



AMPLE (Asset Management Program Learning Environment)

In August 2012 GHD's Global Asset Management Group granted a free license for their AMPLE tool suite to IMESA for use in progressing Sustainable Infrastructure Asset Management within Southern Africa.

IMESA thanks GHD for their actions and promises to use it to benefit all municipalities in Southern Africa.

So what is AMPLE and how was it developed? In the mid1990's, GHD worked with their long-term AM clients to determine what were the lessons learned in implementing advanced asset management over the previous 15 years. This process identified the key areas of concern to be:

- Achieving a repeatable quality framework assessment process
- Driving logical and cost effective AM Improvements to match available resources (Quick Wins)
- Ensuring that the improvements were sustainable with full agency ownership
- The need to raise awareness and train new and improve existing staff skills cost effectively.
- Enable application of TQM, ISO accreditation, balanced scorecards and continuous improvement techniques.

What is AMPLE?

AMPLE is a web enabled knowledge management system whose purpose is to present a means by which organisations and their staff can gain an understanding of:

- ▶ The principles of life cycle asset management from basic (level 1) to advanced (level 3) AM in a logical, cost effective step by step process;
- ▶ The essential components of a state of the art asset management program at sufficient detail to gain a sound understanding; and
- ▶ Enough "how to do it" information to drive their program.

AMPLE is the result of over 20 years of GHD's development of world class asset management manuals and approaches for successful AM improvement programs that have delivered all aspects of best appropriate practice asset management for a full range of infrastructure industries, especially Municipal Metro Cities, Regional Centres, and towns, using a "whole of city" approach covering all infrastructure and physical asset types.

The objective of IMESA's AMPLE is to provide a web based asset management learning environment, which will assist all municipalities and their infrastructure rich businesses to drive sustainable asset management improvements, cost effectively.

It provides a web based knowledge management system that can be implemented over 3 years to go from basic (Level 1) up to advanced (Level 3) Life Cycle Asset Management, delivering the required levels of service at the lowest life cycle cost..



TEAM Quality Framework (TEAMQF)

TEAM stands for Total Enterprise Asset Management and draws attention to the need for all organizations to work as a single team and cover all assets in their portfolio or system. It was designed for municipalities with a diverse set of infrastructure services.

TEAMQF is a quality framework based on ISO standards that enables users to review and assess their performance against a known practice (e.g. world's best practice) with other similar organizations or asset owners.

Using the gap between your current status and world's best practice you can determine a 'Best Appropriate Practice' (BAP) target for your organization. This is based on the benefits that this will bring in delivering 'best value infrastructure service delivery' to your customers and the nation as a whole.

By following the graphic on the right, the user will learn about the seven primary quality elements and the underlying secondary & tertiary quality elements, as well as guidelines to drive improvement and increase the confidence level rating (quality) of the organization in the quality of its asset management performance.

Life Cycle Processes and Practices

Infrastructure asset owners need to better direct limited budget resources toward the sustained performance of their assets by improving their life cycle asset management work processes and individual asset practices.

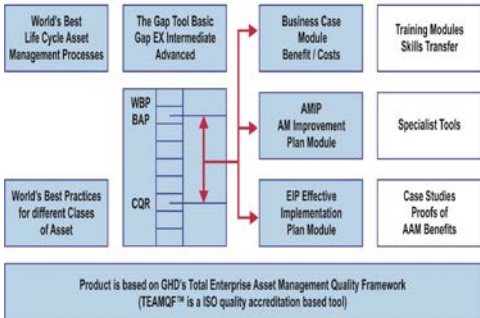
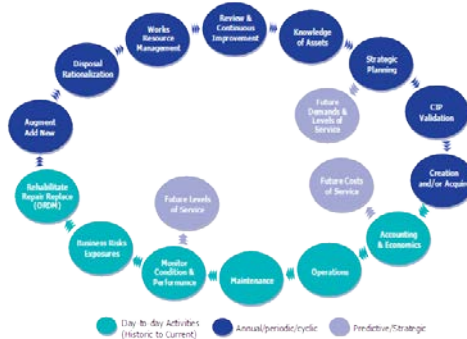
By matching these processes to improved data quality and timeliness, we can raise the confidence level rating and validation of our investment decisions for staff, management, elected officials, and other stakeholders that the investment in operations, maintenance & capital are the very best that can be made.

