

INTERNATIONAL ASSET MANAGEMENT PRACTICES AND TRENDS

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Abstract

New Zealand is at the leading edge in the asset (activity) management area. The local government legislation requires the mandatory preparation of long-term plans; the formulation of clear levels of service, performance measures and targets; the adoption of a balanced budget and the public issue of a service performance report within four months of the close of the year.

The United States Air Force (USAF) is currently (2009) in the process of rolling out a new asset (activity) management system, based on the key principals that underlie the New Zealand model.

The paper summarises the results of a study that was done by the author to identify asset management best practice (and weaknesses) in the U.K., the United States, Australia and New Zealand, and to review the progress that has been made in New Zealand since enactment of the 'new' requirements in 2002. It also briefly explains the Air Force's approach.

Key Words: Activity, Air Force, Asset, Australia, Best Practice, Levels of Service, Management, New Zealand, Performance Measure, Plans, Targets, United Kingdom, United States, USAF, Weakness

Six Fundamental Weaknesses

Interpretation Differences

What is asset management? There is a wide divergence of opinion about what asset management actually is.

The practice is referred to in a multitude of terms that are being interpreted in many different ways, ranging from very superficial 'management' of the built infrastructure to the totally integrated 'services driven' approach relating to both the built and natural assets – that 'Activity Management' does.

The various terms are used very loosely, continue to mean different things to different people, and the 'asset management plans' may, and often do, reflect the particular professional discipline of the writer, rather than address (or adequately address) the issues that they should. This is especially so when the writer is an engineer, whose principal responsibilities are maintenance and operation of the assets concerned.

The Asset Management Plan Structure

Often, organisations appear not to entirely understand themselves what **they** have interpreted 'asset management' to be, and where the task as they are practising it begins and ends.

Instead of carefully considering beforehand, at the management level, what they are wanting to achieve out of the process, and setting the parameters for a properly structured and integrated approach, they simply delegate the responsibility to a lower (usually technical specialist) level, and allow everything to just evolve from there, based on subsequent decisions that are also allowed to be made at that lower level. Organisations are especially inclined to do this when the preparation of an asset management plan is a statutory requirement rather than something that it has decided itself to do, to improve its performance.

The end result is usually plans that are prepared in different formats, making later 'roll-up' of them in order to obtain the

corporate view either very difficult or even impossible; and plans that do not integrate at all with the business processes.

The Asset Management Plan Content

Many asset management plans continue to focus on the physical asset minutiae, and to either not address at all, or to address in only a relatively superficial way, the more 'strategic-type' issues.

It is surprising the depth that some asset management plans go to, to provide all sorts of detailed information about the physical asset components (that should more appropriately reside in the support material), but say very little at all about how the plan ties to the organisational mission, vision, strategic plans and goals; or to the detailed levels of service, performance measures, targets and performance standards.

Other matters that are often not mentioned at all, or which are quickly passed over, include risk management; demand management; optimisation; identification of, or a discussion about, the critical assets; and potential alternative ways of delivering the services. Even the most important required output of all – a future improvement plan – is sometimes missing.

In many organisations, the approach is one of 'concentrating on the ants, while the elephants go marching by', and the following quote from Dr Penny Burns very aptly describes the situation:

"Most of the significant risks for asset management happen at the top strategic level. Most of what we focus on happens at the operational level, and therein lies the problem." (Burns, 2007).

Executive Leadership

An absolutely essential prerequisite for successful asset management is that it be led and driven from the top – that the CEO takes the ultimate responsibility for it, makes his / her expectations abundantly clear to everyone, and is constantly setting targets and following up to make sure that they are achieved.

The importance of this cannot be stressed enough, and internationally it is a major weakness. Currently many CEOs show little or no interest in asset management planning. In fact, in most organisations, the whole practice is not generally well understood or supported, other than by those directly involved in its implementation (CIPFA, 2008).

In the absence of it being clear to everyone that a robust asset management approach has the strong support of the CEO, it will regularly fail – and the asset management plan may become (and in fact, often does become now) nothing more than a document on a shelf that nobody other than the author, ever looks at again.

The Organisational Structure

Despite the fact that more than ten years ago now, the engineering profession itself recognised that asset management is no longer just an engineering function, but is a corporate function (APWA, 1998), that is not the way that it is managed in most organisations.

Some asset management plans are little more than a summary of the organisation's built assets at a particular point in time, compiled by the single technical officer mentioned earlier, who resides within the engineering department; with two or three financial graphs with little or no explanation, slipped in at the end.

The practice will never operate satisfactorily until there is a much more inclusive approach, and all professional disciplines are **fully involved** in an entirely open and participative, 'ongoing' way.

A Compliance Mentality

Too often, the task of preparing an asset management plan is seen as just another compliance requirement. The plan is prepared in isolation, and is not designed in a manner that will ensure it becomes an integral part of the day-to-day management decision-making process. It is not actually used to drive and manage the business, is not kept up-to-date, and quickly becomes 'out

of sync' with other organisational plans and decisions.

Asset Management as it May be in Future

Here to Stay or Just Another Fad?

