AMQ INTERNATIONAL
STRATEGIC ASSET MANAGEMENT

# Roles & Responsibilities, Part 2

Issue 274

Our practical problem this week:

**The Situation:**

The Directors have endorsed your broad framework of roles and responsibilities (SAM 273) and have asked what you intend as your next step.

You decide you need to determine whether all of the **required functions of asset management have been accounted for and assigned to a specific role.** You ask around and find out that the Institute of Asset Management in the UK have been doing a lot of work in this area and, in fact, have developed a detailed check list in which they determine 7 roles within Asset Management (policy development, strategy development, asset management planning, implementation of AM plans, AM capability development, risk management and performance improvement, asset knowledge management) and for each of these roles have identified specific functions that need to be carried out.

**Your Task**

You decide to use the work of the Institute of Asset Management to check whether all functions have been covered in your organisation.

**Our exemplar this week**

Is just one role of the IAM checklist - Asset Management Strategy.

**Also in this issue:**



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## Editorial: A little bit of history - and a new role for Academia?

Way back in 1992, when co-operative research centres were all the rage, one of our universities had the idea of setting up such a centre in asset management. They liked the idea of receiving extra funding from the Government but were not sure of what they could do. Like other engineering departments at the time, their teaching focussed on techniques for construction. I looked for a way in which their construction knowledge could be translated into benefits for engineering asset management and it occurred to me that there were techniques that used to be used, and taught, that have now been scrapped because of the problems later discovered. I suggested that this could be their 'competitive advantage'. Erecting buildings without footings, for example, is now no longer done. Those in the business of teaching civil engineering would know when this ceased to be common practice. And presumably, they would also know what to do with buildings put up in the era when it was common practice. They could, I assumed, say what the problems were, and how to fix them. If each lecturer, I reasoned, were to identify now obsolete practices in their own area, show people how to identify them and analyse them, and what to do to fix them, they could develop an innovative 'engineering asset management course' that could fit well with the needs of the infrastructure owning partners they were seeking to attract.

The lecturers, however, were not as enthusiastic about my plan as I was. It was a question of age. The average age of lecturers was around the mid 50s. By the time they had researched the new course and got it operational and accepted at university level (probably about 4-5 years) they would be looking to wind down to retirement - not ramp up to a new course!

This is an interesting aside to our article in this issue on "...". The Vic Chancellor at the time had a reputation as an innovator and go ahead leader; he was interested to tackle this new area of asset management to have the Institute's name promoted. His agenda was clear: be seen as innovative, get funding. The Head of the Department was keen to make a reputation for himself in this new and potentially growing area. His agenda was also clear: get funding and self promotion and a step up in the academic ranks (and there is nothing wrong with that!) Both, however, relied on the staff doing the actual grunt work. Not surprisingly, the grunts saw things differently, their agenda was: to get more mileage out of the courses that they had already designed and used, to get more funding but without doing more work. The Centre didn't happen.

I was reminded of this when I saw a book that seemed to be taking the view that I had espoused all those years ago - Concrete Structures, Protection, Repair and Rehabilitation. I have reviewed it on page 7

# Roles and Responsibilities
## pr 2: Functions and Roles

**How much do you know about the various asset management functions required in your organisation and the competencies of your people? Where is further development needed? Here is a tool that can help.**

The 2008 version of the Institute of Asset Management's Competency Requirements Framework describes what people involved in the management of assets should be able to do and indicates what they ought to know and understand.

The framework defines seven key Roles and 27 Units. Each Unit is then sub-divided into a small set of elements (not shown in the table below). Different selections of the Units and Elements of competence may be appropriate to senior staff in managerial roles, to specialists with asset specific or technical responsibilities or to new entrants to AM teams.

The Framework is a tool organisations can use to decide on the mix and depth of competencies required across the organisation. It is the responsibility of the users to determine how well these requirements should be met to fulfil the role. This will involve specifying performance criteria for relevant elements and defining the evidence that will be needed to prove these criteria have been met and how this will be collected.

