Team Blue

- Training of trainers / top management
- How to be more engaged with stakeholders?
- Specific data related to road condition should be linked to PAM tool
- Asset Management tools / implementation guidelines

2.3 Futuring

A fictitious letter dated on 15th of January 2017 (exactly three years after now) in which Asanra was given an award because of their progress regarding Asset Management was been read aloud (attachment 1).

The delegates are individually requested to react on the following questions:

1. How do we work and work together in 2017?
2. What do our own people say about us?
3. What do our stakeholders say about us?
4. What is in particular remarkable?
5. What is our secret?

The responses to the above questions were first grouped and then ranked as follows (in order of the responses most frequently mentioned):

1. Happy stakeholders; easy communicating; engaged in various projects / initiatives in coordination with all departments and stakeholders (21)
2. Establishment of effective and efficient Asset Management processes (PAS 55) (18)
3. We improved the quality and safety of the roads (14)
4. We deliver value for money and harmonise systematically improvement processes (13)
5. The responsibilities and accountability of agencies are clear (9)

2.4 Why could this (not) be reached?

The participants were divided into two groups. The first group, the "believers" listed the reasons why the objectives for 2017 could be achieved, while the second group, the "non-believers" listed reasons why the objectives could not be achieved at all.

Believers:

+ Because needs are analysed and understood
+ Because there is a continuous training and assessment
+ Because there is top-level support
+ Because there is Life Cycle Analysis
+ Because there is legalisation of policies

Non-believers:

− Because the time-frame to 2017 is far too short
− Lots of meetings but no implementation
− Politics party lines overriding national objectives
− Not in the interest of the politicians: politics: short term; PAS 55: long term
- Lack of in-house expertise to sustain
- High staff turnover
- Lack of law enforcement
- Vandalism
- Corruption
- Too big a gap time vs funds
- Projects dedicated by politicians
- Corrupt procurement processes
- Lack of skills
- Political interference
- Institutional structures not clear (inadequate legislation)
- Power game, self protection

The non-believers then prepared a list of actions, which could address the constraints previously listed:

+ Market the benefits of Asset Management to stakeholders (13)
+ Good planning (10)
+ Small but positive steps (8)
+ Call for professional attitude by engineers (8)
+ Meet the needs of the politicians in the Asset Management processes (4)
+ Improve conditions of service (4)
+ Adopt regional guidelines / requirements (1)
+ Capacity building (1)
+ Realistic time frame (1)
+ Believe in yourself (1)

All delegates then identified the most important reasons why they would be able to reach the desired situation:

1. Making of an effective planning, step by step within the time frame (18)
2. Establish stakeholder needs analysis / understanding (15)
3. Market the benefits of Asset Management to stakeholders (13)
4. Providing continuous improvement / training Asset Management processes / PAS 55 (11)
5. Doing a LCC analysis (business case), to deliver value for money (11)

2.5 Advised actions (consultants)

The participants divided into five groups (red, orange, yellow, green and blue) imagined they were consulting firms with the task of drawing up advice regarding the implementation of each of the above recommendations (one firm per item).

2.5.1 Making of an effective planning, step by step (Red firm)

1. Carry out a gap analysis (3 months)
2. Consult stakeholders (0,5 months)
3. Draw up an action plan (0,75 months)
4. Develop draft policy (3 months)
5. Present to policy-makers (0,25 months)
6. Amend & finalise (0,5 months)
7. Policy document approval (2 months)
8. Implement policy (26 months)
2.5.2 Establish stakeholder needs analysis / understanding (Orange firm)

1. Identify the stakeholders
2. Establish stakeholder forum that meets regularly (Road Federation) to get understanding
3. Promote and involve existing forums
4. Do gap analysis (current vs desired service level)
5. Hotline / sms for user reporting or feedback survey (stakeholder survey)
6. Develop trust between Government, Roads Authority and Public (Public buy-in)
7. Perceive that infrastructure is cared for

2.5.3 Market the benefits of Asset Management to stakeholders (Yellow firm)

1. Presentation of Asset Management principles to politicians / stakeholders (biannually)
2. Physical engagement by various stakeholders
3. Encourage incorporation of Asset Management principles in Legislation / policy
4. Make it condition dependent to budget allocations
5. Demonstrate actual benefits through Asset Management
   a. Reduced Roads User Costs
   b. Road safety
   c. Risk
6. Make Asset Management part of education program
7. Review of the process / annual reports / KPI’s