However, whatever its current shortcomings, asset management is most definitely here to stay. It is a rapidly emerging professional discipline, the approach to which has already changed quite significantly over the last few years, and which will continue to change. A more strategic-type approach is quite quickly evolving, and *"it will not remain rooted in the operational and cost centric issues that it largely is today"* (Price, 2004) (Rogers, 2004) (National Research Council, 2008).

The Infrastructure Crisis

Indeed, one can only wonder why asset management has not been more widely, even routinely, used before now. The necessity for it is especially driven by the inadequacy of the various services that the assets have been constructed or purchased to help provide, and by the poor state of the public infrastructure assets everywhere.

The United States is a good example of the situation.

Thirty-three percent of America's major roads are in poor or mediocre condition (National Transportation Research Group, 2009). One in four of the nation's 590,000 bridges are rated as structurally deficient or functionally obsolete and requiring \$140 billion to fix (American Association of State Highway and Transportation Officials, undated).

The annual funding gap for drinking water is \$11 billion, and for wastewater it is \$12 billion (Water Infrastructure Network, 2000); and the EPA has estimated that 350,000 contaminated sites will require clean up in the next 20 years (EPA, 2004).

In 2006 the Department of Defense reported a deferred maintenance backlog of more than \$57 billion (GAO, 2007(a)).

America's total infrastructure investment need is estimated to be \$1.6 trillion

(American Society of Engineers, 2005), and in 2007 the Government Accountability Office (GAO, (2007(b)) identified the management of Federal Real Property as one of 26 high risk areas for the Federal Government, because of significant problems with excess and under-utilised assets, facilities deteriorating, unreliable data, space that is too expensive, and poor physical security.

Why the Current Infrastructure Crisis has Occurred

Looking back now it has to be said that internationally, governments at the national, state, regional and local levels – during a prolonged period of comparative prosperity – have not done a very good job at all in the area of services' sustainability. The ability of future generations to meet their own needs has been compromised by the magnitude of the maintenance backlog, and by the 'size' of the under-investment in needed renewals and improvements that is being passed on.

There are four main reasons for this state of affairs – political expediency; weak executive leadership and management; a lack of accountability at all levels in the public sector organisations; and a concentration on short-term decision-making (including a lack of understanding, or a lack of consideration of, the long-term impacts of decisions).

Changes Required if Success is to be Achieved

A more responsible way of managing the provision of public services is essential, and the asset management planning approach is rapidly being adopted in many countries as the answer to the problem.

However, there is one very big qualification to the supposition that this will achieve the results that many envisage. The approach will never satisfactorily address (let alone resolve) all of the issues, unless it is practised in a way where all of the about 120 ingredients that are essential for *"strategic asset management"* (Griffith University, 2005) are present (Strategic Asset Management Best Practice – Appendix A) – and, as the comments thus far and in the next part of this paper illustrate, **this is not currently the**

case in the vast majority of the public sector organisations.

International Trends

New Zealand

New Zealand is deservedly acknowledged as being a world leader in the asset management area. The mandatory legislative requirements that have been instituted for local government there (of which the asset management planning process is but an ancillary part) stand alone as having been extremely well thought through – especially the obligation to publicly produce a balanced budget for not less than 10 years, *“including the estimated revenue and expenses associated with maintaining the service capacity and integrity of assets throughout their useful life”* (LGA, 2002) (unless it is financially prudent not to do so).

The disappointing thing is that so far, despite the (again, internationally recognised) leadership that has been provided by the NAMS Group and the Office of the New Zealand Controller and Auditor-General, the legislative provisions have not been implemented by the local authorities in a way that enables them to achieve their true potential. Few Councils have reached the stage of having an ‘Advanced Asset Management Plan’ (NAMS, 2006), and the process has not been integrated into the day-to-day business practices of the Councils as it might have been. Many local authorities still have a long way to go – especially relating to optimised decision-making and risk management (OAG, 2007). Also, although the only reason assets exist is to provide services, *“many asset managers set ten-year levels of service in their asset management plans, and then promptly forget about them.”* (NAMS, 2009).

Until recently, the central Government agencies in New Zealand have not been subjected to the same degree of accountability for their assets as local government has – but that matter is receiving consideration now.

Australia

While asset management has been practised by the state agencies and local government in Australia for some time, its quality has varied considerably, and a study carried out by the Australian Local Government Association in 2004 concluded that progress was being handicapped by a lack of adequate guidance, and a need for greater standardisation in approaches and systems (CIPFA, 2008). Also, again, as is the case virtually everywhere, the function has not been integrated into the organisation’s business processes, and *“many Councils continue to effectively run deficit annual budgets”* (IPWEA, 2009).

Some significant progress has, however, been made in the last few years. The IPWEA has assumed a leading role with the formation of NAMS Australia (with strong linkages to NAMS in New Zealand). In 2006, the Local Government and Planning Ministers Council developed the Local Government Sustainability Frameworks. Various state-based legislative changes have been introduced – including the new legislation that is proposed for Queensland and New South Wales requiring the preparation of long-term financial forecasts (which can only be based on sound asset management plans and practices). And the Commonwealth Government has established ‘Infrastructure Australia’, with responsibility for the development of a strategic blueprint for the country’s infrastructure needs.

