# The Value of Asset Management to an Organization

Template for Case Studies
First Edition

**English Version** 



Global Forum on Maintenance & Asset Management

ISBN 0-9870602-6-0 Published August 2016

www.gfmam.org

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# The Global Forum on Maintenance and Asset Management

The Global Forum on Maintenance and Asset Management (GFMAM) has been established with the aim of sharing collaboratively advancements, knowledge and standards in Maintenance and Asset Management.

The members of GFMAM (at the time of issue of this document) are:

- Asset Management Council (AMCouncil), Australia
- Associação Brasileira de Manutenção e Gestão de Ativos (ABRAMAN), Brazil
- European Federation of National Maintenance Societies (EFNMS), Europe
- French Institute of Asset Management and Infrastructures (IFRAMI), France
- Gulf Society of Maintenance and Reliability (GSMR), Arabian Gulf Region
- Institute of Asset Management (IAM), UK
- Japan Institute of Plant Maintenance (JIPM), Japan
- Plant Engineering and Maintenance Association of Canada (PEMAC), Canada
- The Society for Maintenance and Reliability Professionals (SMRP), USA
- The Southern African Asset Management Association (SAAMA), South Africa

The enduring objectives of the GFMAM are:

- 1) To bring together, promote and strengthen the maintenance and asset management community worldwide
- 2) To support the establishment and development of associations or institutions whose aims are maintenance and asset management focused
- 3) To facilitate the exchange and alignment of maintenance and asset management knowledge and practices
- 4) To raise the credibility of member organizations by raising the profile of the Global Forum

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## 1 Purpose and background

The purpose of this document is to provide a template for case studies to illustrate the actual realization of value for organizations who have accomplished asset management implementations.

The template for case studies is an integral part of GFMAM project 'The Value of Asset Management to the Organization'. Information on background, project scope, definitions and methodology refers to this document.

### 2 References

The following are references to work that has been undertaken by members of GFMAM on the value of Asset Management

- The Value of Asset Management to an Organization
- Asset Management Maturity
- The Asset Management Landscape

The following are some more general references to different approaches to defining and assessing value:

| ISO 55000<br>ISO 55001<br>ISO 55002 | Asset management Overview, principles and terminology<br>Management systems Requirements<br>Asset management Management systems Guidelines for the<br>application of ISO 55001 |
|-------------------------------------|--|
| AS 4183                             | Value Management   |
| CEN EN 12973<br>CEN EN 1325         | Value Management Value Management - Vocabulary - Terms and definitions   |
| SAVE International                  | SAVE International, Value Standard and Body of Knowledge   |



#### **Template for Case Studies** 3

< Guidance for using the template is included in blue-coloured text in brackets and is intended to be deleted when using the template >

# **Case Study on Value Creation from Asset Management for** (Organization and Project)

< Insert Organization and Project in title >

## The organizational context

| context > What were the ch | nallenges in respect of Pe     | erformance, Cost a     | the most important in the given and Risk?                    |
|----------------------------|--------------------------------|------------------------|--|
| context >                  |                                |                        |  |
|                            | intent here is not to list the | em all but to identify | the most important in the given                              |
|                            | ected by the asset manage      | ement project. Organ   | es, which were intended and/or nizations typically have many |
| 3.                         |                                |                        |  |
| 2.                         |                                |                        |  |
| 1.                         |                                |                        |  |
| What were the ke           | y Organizational objecti       | ves of the project f   | or the company?  |
| under which the as         | sset management project v      |                        | reader to understand the situation                           |
|                            | ion of the organizational co   | ontext to enable the   | reader to understand the cituation                           |

| Objective | Performance | Cost | Risk |
|-----------|-------------|------|------|
|           |             |      |      |
|           |             |      |      |
|           |             |      |      |

< For each of the key objectives identified above, describe the challenges the organization is facing which motivate the asset management decision. The challenges should be described in respect of the performance, the cost and the risk for each objective >



#### Scope of asset management project

| Net book value of assets addressed by project (defined as property plant and equipment (PPE) from financial statement of assets within the scope of the asset management system)   | < Insert amo<br>currency (e.g<br>Million EUR)  | g. XXX         |
|--|--|----------------|
| Number of people (internal employees and external contractors) who were affected by the asset management project or changes caused by the asset management project   | < Insert num affected peo                      |                |
| Number of work processes that were affected by the asset management project. Affected work processes include both administrative and operational work and the number of affected processes is at least the number of new or modified Standard Operating Procedures (SOP's) | < Insert num<br>affected prod                  |                |
| Project resources as equivalent full time employees for all internal and external resources allocated to the project, times the duration of engagement   | < Insert num<br>resources ar<br>YYY man-ye     | nd scale (e.g. |
| Timespan from when the asset management project was started to the point in time for which the results of the case study was evaluated   | < Insert start<br>project (e.g.<br>January 201 | May 2014 -     |
| Standards and certification. List of standards that were used as guidance for  | Standard                                       | Certified      |
| the asset management project and an indication if the asset management project involved certification to any of these standards by an accredited conformity assessment body  | < e.g. PAS<br>55 or ISO<br>55001>              | < yes / no >   |