2.5.4 Providing continuous improvement / training Asset Management processes / PAS 55 (Green firm)

1. Establish Asset Management framework (Strategy Asset Management Plan: measurement criteria, indicators to set targets)
2. Measure outcomes
3. Identify gaps for improvement
4. Implement improvements
   a. Secure funding
   b. Manpower
   c. Equipment
5. Train staff / service providers in new procedures

2.5.5 Doing a LCC analysis (business case), to deliver value for money (Blue firm)

1. Develop performance management framework
   a. Performance measures
   b. Performance targets
   c. Level of service
   d. Who: Asset Management unit
   e. When: year 1
2. Develop investment strategy
   a. Strategy plan
   b. Budget required / steady condition
   c. Budget required – Level of service
   d. Level of service – fixed budget
   e. Who: Asset Management planning department
   f. When: year 1
3. Asset Data Analysis
   a. Road Condition analysis
      i. Surveys
      ii. Visual assistance
   b. Data management
4. Maintenance strategy
   a. Treatment options
      i. Reseal, Repair
      ii. Reconstruction, Routine
   b. Impact analysis
      i. Cycle
      ii. Pavement, remaining life
   c. Who: engineers / technicians
   d. When: annually

5. Risk management framework
   a. Risk identification
   b. Risk analysis / impact
   c. Risk counter measures
      
      Who: Asset Management / Roads Management Unit
      
When: on-going

2.6 Actions per Member State

Each Member State had to make up their own action plan based on the local situation, the reviewed self-assessment gaps and the advices provided by the Consultancy Firms.

The outcomes as stated by the Member States are as follows:

2.6.1 Malawi

<table>
<thead>
<tr>
<th>Clause</th>
<th>Gap identified</th>
<th>Action</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2</td>
<td>Lack of Asset Management policy</td>
<td>Develop draft Asset management policy</td>
<td>Roads Agency</td>
<td>Year 1</td>
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<tr>
<td></td>
<td></td>
<td>Stakeholder consultation</td>
<td>Roads Agency</td>
<td>Year 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Present to policy makers</td>
<td>Roads Agency</td>
<td>Year 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amend and finalize</td>
<td>Roads Agency</td>
<td>Year 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seek policy approval</td>
<td>RA board / Ministry</td>
<td>Year 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implement</td>
<td>Roads Agency</td>
<td>Year 2</td>
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<td>Clause</td>
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<td>Action</td>
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<td>When</td>
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<td>----------------------------------------------------------------------</td>
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<td>------</td>
</tr>
<tr>
<td>4.4.3</td>
<td>Training, awareness &amp; competence</td>
<td>Scheduling of quarterly training for all project managers</td>
<td>Done</td>
<td>Done</td>
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<tr>
<td>4.6.3</td>
<td>Evaluation of compliance</td>
<td>Audits on a quarterly basis performed by independent international auditor</td>
<td>Done</td>
<td>Done</td>
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<tr>
<td>4.7</td>
<td>Management review</td>
<td>Audit and findings reported to Audit- and Risk sub committee of the Board</td>
<td>Done</td>
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### 2.6.2 South Africa

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<th>Action</th>
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<th>When</th>
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</thead>
<tbody>
<tr>
<td>4.4.3</td>
<td>Incorporate Asset Management in policy &amp; legislation</td>
<td>RDA/MTWSC + ...</td>
<td>LT</td>
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<tr>
<td>2</td>
<td>Market Asset Management principles to politicians + stakeholders (education &amp; incorporation of interests)</td>
<td>Boards</td>
<td>Immediately</td>
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<tr>
<td>3</td>
<td>Management Buy-in in Asset Management; inclusion in strategic plans</td>
<td>RDA/NRFA</td>
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<tr>
<td>4</td>
<td>Setting repair on Asset Management Plan</td>
<td>RDA/NRFA</td>
<td>Immediately</td>
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<tr>
<td>5</td>
<td>Continuous training in Asset Management improvements</td>
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## 2.6.4 Zimbabwe

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<td>Asset Management policy</td>
<td>Do gap analysis</td>
<td>RA</td>
<td>3 years</td>
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<td></td>
<td>Stakeholder consultation</td>
<td>RA</td>
<td>3 years</td>
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<td></td>
<td></td>
<td>Develop draft policy</td>
<td>RA</td>
<td>3 years</td>
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<td>Resent draft to policy makers</td>
<td>RA</td>
<td>3 years</td>
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<td>Amend and finalize</td>
<td>RA</td>
<td>3 years</td>
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<td></td>
<td>Policy document approved</td>
<td>RA</td>
<td>3 years</td>
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<td></td>
<td>Implementation of policy</td>
<td>RA</td>
<td>3 years</td>
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<td>4.3.4</td>
<td>Contingency planning</td>
<td>Allow 10% of the budget for contingency planning</td>
<td>RA/Road Fund</td>
<td>1 day</td>
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<td>Risk Management</td>
<td>Risk identification</td>
<td>RA</td>
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<td></td>
<td>Risk Analysis</td>
<td>RA</td>
<td>1 year</td>
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<tr>
<td></td>
<td></td>
<td>Risk Countermeasures / mitigation</td>
<td>RA</td>
<td>1 year</td>
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## 2.6.5 Botswana