The United States of America

In the United States, the Federal Government controls over \$374 billion in real property assets. An Executive Order issued in 2004, requires all departments and agencies to develop and implement an asset management planning process. A Federal Real Property Council has also been established, and every agency is required to employ a Senior Real Property Officer who has certain mandatory responsibilities (EO 13327, 2004).

It seems that the local authorities are not subjected to the same requirements as the Federal Agencies are and, while required to issue an annual financial report (Santa Maria,

2008), are not mandatorily required to report their service performance results (GASB, 2008).

In 2004 few water utilities (70,000 water supply and wastewater systems) were implementing comprehensive asset management, and those that had done so were almost exclusively the larger entities. And like the situation in the local authorities in Australia, many were not collecting enough revenue to cover their annual costs (GAO, 2004).

However, progress – albeit slow and patchy – is being made, and the way that asset management is currently being implemented by the United States Air Force (USAF) is a good example.

The USAF provides and manages roads, runways, and utility services and has over 100,000 buildings totalling 430 millions square feet, that are located at 175 Bases around the world. The buildings include houses, dormitories, hotels, shops, offices, libraries, Officers' Clubs, theatres, schools, hospitals, youth centres, gymnasias, workshops, hangars, and so forth.

Five asset management plans for each of the 97 major Bases are being prepared – for transportation networks and airfield pavements; water supplies, wastewater, stormwater and energy; buildings and structures, housing and custodial services; natural infrastructure (land, water, air, and grounds' maintenance); and for waste management (solid and hazardous waste).

Six-hundred-and-fifty-four plans are being compiled in a thoroughly integrated way, to enable the Air Force to easily see the 'total view'.

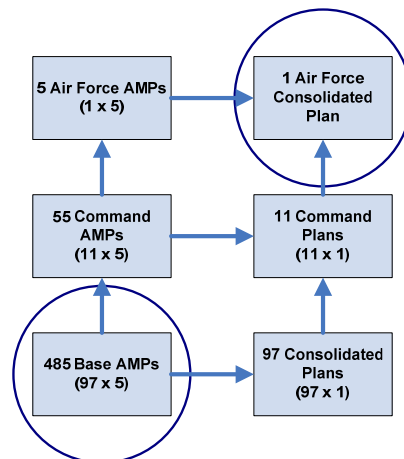


Figure 1 - USAF AMPs Structure

Each plan is compiled by inserting the relevant information into a data 'warehouse', from which it can be electronically generated in a matter of minutes, in a continuously updated form – at any of the levels indicated in Figure 1. All of the financial information is drawn down electronically from the Air Force's existing legacy systems.

The whole process is 'services-driven' – **not 'asset-driven'**, and has been designed as an electronic, integrated, planning and management tool, capable of being actually used to drive and manage the business daily. That is to say, **not as 'just another plan'**.

The United Kingdom

In the United Kingdom, the Water Industry has been practising asset management since the late 1980s, and the local authorities have been required to prepare property asset management plans since 1999 (Audit Commission, 2006 (a)). While the Water Industry has done this successfully (CIPFA, 2008), the local authorities have made only modest progress during the last ten years, and their asset management plans are often weak. Few are strategically managing their £250 billion worth of assets, and many lack the capacity or even the basic information to support strategic planning (Audit Commission, 2009)

Network Rail has only recently adopted the practice (but, like the Water Authorities is reported to have already had good success –

a 24% efficiency saving in the three year period ending 2007). Highway Asset Management Plans (HAMPs) have been being prepared by the authorities in England, Scotland, Wales and Northern Ireland since 2005 (CIPFA, 2008).

In 2006, the Office of Government Commerce issued guidelines for the public service about how to achieve asset management excellence – with the aim of being able to dispose of surplus assets worth between £6 billion and £7 billion, and to achieve annual efficiency savings of between 17% and 20%, – both within six years.

A report published by CIPFA in 2008, commissioned by the U.K. Treasury and the Department of Transport, concludes that comprehensive asset management has the potential to deliver significant value for money benefits and improve service delivery, and says that having looked at all available approaches, asset management is the only approach capable of delivering all of the objectives that were listed in the terms of reference for the study.

Conclusion

Despite the various government and local authority association initiatives, and the leadership that has been shown by numerous bodies (NB) during the past 10 to 15 years the meaningful application of asset management in the public sector internationally continues to be slow.

The only exception to this appears to be when the organisation depends on funding or regulatory approval from a higher authority, that specifies the asset management information and standards that it requires be provided or met (like the water regulator OFWAT in the U.K., and the Land Transport Authority in New Zealand). In those situations, at least some of the wider aspects of strategic asset management are sometimes taken more seriously than is usually the case.