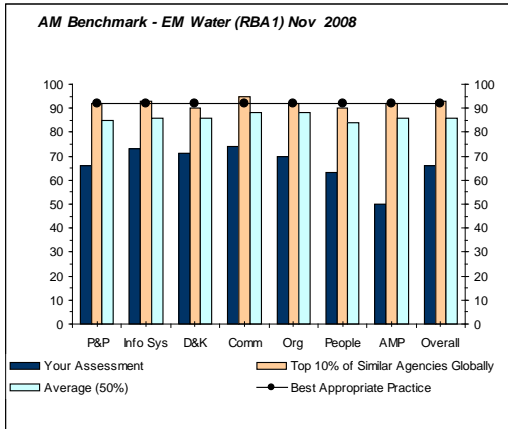
The graphic on the right shows the journey of an asset throughout its lifecycle and directs the reader to a series of guidelines that drive improvements to provide a sustainable and 'best value' service delivery.

What Modules is AMPLE made up of?

The tool consists of several modules shown in the graphic to the right.

- Best practice asset management processes;
- Best practice – practices related to each asset group; Industry guides
- The gap analysis tool Gap – Ex1 – that enables users to understand their Current Quality Rating (CQR), compare and benchmark this with a vast database of similar clients, and set their improvement targets for both short-term and long-term objectives;
- The benefits / costs modules that enables you to determine the costs that will be incurred in driving improvement by closing the gaps identified, and then assessing the benefits that will be derived;
- The Asset Management Improvement Planning module that allows you to determine the most appropriate improvement program that will deliver the 'best bang for your buck' while moving to a sustainable asset management



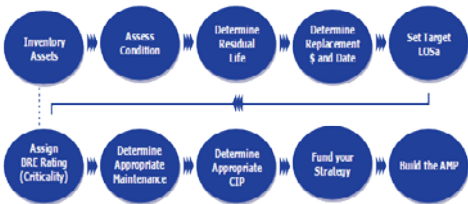


organization. It will give you a 'Roadmap' for the journey, but you control how far, how fast, and how much to spend on it;

- ▶ The effective implementation module covers all the issues that ensure successful implementations including planning, cultural change and organizational support issues;
- ▶ The training or Learning Environment modules enable staff at all levels in the asset management program to learn using a web-based curriculum. These programs can be developed for your industry and your business covering all issues that you need to address.

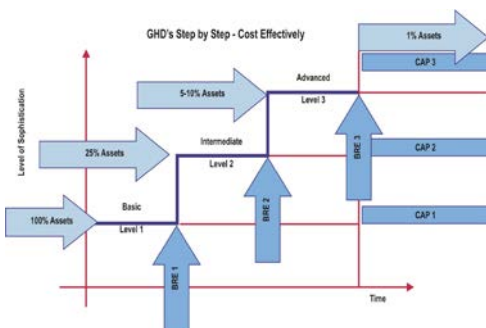
IMESA's 10 Box & Step-by-Step Approach

AMPLE has been developed to allow asset managers with varying degrees of experience (novice, aware, competent, and expert) to follow different tracks through this tool. It encourages the user to develop the required skills in a methodical process. The graphic on the left becomes the home page for the novice user and directs the reader to a series of asset management questions, which provides a comprehensive picture of asset management.



The whole program is driven using these unique approaches to driving sustainable asset management improvements including:

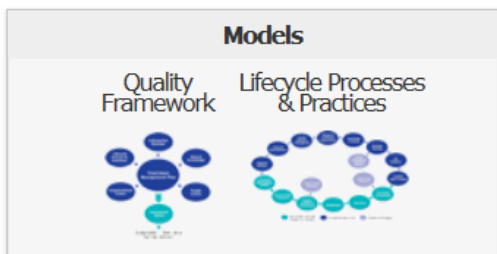
- ▶ The Step-By-Step approach (SBS);
- ▶ ISO based quality framework (TEAMQF);
- ▶ The Business Value Chain (BVC) proposition or approach;
- ▶ Confidence Level Rating (CLR) techniques for all investment decisions both CIP and O&M;
- ▶ Business Risk Exposure (BRE) filtering methodology; and
- ▶ Triple Bottom Line (TBL) sustainability methodologies.