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<tr>
<th>Clause</th>
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<td>4.2</td>
<td>Asset Management Policy</td>
<td>Set up of Asset Management Unit</td>
<td>Director</td>
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<td>4.3.4</td>
<td>Contingency planning</td>
<td>Draw action plan for identified gaps</td>
<td>AM Members</td>
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<td>4.4.4</td>
<td>Risk Identification</td>
<td>Develop draft policy</td>
<td>AM Unit</td>
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<td>Consultation of stakeholders and politicians</td>
<td>AM Unit, Director</td>
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<td></td>
<td></td>
<td>Present policy to policy makers</td>
<td>Director</td>
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<td></td>
<td>Finalization of policy</td>
<td>Director</td>
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<td>Develop Risk management strategy and Contingency planning strategy</td>
<td>AM Unit</td>
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<td>Clause</td>
<td>Gaps identified</td>
<td>Action</td>
<td>Who</td>
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<td>Asset Management Policy</td>
<td>Consult relevant staff in the organisation</td>
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<td>Contingency planning</td>
<td>Implement strategy</td>
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<td>Risk Identification</td>
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### 2.6.6 Namibia

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<td>Present to policy-makers</td>
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<td></td>
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<td>Amend &amp; finalise</td>
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<td></td>
<td>Policy document approval</td>
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<td></td>
<td>Implement policy</td>
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<td>Risk Management Processes</td>
<td>Risk Management Framework</td>
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<td>Risk Mgt Methodology</td>
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<td>4.4.7.4</td>
<td>Use &amp; maint. of asset risk info</td>
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<td>4.4.8</td>
<td>Legal &amp; other requirements</td>
<td>Encourage incorporation of Asset Management principles in Legislation / policy</td>
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<td>Life Cycle Activities</td>
<td>1. Develop performance management framework</td>
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<td>2. Develop investment strategy</td>
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<td></td>
<td>3. Asset Data Analysis</td>
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<td>4. Maintenance strategy</td>
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<td>5. Risk management framework</td>
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<td></td>
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<td>6. Risk counter measures</td>
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## 2.6.7 Tanzania

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<td>ASAP</td>
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<td>Stakeholder consultation</td>
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<td>List of actions</td>
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<td>Prepare concept to be approved by the Government</td>
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<td>Establish Risk Framework</td>
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<td>Risk countermeasures</td>
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<td>4.6.6</td>
<td>Records</td>
<td>Establish Maintenance Information System (MIS)</td>
<td>Organisation</td>
<td>ASAP</td>
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<td>Training</td>
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<td>Implementation</td>
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## 2.6.8 Mozambique

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<td>Directorate of Planning</td>
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<td>Risk identification assessment</td>
<td>Type of projects</td>
<td>Planning &amp; Project Divisions</td>
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<td>Stakeholders</td>
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<td>4.4.7.4</td>
<td>Use and maintenance of Asset Risk Information</td>
<td>Set up Risk Management Data system on all levels</td>
<td>Planning Division</td>
<td>On-going</td>
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<td>Monitoring of assets</td>
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<td>Resource information</td>
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<td>Training of staff</td>
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2.6.9 Lesotho

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<td>4.2</td>
<td>Asset Management Policy</td>
<td>Develop Policy action plan</td>
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<tr>
<td></td>
<td></td>
<td>Receive final report, extract recommendations</td>
<td>Asanra, IT members</td>
<td>2 months</td>
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<td>Present to management, seek buy-in</td>
<td>IT member</td>
<td>5 months</td>
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<td></td>
<td>Investigate its viability as a stand alone entity</td>
<td>Specialist</td>
<td>6 months</td>
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<td>Develop a pre-funding proposal</td>
<td>IT member</td>
<td>1 month</td>
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<tr>
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<td>Develop policy and incorporate all gaps</td>
<td>Specialist</td>
<td>8 months</td>
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<td>Implement the policy</td>
<td>Specialist</td>
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2.7 Recommendations

The Members States have established an excellent amount of work by doing their self-assessment and have made up a fine conclusion by making up their next steps towards structural improvement of the Asset Management of the Asanra roads network.