The principal weaknesses are: the absence of a commonly accepted and understood definition of what asset management is; a lack of recognition of the importance of asset

management by the elected councils (or boards) and by CEOs; stovepipe (or compartmentalised) management (GAO, 2004) (USDT, 2008) (Woodhouse, 2006), and a lack of appreciation of the fact that the function is a corporate (not solely engineering) responsibility (Audit Commission, 2006 (b)) (IWA, 2007) (GAO, 2004) (OGC, 2009) (National Research Council, 2008); and poor integration with the strategies, goals and business processes of the parent organisations. **Until this situation changes, the potential that asset management has will not be realised.**

However, the practice is in transition. There is a rapidly increasing realisation that communities can no longer afford to manage their public assets in the way that they have traditionally done (National Research Council, 2008), and asset management is likely to be much more widely used, but in a more sophisticated manner (Strategic Asset Management Best Practice – Appendix A) than it currently is, in the years ahead.

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NB (Numerous Bodies including NAMS (the International Infrastructure Management Manual, various other publications, and its extensive training programme), the Office of the Controller and Auditor-General, and the Land Transport Authority in New Zealand; the IPWEA and NAMS in Australia; the County Surveyors' Society, the Institute of Asset Management (Publicly Available Specification – PAS 55), the Chartered Institute of Public Finance and Accountancy (CIPFA), and the Audit Commission in the U.K.; and the Government Accountability Office (GAO), the Federal Real Property Council, the American Public Works Association (APWA), the American Water Works Association (AWWA), the EPA, and the Department of Transportation in the USA).

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Author Biography



Brian Sharplin joined MWH in 2001, and is a Principal Consultant with MWH's Business Solutions Group based in Auckland, New Zealand. His background includes 27 years as Chief Executive of Rodney District Council - one of New Zealand's most complex local authorities.

When the local government legislation in New Zealand was significantly amended in 2003, Brian spent the next two years specializing in advising local authorities on ways and means of achieving integrated management of their affairs. Since 2005 he has concentrated on asset management, and for the past two years has been stationed at MWH America's office in Texas, USA, helping to devise and install a future asset management planning process for the United States Air Force.

Appendix A

Strategic Asset Management Best Practice

The Essential Ingredients for Successful Strategic Asset Management (i.e. The Planned Alignment of Physical Assets with Service Demand) – Checklist

Yes No

Foundation

- | | | | |
|-----|--|--------------------------|--------------------------|
| 1. | The authority is 'large enough' to be able to operate as a viable business, and to sustainably provide the services that it is responsible for. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | An appropriate governance structure (including a clearly defined point of access to the Council / Board about asset management matters that require a political decision). | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | A clear and common understanding (and documented agreement) of exactly what 'asset management' as it is to be practised by the organisation is. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | A full understanding of the legal and regulatory environment that applies to the business. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | A clear understanding of who all the stakeholders are – for each service. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | Stakeholder involvement. (The stakeholders' short- and long-term outcome expectations of the organisation are documented and fully understood). | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | The organisation's Mission, Vision, Values, Goals, Strategic Plans and Policies, and Objectives (and how they all link together – including to asset management) are clearly documented. (The various statements and how everything links together are also understood at all levels within the organisation – not only by senior managers.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | Clearly specified and documented customer levels of service and management and technical service standards. (The customer levels of service have been finalized only after consultation with all of the stakeholders). | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | Appropriate , clearly specified and documented customer and management and technical performance measures and targets (in a tiered form). (The customer performance measures and targets have been finalised only after consultation with all of the stakeholders). | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | An accurate and complete inventory of all of the assets that the organisation owns (or otherwise has the responsibility for). | <input type="checkbox"/> | <input type="checkbox"/> |

Organisation and People

- | | | | |
|----|--|--------------------------|--------------------------|
| 1. | An excellent working relationship between the members of the Council / Board, and those involved in asset management at the senior management level (especially between the Chairman / Mayor and the CEO). | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | A supportive political environment. (The importance of asset management is understood and is respected by the elected members or board.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Strong and committed executive leadership – especially by the CEO. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | An appropriate organisational structure. | <input type="checkbox"/> | <input type="checkbox"/> |

	Yes	No
5. Sufficient appropriately qualified, experienced, and competent staff in all relevant professional disciplines – including legal, business management, strategic planning, resource management planning, engineering, finance, and information.	<input type="checkbox"/>	<input type="checkbox"/>
6. Clearly documented and understood roles, responsibilities, and authorities.	<input type="checkbox"/>	<input type="checkbox"/>
7. Continuously up-to-date written statements that specify how routine tasks are to be performed.	<input type="checkbox"/>	<input type="checkbox"/>
8. All senior managers have an understanding of asset management among their core skills.	<input type="checkbox"/>	<input type="checkbox"/>
9. There is a named individual (or a specified position) at the senior level who / that has the responsibility to champion asset management throughout / across the organisation.	<input type="checkbox"/>	<input type="checkbox"/>
10. There is a named individual who, (or a specified position that), has the responsibility for championing each service.	<input type="checkbox"/>	<input type="checkbox"/>
11. An operating environment in which individuals are empowered, but are also rigorously held accountable for their actions.	<input type="checkbox"/>	<input type="checkbox"/>
12. The 'right' organisational culture (especially a culture where 'everyone understands that the only reason that the organisation exists is to provide services – not assets – and where everyone works together as a team' and not as separate 'stovepipes' or in isolated separate compartments or departments that do not meet together and communicate absolutely openly with each other).	<input type="checkbox"/>	<input type="checkbox"/>
13. Asset management is accepted by all employees as being 'a way of thinking – the way that the organisation manages its business'. Everybody understands that it is not something that is just the responsibility of a particular employee (or employees).	<input type="checkbox"/>	<input type="checkbox"/>
14. Performance incentives and the performance appraisal processes at all levels are linked to the prescribed customer levels of service, and have been designed to drive 'the right' behaviours, and to facilitate achievement of the desired services outcomes. (They have not been formulated based on departmental objectives that are out of alignment with the organisation's wider integrated approach).	<input type="checkbox"/>	<input type="checkbox"/>