## Scope of project in relation to The Asset Management Landscapes 39 subjects

< Mark the impact of the asset management project to each of the 39 subjects of asset management from The Asset Management Landscape. Each of the 39 subjects should be marked by a "X" in one of the boxes of either major, minor or no impact. Subjects which are only indirectly addressed by the project should be marked as no impact. Generally, major impact is used when new procedures, plans or models are introduced or redesigned whereas minor impact is used when existing procedures, plans or models are updated. >

| Proj | Project scope in relation to the 39 subjects of The Asset Management Landscape |  |                  |                  |  |  |  |
|------|--|--|------------------|------------------|--|--|--|
| No   | Subject of AM Landscape  | Major impact   | Minor impact     | No<br>impact     | Description  |  |  |
| 1    | Asset Management Policy  | <set x=""></set>   | <set x=""></set> | <set x=""></set> | < Short description of how each element<br>is addressed by the project where<br>relevant > |  |  |
| 2    | Asset Management Strategy & Objectives   | To The State of th |                  |                  |  |  |  |
| 3    | Demand Analysis  |  |                  |                  |  |  |  |
| 4    | Strategic Planning   |  |                  |                  |  |  |  |
| 5    | Asset Management Planning  |  |                  |                  |  |  |  |
| 6    | Capital Investment Decision-<br>Making   |  |                  |                  |  |  |  |
| 7    | Operations & Maintenance Decision-Making                                       |  |                  |                  |  |  |  |
| 8    | Lifecycle Value Realisation  |  |                  |                  |  |  |  |

| 9  | Resourcing Strategy                        |            |     |   |  |
|----|--|------------|-----|---|--|
| 10 | Shutdown & Outage Strategy                 |            |     |   |  |
| 11 | Technical Standards & Legislation          |            |     |   |  |
| 12 | Asset Creation & Acquisition               |            |     |   |  |
| 13 | Systems Engineering                        |            |     |   |  |
| 14 | Configuration Management                   |            |     |   |  |
| 15 | Maintenance Delivery                       |            |     |   |  |
| 16 | Reliability Engineering                    |            |     |   |  |
| 17 | Asset Operations                           |            |     |   |  |
| 18 | Resource Management                        |            |     |   |  |
| 19 | Shutdown & Outage<br>Management            |            |     |   |  |
| 20 | Fault & Incident Response                  |            |     |   |  |
| 21 | Asset Decommissioning and Disposal         |            |     |   |  |
| 22 | Asset Information Strategy                 |            | < I |   |  |
| 23 | Asset Information Standards                |            |     |   |  |
| 24 | Asset Information Systems                  | 4          | 人口  | 人 |  |
| 25 | Data & Information<br>Management           |            |     |   |  |
| 26 | Procurement & Supply Chain Management      |            |     |   |  |
| 27 | Asset Management<br>Leadership             |            |     |   |  |
| 28 | Organizational Structure                   |            |     |   |  |
| 29 | Organizational Culture                     |            |     |   |  |
| 30 | Competence Management                      |            |     |   |  |
| 31 | Risk Assessment and<br>Management          |            |     |   |  |
| 32 | Contingency Planning & Resilience Analysis |            |     |   |  |
| 33 | Sustainable Development                    |            |     |   |  |
| 34 | Management of Change                       |            |     |   |  |
| 35 | Assets Performance & Health Monitoring     |            |     |   |  |
| 36 | Asset Management System<br>Monitoring      | Sp. 35- 33 |     |   |  |
| 37 | Management Review, Audit & Assurance       |            |     |   |  |
| 38 | Asset Costing & Valuation                  |            |     |   |  |
| 39 | Stakeholder Engagement                     |            |     |   |  |



### Outline of asset management project in relation to ISO 55001 requirements

< Mark the focus of the asset management project to each of the primary requirements in ISO 55001. Each of the requirements should be marked by a "X" in one of the boxes of either major, minor or no focus. Requirements which are only indirectly addressed by the project should be marked as no focus. Generally, major focus is used when new procedures, plans or models are implemented, whereas minor focus is used when changes to existing procedures, plans or models are implemented. >