**As you consider the following list of functions, consider that involvement may vary in terms of responsibility:**

| Code | Level | Description |
|---|---|---|
| **R** | Can Direct | Direct and plan the work of others and teams |
| **G** | Can Guide and Show | Lead the work of others |
| **D** | Can do Independently | Undertake the work independently (though may receive contributions from others) |
| **C** | Can Contribute | Contribute to the work of others but don't undertake independently |

**Analysis can be beneficially carried out in two ways:**

**Top Down:** From perspective of Director and Managers
**Bottom Up:** From perspective of individuals in the asset management teams

**Questions to be asked:**

**For any given position/person:** **is this role/function relevant to this position?**
**if YES, what level is required (Codes R, G, D or C)**
**if NO, then who?** (an important question, and experience so far suggests that frequently officers do not know who is responsible for functions if it is not them)

## Role 2 Strategy development

### 2.1 Analyse Strategic requirements

2.1.1 Define the AM Policy and objectives the AM Strategy must address
2.1.2 Define all risks the AM Strategy must take into account
2.1.3 Define the constraints the AM Strategy must take into account
2.1.4 Define the implications of current and forecast asset condition for AM Strategy development
2.1.5 Define the legal, social, environmental and economic factors and trends the AM Strategy must take into account
2.1.6 Define the stakeholder groups the AM Strategy must take into account

### 2.2 Forecast and analyse future user requirements and demands

2.2.1 Use effective tools and techniques to analyse current demands
2.2.2 Use historical data to support forecasts of demands and costs
2.2.3 Use effective tools and techniques to forecast costs and demands
2.2.4 Forecase and assess relevant external products and technological improvements and their effects.

### 2.3 Develop the AM Strategy

2.3.1 Define the aims and objectives of AM Strategy
2.3.2 Develop key strategies for the overall system, asset portfolio, and/or asset groups that support strategic aims and objectives
2.3.3 Define the expected outcomes of all AM Strategies
2.3.4 Make sure stakeholders are engaged in the strategy development process as appropriate
2.3.5 Make effective use of internal and external expertise in strategy development

### 2.4 Plan the implementation of AM Strategy

2.4.1 Define, prioritise and optimise the AM Strategy
2.4.2 Prepare financial projections using suitable best practice models
2.4.3 Prepare business plans using suitable best practice models
2.4.4 Define requirements for market research, systems development and management team-building
2.4.5 Define how the effectiveness of the AM Strategy will be measured and monitored

More information can be obtained from the Institute of Asset Management website.

# Decisions, Decisions

Why is it that it is such a hard job getting everyone in the organisation to 'sing from the same song sheet'? They may agree to a policy if if is politic to do so, but then do everything they can to make sure it fails.

But the greater chance is that you have no clear corporate policy and when recommendations for actions or processes are proposed by different groups, the motivation of each may differ widely. Worse, you don't even know what these motivations are, or how they colour the proposal.

In many ways it is healthy to have different viewpoints represented in an organisation. But not if you are not aware.

An example readily comes to my mind, and maybe others come to yours.

Many years ago, the engineers in the state electricity corporations in Victoria and Tasmania jointly proposed that they be connected by an undersea cable. They said that the technology was well proven, tried and tested! And it was. It just wasn't tested in waters that were as deep, nor as rough, nor over such a great length. And that was the point. For the engineers this exercise was an exciting challenge! The possibility of failure was what made it such a challenge. Had the technology truly been tested under these conditions there would be nothing left to discover. So, to the engineers, the fact that it could fail was what made it worthwhile attempting.

Management, however, did not like downside risk. Their idea of a great project was one that promised high returns and had little possibility of failing at all.

Finance was also risk averse. But completely. They were equally concerned with projects that could cost less than projected and return more as they were with projects that could cost more and return less. They wanted projects that came in 'within budget'.

Now, depending on the goals, each of these groups could propose different processes and actions.

And so it probably is in your organisation.

What's the answer?

## Put all your cards on the table!

**For any proponent of a project ask three questions:**

1. What is your criteria for a successful project? What should it do? What for you would be a 'deal breaker'. What for you would be a disappointing outcome?
2. What questions have you asked in coming to this decision?
3. What information have you sought, and how have you tested the quality of the information for your purposes?

Armed with this information you can start to make sense of what someone recommends as the 'best' process, outcome, or production choice.

If this is done consistently for every proposal - and every argument against or for the proposal - then a number of things start to happen.

**One.** Project proponents start to think more critically about the proposals they make, knowing that they are going to have to account for them.

**Two.** When deciding on a proposal, the team is made of aware of different perspectives. Recognise that all perspectives have validity. There are times to be bold and take a chance with a challenging project, and times to be more cautious.

**Three.** 'Gaming' can be relatively easily detected. Anybody who claims that his criteria for a 'successful' project is other than he really believes (his view of the criteria that may be more corporately acceptable, for example) will be brought down by the fact that the questions he has asked in order to establish the validity of his proposal will be inconsistent with his stated criteria and/or with the information he has used and the tests he has applied to that information.