Decision-Making

1. Every decision that is made (at every level) can be linked back to a particular stated customer desired outcome or service goal. (If it cannot be linked to one of these, it is probably redundant).	<input type="checkbox"/>	<input type="checkbox"/>
2. All decisions relating to the assets are made taking the lifecycle management approach.	<input type="checkbox"/>	<input type="checkbox"/>
3. Every lifecycle cost analysis includes an analysis of the staff, equipment, and technologies inherent to the alternatives, and the cost of the required funding. Also (where appropriate), the cost of disposal at the end of the asset's life. (In a study carried out by the U.S. National Research Council in 2004, the omission of at least some of these aspects was found to be a common weakness).	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
4. Political decisions are always made based on factual data that has been properly researched, and are at all times consistent with the priorities that are listed in the asset management plans. (If at any time this is not the case, that fact is formally reported to the Council / Board, and the relevant asset management plan is promptly updated to reflect the political decision that has been made, and to transparently identify the consequences of the inconsistency).	<input type="checkbox"/>	<input type="checkbox"/>
5. All reasonably practicable options for achieving the objective of the required decision are identified and evaluated before decisions are made.	<input type="checkbox"/>	<input type="checkbox"/>
6. Careful evaluation of the likely economic; environmental (including carbon emissions, climate change, and water and energy use reduction;) social; and cultural impacts of every identified option underpins all decisions at all levels.	<input type="checkbox"/>	<input type="checkbox"/>
7. Optimised decision-making is routinely practised (to the relevant degree) at all levels.	<input type="checkbox"/>	<input type="checkbox"/>
8. The likely impacts of changing technology are carefully considered before decisions are made.	<input type="checkbox"/>	<input type="checkbox"/>
9. Whenever others are going to have to be involved in the decision-making process (e.g. special or amended legislation required, regulator's approval required, planning approval or land owner consent required, property required to be purchased, the project is to be fully or partially funded by someone else), those parties are consulted as early as possible, and meaningful contact is maintained with them throughout, in order to be able to achieve the fastest and best possible outcome. (The Midlands Expressway in the U.K. took only two years to build, but 19 years to clear the planning process, and the new terminal (No. 5) at Heathrow Airport took 23 years to complete (BCOM, 2006)).	<input type="checkbox"/>	<input type="checkbox"/>
10. Whenever problems are encountered (including service breakdowns or failures, or breakdowns in customer relationships), the mistake or weakness is readily acknowledged and is debated quite openly, and prompt action is taken to minimise the damage and to prevent a repetition. (Problems are always addressed quickly and 'head on', and no problem is avoided because the decision that obviously needs to be made is 'too hard'.)	<input type="checkbox"/>	<input type="checkbox"/>
11. The Council / Board is constantly reminded and understands that every time it makes a new purchase, or approves the construction of a new asset, that has been approved at the senior level, it may be committing the organisation to up to five times the initial capital cost of the asset over its lifetime.	<input type="checkbox"/>	<input type="checkbox"/>

The Asset Management Plan

1. The asset management plan is prepared in a properly structured manner (standard format, linked to the business processes, focussed and factual (not general or unnecessarily voluminous), and is easy to 'get into' and to use and to keep updated).	<input type="checkbox"/>	<input type="checkbox"/>
2. The asset management plan identifies the true long-term cost of providing the prescribed levels of service. (It does not conveniently ignore unpalatable facts, and has not been prepared simply to enable the organisation to live within, or to justify, what it may consider to be an 'affordable' budget. If the costs that have been identified as being required cannot be afforded, either the proposed levels of service are reduced, or the risks are identified and a plan for managing them	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
is transparently agreed and recorded – or there is a combination of both.)		
3. The asset management plan is in total alignment with all strategic and other plans and policies (including other asset management plans) that have been developed by the organisation. (Especially, in the case of local authorities, with the land use plan, with other asset management plans, and with any development contributions policy).	<input type="checkbox"/>	<input type="checkbox"/>
4. The asset management plan lists all of the assumptions and uncertainties that were taken into account when it was prepared.	<input type="checkbox"/>	<input type="checkbox"/>
5. The asset management plan has an Executive Summary of not more than 15 to 20 pages, that concisely summarises the key points – including, but not limited to, the intended customer levels of service (including any intended service level changes or increased charges / rates during the planning period), a very high level description of the assets that are being managed, the assumptions and uncertainties that were taken into account when the plan was prepared (and their sensitivity), the future costs and funding profiles and a statement saying whether or not a balanced budget will result, the principal outcomes and projects that are forecasted to be achieved during the planning horizon, demand management, environmental management, risk management, deferred maintenance (backlog) and what the Council / Board is intending to do about it, and the main issues (weaknesses) that are intended to be addressed in a future continuous improvement programme.	<input type="checkbox"/>	<input type="checkbox"/>
6. The asset management plan has been prepared (or at the very least, reviewed) by (a) suitably qualified person(s).	<input type="checkbox"/>	<input type="checkbox"/>
7. The asset management plan has been, and all subsequent amendments to it are, formally adopted by the Council / Board.	<input type="checkbox"/>	<input type="checkbox"/>
8. The asset management plan is ACTUALLY USED on an ongoing basis, throughout the year, to drive and manage the business (by the entire organisation – not only for the writer or by the particular work section or department within which it was written).	<input type="checkbox"/>	<input type="checkbox"/>
9. At no time is the asset management plan allowed to become out of alignment with what is actually happening in the organisation.	<input type="checkbox"/>	<input type="checkbox"/>