Tailored to Your Organization / Business

These innovative approaches allow your municipality to drive your Asset Management improvement programs by:

- ▶ Tailoring the approach to suit your individual organization – not one model fits all. Your businesses maybe the same as others but your assets (the position in their life cycle and performance), your political environment, and your viability and available resources / skills may all be different;
- ▶ Prioritizing your program to suit your business and the key issues you face through the three levels of AM maturity;
- ▶ Taking full ownership of the program. IMESA's implementation contractors will work in a partnering relationship with you and your staff members to develop the ultimate successful implementation program;
- ▶ These tools are designed to help you achieve your goals as cost effectively as possible and to ensure that we leave you and your staff with AMPLE to enable you to continue your program.



Novice **Aware** **Competent**

Aware Contents

- Acknowledgement
- How to use AMPLE

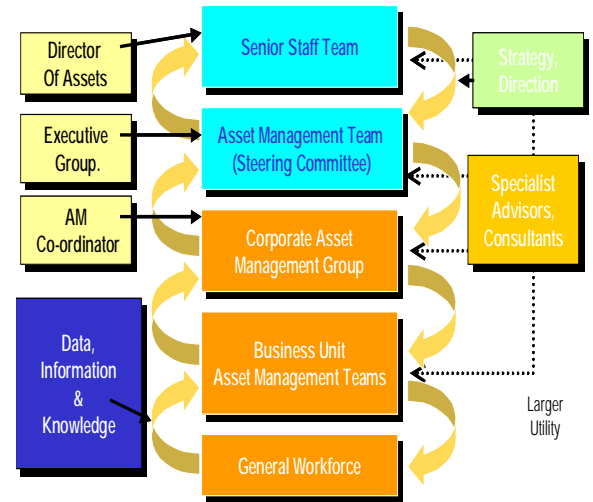


Effective (Sustainable) Implementation

Because the transition to advanced asset management is really a change management process, AMPLE is designed to ensure that individual staff and organizational change issues are fully addressed and supported. Staff members are the most important assets in the TEAM process.

Successful implementation ensures that the full benefits of advanced asset management are achieved by your organization. It is estimated that over 50% of the asset management benefits are derived in this area alone. The AMPLE tool has been designed to achieve this transition to an “asset centric organization,” by dealing with:

- ▶ Organizational structures;
- ▶ Roles and responsibilities;
- ▶ Individual staff and work groups;
- ▶ Transition cycle;
- ▶ Seven steps to successful change;
- ▶ Bridging the silo's;
- ▶ Training new and re-skilling existing staff.



About IMESA’s NAMS za

IMESA is forming a National Asset Management Steering Committee (NAMS za) to help progress asset management practices in Municipalities throughout Southern Africa. Read more about this in our National SIAM Program paper.

For More Information about AMPLE & NAMS za :

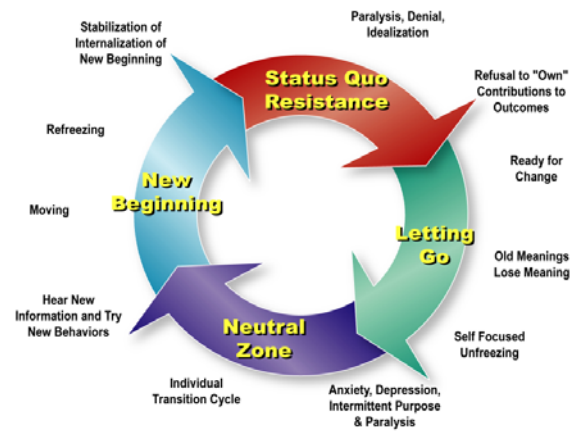
For more information, please contact the following IMESA members who have experience with SIAM and an understanding of AMPLE:

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To make use of the product, please make contact with:

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IMESA acknowledges the kind gift of AMPLE by GHD Asset Management Group together with many associated documents and power point presentations. It also notes the use of GHD trademarked names such as: BRE / SBS / TEAMQF / Gap- Ex1 / CLR & BVC. In return IMESA has made GHD a GOLD SPONSOR for their kind assistance of their NAMS za Activities.



IMESA Gold Sponsor of NAMSza