To be able to reach the aimed goals as described in the respective action plans we would like to emphasize that the goals can only be reached when the following provisions are kept in mind:

A. Step by step: focus on only one step at the same time.
B. Practical knowledge regarding the Asset Management practices is important. Having (practical) training would be advisable.
C. Management commitment: because completing the actions are interconnected to many other aspects of the organisation commitment of the higher management is essential to be able to make progress.

Reeuwijk, 30 January 2014,
The Netherlands

Ronald van der Vegte
Kees Wieringa
3. Appendices

3.1 Appendix 1: Futuring

Pretoria, 15 January 2017

It’s been a while since we were together, but now we are back again where we started three years ago: the ASANRA Self Assessment Review event in Sanral in Pretoria at 48 Tambotie Avenue ……

The World Class Roads Asset Management Foundation (WCRAMF) has decided to grant us its 2017 Annual Award, and we are all invited to be involved with this!

The ceremony is going to happen in the great lecture room in the presence of the Implementation Team. Because we are the responsible representatives behind this remarkable milestone.

The main trunk roads in the SADC region are by now in excellent condition, maintenance budgets are fixed already for 3-years and road maintenance has become an important issue on the governments agendas. The contractors have been able to get important and sustainable performance improvements throughout the whole SADC region. We cooperate more together and on a higher level with the different agencies.

Even despite an increase of heavy traffic our trunk roads became safer every year according to the decrease in accidents for the last 3 years in a row now.

A party like this will cost something, but that is by no means comparable with the savings we have already realised on maintenance!

Of course the Roads Agencies as well as the Roads Funds organisations throughout Asanra are very proud of winning this Award. We put ourselves on the map because we are now well known for our reliability, innovative support and our good relations with knowledge platforms like the universities.

In fact many well skilled professionals seek positions there to advance their careers.

The roads quality has been measured very strictly, the roads have been prioritised and the communication with the several Stake Holders in Public and Transport Sector has been intensified tremendously now.

The results speak for themselves: the customer satisfaction KPI is high (over 80%) and the clients are very content with the high level of quality and services. The Roads Agencies and Funds can take credit for the smooth and clear communications regarding the communication and justification of the necessary investments to Government, Politics and Public. It really works!
They understand that this level of success is certainly caused by our hard work and smart and thorough Roads Asset Management Plan.

The past couple of years were very successful. In fact they were beyond expectation.

How come .......?

It all began with that session back there in Pretoria, exactly 3 years ago, when we started to explore Asset Management with Asanra.

Oh, ....... here the President of the Foundation is coming in!

Let's see how the award procedure is going to start......
3.2 Appendix 2: list of participants

PEER REVIEW OF ASSET MANAGEMENT WORKSHOP
SANRAL, SOUTH AFRICA, 15th JANUARY, 2014

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Final report

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Summary feedback forms from country visits

Facts and figures
Number of Member States: 8 (Malawi did not use the FB forms because of “sudden public holiday”)

Number of FB's: 60

FB form
See last page

Feedback in figures

<table>
<thead>
<tr>
<th>Question #</th>
<th>item</th>
<th># excellent</th>
<th># good</th>
<th># fair</th>
<th># poor</th>
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<tbody>
<tr>
<td>1</td>
<td>Understanding PAM tool</td>
<td>12</td>
<td>29</td>
<td>15</td>
<td>4</td>
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<tr>
<td>2</td>
<td>To what extend does the result reflect the present Asset Management?</td>
<td>15</td>
<td>32</td>
<td>13</td>
<td></td>
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<tr>
<td>3</td>
<td>Communication during review</td>
<td>24</td>
<td>35</td>
<td>1</td>
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</tbody>
</table>

![Bar chart showing feedback distribution for understanding PAM tool, to what extend does the result reflect the present Asset Management, and Communication during review.]
Suggestions done regarding the next step (in order of Feedback forms provided)