| Projec | Project outline in relation to the requirements in ISO 55001               |                  |                                     |                        |  |  |  |
|--------|--|------------------|-------------------------------------|------------------------|--|--|--|
| Ch.    | Requirement  | Major focus      | Minor focus                         | No<br>focus            | Description  |  |  |
| 4.1    | Understanding the organization and its context                             | <set x=""></set> | <set<br>X&gt;</set<br>              | <set<br>X&gt;</set<br> | < Short description of how each<br>requirement is addressed by the project<br>where relevant > |  |  |
| 4.2    | Understanding the needs and expectations of stakeholders                   |                  |                                     |                        |  |  |  |
| 4.3    | Determining the scope of the asset management system                       |                  |                                     |                        |  |  |  |
| 4.4    | Asset management system  |                  |                                     |                        |  |  |  |
| 5.1    | Leadership and commitment  |                  |                                     |                        |  |  |  |
| 5.2    | Policy   |                  | $\langle \langle   \rangle \rangle$ |                        |  |  |  |
| 5.3    | Organizational roles, responsibilities and authorities                     |                  |                                     |                        |  |  |  |
| 6.1    | Actions to address risks and opportunities for the asset management system |                  |                                     |                        |  |  |  |
| 6.2    | Asset management objectives and planning to achieve them                   |                  |                                     |                        |  |  |  |
| 7.1    | Resources  |                  |                                     | N.                     |  |  |  |
| 7.2    | Competence   |                  |                                     |                        |  |  |  |
| 7.3    | Awareness  |                  |                                     |                        |  |  |  |
| 7.4    | Communication  |                  |                                     |                        |  |  |  |
| 7.5    | Information requirements   |                  |                                     |                        |  |  |  |
| 7.6    | Documented information   |                  |                                     |                        |  |  |  |
| 8.1    | Operational planning and control   |                  |                                     |                        |  |  |  |
| 8.2    | Management of change   |                  |                                     |                        |  |  |  |
| 8.3    | Outsourcing  |                  |                                     |                        |  |  |  |
| 9.1    | Monitoring, measurement, analysis and evaluation                           |                  |                                     |                        |  |  |  |
| 9.2    | Internal audit   |                  |                                     |                        |  |  |  |
| 9.3    | Management review  |                  |                                     |                        |  |  |  |
| 10.1   | Nonconformity and corrective action  |                  |                                     |                        |  |  |  |
| 10.2   | Preventive action  |                  |                                     |                        |  |  |  |
| 10.3   | Continual improvement  |                  |                                     |                        |  |  |  |



#### Outline of asset management project

< Describe the outline of the asset management project. What was the approach of the asset management project? How was it organised and manned with internal and external resources? How were the management and employees engaged in the project? >

#### What is the expected effect to Value of the asset management project?

| Expected val | Expected value of the asset management project |             |      |      |  |  |  |
|--------------|--|-------------|------|------|--|--|--|
| Objective    | Time   | Performance | Cost | Risk |  |  |  |
|              | Short-term                                     |             |      |      |  |  |  |
|              | Long-term                                      | (           |      |      |  |  |  |
|              | Short-term                                     |             |      |      |  |  |  |
|              | Long-term                                      |             |      |      |  |  |  |
|              | Short-term                                     |             |      |      |  |  |  |
|              | Long-term                                      |             |      |      |  |  |  |

< Describe the expected effect to value from the asset management project when it was approved to proceed. Value is described as the expected effect to performance, cost and risk in the short-term and long-term respectively. Performance, cost and risk can be descriptive but should also be expressed in measures which qualify for SMART (Specific, Measurable, Ambitious, Realistic and Time bound). The timespan for short-term and long-term must be clearly defined, and the time perspective can be further refined where useful (e.g. categories like 0-2 years, 3-5 years, 6-10 years, more than 10 years) >

#### Which other Opportunities did the company consider?

- 1.
- 2.

< If the company was considering other opportunities to the initiated asset management project, insert a brief description of these opportunities the organization and the rationale for decision on the given asset management project >

#### What is the resulting Value from the implementation of the asset management project?

| Actual value | Actual value from the asset management project |             |      |  |  |  |  |
|--------------|--|-------------|------|--|--|--|--|
| Objective    | Time   | Performance | Cost |  |  |  |  |
|              | Short-term                                     |             |      |  |  |  |  |
|              | Long-term                                      |             |      |  |  |  |  |
|              | Short-term                                     |             |      |  |  |  |  |
|              | Long-term                                      |             |      |  |  |  |  |
|              | Short-term                                     |             |      |  |  |  |  |
|              | Long-term                                      |             |      |  |  |  |  |

< In retrospect after the asset management project has been implemented in the organization, describe the actual resulting value to the same level of detail as the assessment of expected value prior to the decision to proceed. Risk is not of relevance here as there is no effect from uncertainty to objectives in retrospect >

#### What was the learnings from the implementation of the asset management project?

< Discuss the learnings from the implementation of the asset management project. Learnings should address both the results, the process and the methodologies applied. How was the actual value creation compared to the expected? What was the key reason for differences in expected and actual outcome? Were all relevant objectives identified and addressed? What would the organization have done different seen in retrospect? >

#### Conclusion

< Insert the conclusion from the learnings of the implementation >