**Using this approach, you**

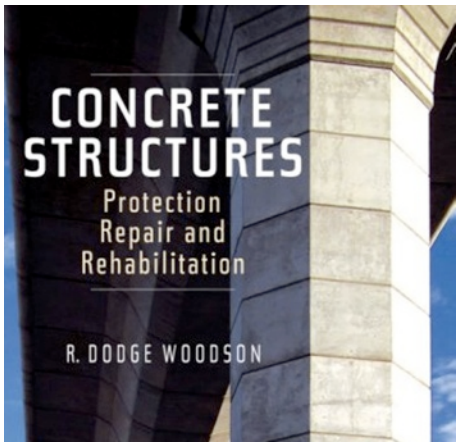
recognise that all viewpoints are valid

listen

decide which viewpoint shall be the corporate attitude **this time**

and review the arguments with this viewpoint in mind.

**Concrete Structures, Protection, Repair and Rehabilitation by R Dodge Woodson, Butterworth Heinemann (July 27 2009) 280 pages.**




Concrete repair and renewal is not a strategic issue. Neither is knowing whether a structure needs to be repaired, can be repaired, or is worth repairing.

However, ***deciding*** to go ahead and repair it because this is the most cost effective way ***of meeting the longer term service need*** **IS** a strategic issue. If the advice that you receive from your maintenance supervisors is informed by information such as is found in this book, you will have greater assurance that your decision is based on firm foundations.

I liked this book because it has not been written by an academic. The author 'has worked in the field of construction for over 30 years' and it shows. He is also an experienced writer of technical manuals - and when I tell you he writes simply enough so that even an economist like me can understand it, you will know it has something going for it.

The writing style is well adapted to practical use - there are no wasted words; the sub-headings are clearly signposted so that it is easy to find what you want with a minimum of effort. There are lots of diagrams, pictures and illustrations that go with the text to make sure that everything is clear. Lots of worked out examples and equations. Many tip boxes. I particularly liked the wealth of checklists, flowcharts that enable you to select the most appropriate repair method for the task, and discussion of the critical features of each method and when and where it is good to use it. There are also international code specifications and a couple of sections on safety and first aid. The text occupies about 2/3 of the book and the last 1/3 consists of 'other useful information' - everything you would need to prepare the renewal project.

And, as one would expect, from a publishing date of July 2009, environmental consequences of concrete disposal are dealt with as well as the technical aspects.

My attention was drawn to this volume by the recognition of the fact that renewal is a harder task than new construction. I have been arguing this for over 20 years. (And I reckon it is about time that this was recognised in pay scales!)

> "Many people look at concrete and see nothing but, well, concrete. But the knowledgeable mind sees much more. Are there stress cracks in the surface? Were expansion joints installed properly? Does the color of the concrete indicate a proper curing time? Is the surface a slick, glasslike finish or a brushed finish? Is the material flaking away? Can existing flaws be repaired in such a way to guarantee structural integrity?
>
> Most people take concrete for granted. Yet, it is one of the strongest building blocks of many bridges, highways, and other significant infrastructure. Working with a new installation of concrete is very different from repairing and rehabilitating existing concrete structures. Both types of work have their rules of thumb and their engineering elements. **It often requires more experience to repair concrete than it does to install it as new construction. This is what you will learn here."** *(my emphasis)*

**Available through Amazon and costs about $75 US.**

## A different perspective

Last week I told you why I got so angry over a USA blog site and I gave you my response to this blog entry and suggested that you might like to add your comments, too.

Leo Gohier, (Hamilton, Canada) did just this.

This is one of those great passages that I really wish I had written myself! After you read it you will never see the renewal question quite the same way again!

> I am amazed at how people react when they are inconvenienced, as your article states, “for a while”. This watermain was built 140 years ago, and I’m sure has served the community well for a very long time. In fact, it would be interesting to know how often it has broken in those 140 years since that is the real test of negligence. I have been in this business for a long time, and I would venture that it has not failed often. Furthermore, strictly from a technical perspective, watermain breaks usually indicate a very localized weakness and this does not require overall replacement even though it may be 140 years old. This politicizes the process and results in wasting precious financial resources that could be used elsewhere. Things break, even newer things. The more “things” (i.e. services) we have in our lives, the greater the odds of one of them breaking: cell phones, cars, televisions, computers, even watermains and sewers. We need to accept that reality and those inconveniences, and not react like spoiled children. That’s what happens when we have things that last for many generations, we take them for granted. In fact, this particular watermain may have many more decades of life left in it. Let’s not jump to conclusions and waste even more public money that we don’t have. We need to start rationalizing infrastructure decisions, and more importantly we need to obtain public buy-in to that rationale.

Worth thinking about!