Financial

1. The future likely demand for each service is fully understood (including for future growth, or for any foreseeable contraction, and taking into account possible changes in demographics and in customer preferences, and the impacts of likely changes in technology).	<input type="checkbox"/>	<input type="checkbox"/>
2. The new capital and renewals capital work that will be needed to satisfy the future service demand requirements has been identified and is accurately documented for at least the next ten years (and preferably for the next 20 to 25 years).	<input type="checkbox"/>	<input type="checkbox"/>
3. Clear short- and long-term project priorities have been established (both within each service and across all services).	<input type="checkbox"/>	<input type="checkbox"/>
4. The priority list(s) gives ‘the reasons why’ each project has the priority that it does.	<input type="checkbox"/>	<input type="checkbox"/>
5. Accurate cost forecasts for at least the next ten years (and preferably for at least	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
the next 20 – 25 years).		
6. Accurate revenue forecasts – including all user charges and reimbursements – for at least the next ten years (and preferably for the next 20 – 25 years).	<input type="checkbox"/>	<input type="checkbox"/>
7. The financial forecasts have been prepared in a way that clearly shows the total net cost of providing and maintaining each service (as well as the cost of each asset, or group of assets).	<input type="checkbox"/>	<input type="checkbox"/>
8. The financial forecasts include the cost of depreciation for each service.	<input type="checkbox"/>	<input type="checkbox"/>
9. The financial forecasts include the management, overhead, and other indirect costs for each service.	<input type="checkbox"/>	<input type="checkbox"/>
10. All assets which either are, or which may in the future become, surplus to requirements have been identified and the forward financial programme includes provision for their early demolition and / or consolidation.	<input type="checkbox"/>	<input type="checkbox"/>
11. The revenue forecasts include provision for fair financial contributions being received from subdividers and developers towards the cost of providing new, or expanding or upgrading existing, assets in order to meet the increased demand caused by their subdivisions or developments.	<input type="checkbox"/>	<input type="checkbox"/>
12. Forecasted expenditure to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential (new capital expenditure) is recorded quite separately to expenditure incurred to upgrade, refurbish or replace existing facilities with facilities of equivalent capacity or performance capability (renewals capital expenditure).	<input type="checkbox"/>	<input type="checkbox"/>
13. The deferred maintenance (backlog) has been quantified (not just generally estimated) and is being continuously tracked and reported (together with a documented record of the risks that the organisation is exposed to, as a result of not having carried out required maintenance and renewals work at the optimum time) – and an explanation of how those risks are being managed.	<input type="checkbox"/>	<input type="checkbox"/>
14. The future financial forecasts are prepared based on the achievement of a balanced budget annually.	<input type="checkbox"/>	<input type="checkbox"/>
15. If, in any year, the Council / Board decides not to levy its rates / charges at a level sufficient to cover its annual costs (including the estimated costs and expenses associated with maintaining the service capacity and integrity of the assets during their useful lives), that fact is formally recorded and publicly reported – together with an explanation of why the decision not to impose charges or levy rates at a level sufficient to cover the total costs and expenses was made, and how the Council / Board is intending to fund (or otherwise remedy) the deficit that will result.	<input type="checkbox"/>	<input type="checkbox"/>

Information

1. Adequate, appropriate, and reliable IT tools.	<input type="checkbox"/>	<input type="checkbox"/>
2. Continuously accurate and complete information about asset material type, location, condition, capacity, criticality, age, and remaining life – at the component level.	<input type="checkbox"/>	<input type="checkbox"/>
3. Accurate and complete financial data (relating to not only the past, but also the forecasted future situation).	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
4. Accurate, up-to-date asset values (Replacement Value and Depreciated Replacement Value).	<input type="checkbox"/>	<input type="checkbox"/>
5. A continuously accurate and complete understanding of asset performance – irrespective of condition (including, in the case of buildings, the detailed space utilisation needs and how this compares with the amount of space that is available, and the actual usage) and the trends.	<input type="checkbox"/>	<input type="checkbox"/>
6. Integrated data management across the whole organisation. (The setting up of departmental and other separate systems is discouraged. Data is entered only once).	<input type="checkbox"/>	<input type="checkbox"/>
7. A single asset register (Wellsgrove, 2007).	<input type="checkbox"/>	<input type="checkbox"/>
8. The organisation's general records are always up-to-date, the required information is always able to be retrieved easily from them, and they are such that should all existing employees leave, the new appointees (at every level) will be able to easily ascertain the complete history and the current situation relating to all aspects of the business.	<input type="checkbox"/>	<input type="checkbox"/>