1. Final feedback
2. Work on the areas where we can improve
3. Feedback report for all Asanra countries should be interesting
4. Then helping everyone getting the same level of excellence
5. Develop and implementation of road asset management policy
6. Develop systems to close identified gaps
7. Implementation
8. Appointing of the country implementing team
9. Development and implementation of an AM policy in line with PAS 55
10. Reviewing of the report
11. Training of DOR staff
12. PAM training of dept of roads
13. Training on PAS 55
14. Training of AM & PAS 55 to Operations Officers
15. Training for Zimbabwe
16. Implementation of AM Policy fully
17. Training, workshops
18. Have a workshop to map the way forward
19. Training on PAS 55
20. Training, workshop
21. Revisit PAS 55 and organise training
22. Revision of AM Policies
23. Training on PAS 55
24. I recommend training for the whole country!
25. Training
26. Assessors to assist in the AM process
27. To be assisted to improve further
28. Asanra should assist Member States achieving the ideal score as per PAS 55. Engagement of AM specialists to assist.
29. Member States to consider training action towards closing the identified gaps
30. Asanra to encourage Member States to establish AM teams/structures
31. Results of AM
32. AM Policy formulation and implementation
33. Implement; involve more executive managers
34. Taking another training program
35. Sharing up the review results as well as any documents from the IAM which we could use to do better final rating
36. I suppose should now take the next step of educating people from top-down and achieving goals
37. Implementation, forging a way forward
38. Full report of AM and mechanism to improve
39. A study on the action plan for individual Agencies to improve on the current status of AM
40. The actions to address shortcomings noted from the assessment to improve AM
41. Institutions/countries be assisted to perform best AM procedures
42. Results should be communicated as soon as they are ready
43. Improve on the noted gaps
44. The Agency should try to accept the standards because it seems a nice standard for our countries
45. The review results should be given to the Chief Executive for records and comparison
46. Help the countries to improve the management of their road assets
47. To implement the recommendations
48. The time allocated was very tight; I suggest to carry on with this exercise
49. Member States to have systematic training on AM
50. Road map strategy for establishing AM System
51. Assistance in training and funding improvement
52. Roadmap and timeline for each member state
53. Training on AM system
54. Road map
Used suggestions regarding recommendations

1. Reduce # of questions (max 40)
2. Have roads oriented questions
3. Combine some of the questions that are similar
4. Is good that we have known the consultants
5. Wish we knew them during self assessments so that we could have had a possibility to ask on some questions for clarification
6. Periodic reviews necessary
7. Take representatives to other countries where it was implemented for appreciation
8. More information on PAS 55
9. Training of personnel on AM
10. Provide literature on the PAM tool
11. There should be an in house training on asset management
12. Need for more time ..?
13. It would be more helpful if every attendant understands PAS 55
14. Funding
15. Training on PAS 55
16. Human resources training and development
17. Come up with risk management plan
18. To organise a workshop to further address AM
19. AM consultants to assist in systematically issues
20. Addressing the identified gaps
21. Member States be assisted to establish AM
22. Frequent meeting between Member States (IT committee)
23. Follow up by Asanra to see if Member States are improving
24. Asanra to consider funding workshops to assist Member States
25. More workshops on AM
26. Interviewees to be invited to the result presentations
27. More time spend on difficult questions
28. It was very good, honestly thank you
29. Continuous email exchange to take us to the next step
30. Job well done! very informative!
31. Great exposure to AMS
32. Training to more members of institution on PAS 55
33. Recommend on beforehand who is to participate in the review exercise
34. PAS 55 also consider the quality of a requirement instead of its presence only
35. Awareness of PAS 55 be enhanced
36. Meeting in January 2014 involve CEO’s and Asset Owners apart from IT
37. Put in place a procedure for regular assessment to monitor progress
38. Players outside institutions being involved in AM
39. TOP management should be trained on PAM
40. Monitoring and evaluation system review
41. Sensitise higher management levels including Asset Owner
42. Revise the PAM to reflect actual situation
43. Keep data
44. Asanra should continue supporting this
45. Representatives from each Directorate should be involved coming to the review
46. The methodology of the PAM has an inherent deficiency (human) as it has too many questions and are interconnected so many aspects might be over weighted or underweighted
47. Keep consulting the Member States
48. Share different experience with Member States
49. Customize the tool country specific midpoints & maturity levels
50. Training on asset management for the organisation
51. Customised examples for road sector for reference
52. Additional support to be given to member states towards implementation
53. The tool for assessments should be more eager to comprehend and should be specific for the road industry
54. Align the questionnaire to access infrastructure management
Feedback form review self assessments PAM

Name: ..................................................................................

Member State: ........................................................................

Date: ..................................................................................

Tick your opinion regarding:

<table>
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<tr>
<th></th>
<th>Excellent</th>
<th>good</th>
<th>fair</th>
<th>poor</th>
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What should be the next step?
.................................................................

Do you have any recommendations for improvement?

1. .................................................................................
2. .................................................................................
3. .................................................................................
4. .................................................................................