System) is a piece of equipment that uses radio emitting and receiving satellites to determine the location of objects on the earth. With this information we can put objects (eg footpaths, manholes etc) on our Geographic Information System accurately. Data collected from the GPS handheld receiver is accurate to about 5 metres on its own. Accuracy can be improved to within around 30 cm by using computer software to carry out differential correction. This is the technique of using the readings of the handheldGPS unit as well as those from a fixed base station receiver. Council’s GPS base station is mounted on the roof of the Best Street administration centre. Design Officer Leigh Heron is pictured here using the GPS unit in the field to survey the location of a pit.



## SAM SANDSHOES

Let us introduce you to Sam Sandshoes. Sam is 15 and loves sport. He also loves his sand shoes - so much so his friends have nicknamed him Sam Sandshoes. He likes to buy a new pair once a year so he can use them for running, going to the gym, kicking the footy and other recreational activities. Like most teenagers Sam's parents pay for Sam's day to day expenses (ie. food, clothes and essentials) but if Sam wants to buy some high quality sneakers for sport he must save the majority of his weekly allowance of \$5 per week to buy them.



Sam knows that his sand shoes usually last about a year therefore in Service & Asset Management terminology his sand shoes have a useful life of 1 year. On average he knows that a high quality pair will cost him \$200. So he puts his \$5 per week allowance aside to cover the cost of the new shoes. At the end of the year this will leave him \$60 to spend on accessories, CDs or whatever else takes his fancy.

Sam's sneakers are no different to Council's assets. Each asset in Council's asset database has a useful life and when an asset's life is over Council rate payers expect the asset to be replaced, just as Sam does with his shoes. Take for example a Council building. A building may have an expected useful life of 80 years. Over the 80 years Council is expected by law to put money aside for the building's replacement, so that at the end of its life Council has the funds to reconstruct another building in its place. This is called depreciation.

"So by putting money away each week for the replacement of his sandshoes Sam is actually allowing for the depreciation of his sneakers."



Ed: Why not introduce your teenagers to AM concepts with SAM Sneaker? We will see more of SAM in future issues.