General Management

1. A totally integrated management approach. (Not only portfolio management of the particular service or activity, but also alignment of each service with all of the other services / activities and external influences. This especially relates to the integrated provision of new buildings, and transport and utility assets, and / or to the carrying out of upgrading work or repairs by the several service providers at the same time).	<input type="checkbox"/>	<input type="checkbox"/>
2. All of the critical assets have been identified, and a clearly documented approach for managing them is in place and is being adhered to.	<input type="checkbox"/>	<input type="checkbox"/>
3. Robust maintenance and operations practices (including continuously up-to-date maintenance manuals and operations manuals).	<input type="checkbox"/>	<input type="checkbox"/>
4. All maintenance work that needs to be done has been identified. (The organisation is not planning to only carry out maintenance work in order to live within a limited budget. The first step is always to identify what needs to be done. Any gap between the work that has been identified through that process as being required through that process, and that which can be afforded has been quantified, the risks of not doing it have been identified, and a plan for managing all of those risks has been documented and agreed.)	<input type="checkbox"/>	<input type="checkbox"/>
5. All maintenance and renewals work is properly managed and planned for in advance. (On no account a 'fix it when it breaks' approach).	<input type="checkbox"/>	<input type="checkbox"/>
6. Robust procurement policies and practices.	<input type="checkbox"/>	<input type="checkbox"/>
7. Robust contracts' specification and supervision.	<input type="checkbox"/>	<input type="checkbox"/>
8. Robust supervision of work in new subdivisions carried out by developers. (New assets are not accepted from developers unless the organisation actually needs them and is entirely satisfied that they have been constructed to standards that fully meet the organisation's requirements).	<input type="checkbox"/>	<input type="checkbox"/>
9. Planning and design work is completed well in advance of the programmed date for project construction – preferably before the commencement of the financial year in which it is planned to be done. (No delays as a result of poor planning or	<input type="checkbox"/>	<input type="checkbox"/>

Yes **No**

'end of year' rushes to spend available funds that cannot be carried forward to the next year).

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|-----|---|--------------------------|--------------------------|
| 10. | Accurate 'as built' information is received (and promptly processed) immediately after the completion of each project. | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. | The organisation has taken all reasonable steps to protect its intellectual property. | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. | The organisation is satisfied that it continues to be in total control of its business, and that it has not abdicated its responsibilities, obligations, powers, or authorities to others, or lost the ownership of any information, through contracts, outsourcing, privatisation, or other arrangements that did not contain sufficient provision to protect its long-term interests. | <input type="checkbox"/> | <input type="checkbox"/> |

Risk Management

- | | | | |
|----|---|--------------------------|--------------------------|
| 1. | Robust, integrated, risk management. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | The risk management process considers all risks of all types relating to sustainable delivery of the services – not only asset risks (including health and safety, and legislative and regulatory compliance). | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | There is an up-to-date business continuity / operations recovery plan, to ensure the organisation is able to continue to provide the services, albeit in perhaps a reduced form for a period, should a natural disaster or other emergency occur. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | All relevant people, at all levels, know what the risks that the organisation has identified are, and of their obligation to report additional risks / hazards as they are identified. They are also familiar with the business continuity plan and know what their responsibilities are should an emergency occur. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | All areas of the business where an insurable loss may occur have been identified, and insurance cover (or other risk management arrangement) is in place relating to each one. | <input type="checkbox"/> | <input type="checkbox"/> |

Staff Training

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|----|---|--------------------------|--------------------------|
| 1. | The organisation pro-actively supports and monitors the personal development and training of its employees. | <input type="checkbox"/> | <input type="checkbox"/> |
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Consultation and Communication

- | | | | |
|----|---|--------------------------|--------------------------|
| 1. | The organisation's stakeholders (especially its customers) are kept regularly informed about matters that might be of interest to, or which might affect, them. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | Complaints and requests for service are responded to promptly and effectively. (In a 2007 survey of utilities in the UK, the average time taken to reply to an email was 53 hours, and only 15% of the replies answered the question (Chaffey, 2008). | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | The customer levels of service and the performance targets and measures relating to them are published and widely circulated to all stakeholders in a 'Customer Charter' or equivalent public document. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | A summary of the public report is sent to all stakeholders not later than five months after the end of the each year (including, in the case of local authorities, to every household). | <input type="checkbox"/> | <input type="checkbox"/> |

Yes No

Review

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|----|---|--------------------------|--------------------------|
| 1. | Before it is issued, the asset management plan is reviewed, in order to be satisfied that it really does 'tell the true story in a manner that will be able to be easily understood by a lay person reader'. (Some asset management plans do not do this. Sometimes, a person who is not familiar with the organisation, its relative size and the scope of its responsibilities, finds them to be difficult to comprehend, and sometimes they convey a picture that is at variance with the messages that are being conveyed about the financial situation etc, by other parts of the organisation). | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | The asset management plan is updated and reviewed (at least annually, and comprehensively reviewed at intervals of not longer than every three / four years, linked to the strategic planning review cycle). | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Proper thought is regularly being given to alternative (non-asset) possible ways and means of managing the future demand for the services that the assets have been, or will otherwise be required to be, purchased or constructed to help provide (Demand Management). | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | Proper thought is regularly being given to alternative possible ways and means of delivering the services – not just a continuance of the status quo (eg, In-House Provision vs Contracting Out vs Public : Private Partnerships vs Sharing Services with Others, etc). | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | Proper thought is regularly being given to whether or not the organisation really needs to provide / own the assets (or any of them), either at all, or wholly by itself, (and if the assets must be provided, if that might be able to be done better by someone else). | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | Regular reviews to ensure that all assets continue to be fit for purpose, that the use of them is being maximised, and to identify areas where assets may be able to be used in a better or more intensive way, may be surplus to requirements, or be able to be rationalised in some way. | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | Regular reviews to identify any data gaps, and to confirm that only useful data is being collected, and that it is actually being used in the most effective manner. | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | Regular internal, and periodic external, audits and reviews, to vigorously question and challenge the strategic and policy approaches (including the overall alignment and the linkages), the project priorities, the current decision-making and work processes, the results that are being achieved at all levels, and the adequacy of the management and public monitoring and reporting mechanisms. | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | Regular benchmarking against similar organisations (including the private sector). | <input type="checkbox"/> | <input type="checkbox"/> |

Continuous Improvement

- | | | | |
|----|---|--------------------------|--------------------------|
| 1. | All 'issues' – no matter how small – have been identified and are listed in a prioritised improvement plan. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | The improvement plan is being maintained in a continuously updated form, and closely managed – with the responsibility for achievement of each item by a specified target date being allocated to a named position – <u>the occupier of which is held accountable.</u> | <input type="checkbox"/> | <input type="checkbox"/> |

Yes No

Monitoring and Management Reporting

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|----|---|--------------------------|--------------------------|
| 1. | The actual cost of providing each service is accurately tracked and reported against the financial forecasts / approved budgets. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | The cost of depreciation is identified in the reports separately – for each service. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Expenditure to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential (new capital expenditure) is reported quite separately to expenditure incurred to upgrade, refurbish or replace existing facilities with facilities of equivalent capacity or performance capability (renewals capital expenditure) – for each service. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | Assets that have been vested, or financial contributions that have been paid, by subdividers and developers, are reported separately. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | A robust monitoring and management reporting regime that clearly states the actual performance against the customer service and the management and technical service performance targets and the trends . | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | The performance measures against which results are reported cover the areas of at least: health and safety; risk management (including security); asset preservation, development and consolidation; conservation, environmental protection and enhancement; service quality (including aesthetics, reliability, responsiveness, and capacity); compliance (including record keeping and reporting); and costs. | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | The financial and service provision results are reported against the prescribed performance measures and targets, in an appropriate manner, at regular intervals throughout the year. (At all levels – from the maintenance workshops to the elected council / board.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | The regular management reports are carefully studied, and prompt corrective action is taken, at all levels, whenever the results are not as intended. | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | No extraordinary effort is required after year end to collect information about performance for the annual report, because results have been reported in a systematic and integrated fashion throughout the year, and except for one or two additions, the whole process is very much routine. | <input type="checkbox"/> | <input type="checkbox"/> |

Public Reporting

- | | | | |
|----|--|--------------------------|--------------------------|
| 1. | The annual public report is completed and formally adopted not later than four months after the end of the year. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | The report fairly and fully discloses the true financial and service provision situations against the earlier prescribed performance measures and targets, and has not been compiled principally to portray the organisation in a good light. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | The report clearly shows the net cost of each service . (It does not combine services in such a way that the full details relating to each separately cannot be identified). | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | The report contains a variety of graphs that show the actual result trends against the targets over at least the last five years (and where appropriate, also the targets for the next few years). | <input type="checkbox"/> | <input type="checkbox"/> |

Yes **No**

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| 5. | The report is able to be easily understood by a lay person. (Readers do not have to navigate a mountain of material in order to obtain the information that they want). | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | The report has been prepared in a standard form that enables the results to be easily compared with other similar bodies. | <input type="checkbox"/> | <input type="checkbox"/> |

Audit

- | | | | |
|----|---|--------------------------|--------------------------|
| 1. | The asset management plans are independently audited for completeness and correctness. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | The annual audit of the total organisation includes an audit of the correctness of the service performance information, as well as of the financial information. (In 2008, the U.K. Water Regulator fined Thames Water £8.3m for misreporting regulatory information in respect of customer services (OFWAT, 2008). | <input type="checkbox"/> | <input type="checkbox"/> |