



**Limpopo Province Department of Public
Works**

**Draft Real Estate Operational
Risk Assessment Report**
15 December 2006

15 December 2006

This report contains 29 pages

Contents

1	Introduction	1
2	Strategic overview	2
3	Background	2.1
3	Vision	2.2
3	Mission	2.3
3	Real Estate operational objective	2.4
4	KPMG risk assessment approach	3
4	Methodology	3.1
4	What is risk in a business environment	3.2
4	Risk definition for the purpose of the workshop	3.2.1
5	Inherent risk	3.2.2
5	Controls	3.2.3
6	Perceived control effectiveness	3.2.4
6	Residual risk	3.2.5
6	Management actions	3.2.6
7	Results	4
8	Graphical illustrations	4.1
8	General	4.1.1
8	Risk graph	4.1.2
9	Inherent risk	4.1.3
11	Identified risk categories	4.1.4
11	Perceived control effectiveness	4.1.5
12	Residual risk	4.1.6
15	Summary of operational risks confirmed during the workshop	4.2
21	The way forward	5
23	Acknowledgements	6
24	Appendix A – Dependency Profile	
25	Appendix B - Assessment tables	

Introduction

We were requested to facilitate one strategic and nine operational risk workshops for the Limpopo Province Department of Public Works (DPW). The first step in this process was to undertake a strategic risk assessment, with a view to best direct Executive Management's efforts towards the highest risks to which DPW is exposed. Accordingly, meetings were held with executive management to identify potential risk areas' threatening the achievement of DPW's strategic objectives prior to the strategic risk workshop which was facilitated by KPMG on 1 December 2006.

Subsequent to the strategic risk workshop an operational risk assessment workshop for Real Estate was facilitated by KPMG on 12 December 2006 to identify potential risk areas' threatening the achievement of Real Estate's operational objective.

The main purpose of this workshop was to involve and assist the General Manager: Real Estate and Management from the programme in assessing and prioritising the risks that need to be managed in order to achieve the vision and vision of DPW as well as the operational objective of Real Estate. The workshop was also designed to assist Real Estate in the establishment of the risk management process as required by the Public Finance Management Act (PFMA) and best practice corporate governance, as well as provide guidance to the internal audit function in the development of a risk based internal audit strategy and annual internal audit plan for DPW.

The participants included amongst others:

- General Manager: Real Estate;
- Senior Managers;
- District Managers; and
- Managers.

We are pleased to provide you with a summary of the results of the operational risk assessment. The risk assessment incorporates the participants' perceptions, assumptions and judgments about Real Estate's operational risks and related controls. The report does not seek to identify all risks faced by Real Estate. It focuses only on those operational risks that were highlighted during the workshop by the workshop participants.

It is important to note that risk management is the responsibility of the General Manager: Real Estate and Management of the programme. KPMG's responsibilities are limited to the facilitation of the operational risk assessment (ranking of the identified operational risks).

A final evaluation regarding the efficiency and effectiveness of the processes and controls in mitigating the identified risks will not be made until the internal audit function perform actual tests during internal audit fieldwork.

1.1

Restriction on distribution of this document

This document has been prepared for the sole and exclusive use of DPW and may not be made available to anyone other than authorised persons within DPW, nor relied upon by any third party without the prior written consent of KPMG.

DRAFT

2 Strategic overview

2.1 Background

The results of the operational risk assessment workshop reflect participants' views only. The facilitators did not attempt to influence the process or results in any way. Their role was merely to gather information in a structured manner and to record the views of the participants.

DPW's vision and mission and Real Estate's operational objective are as follows:

2.2 Vision

The vision of DPW is:

"A leader in the provision and management of provincial government land and buildings"

2.3 Mission

The mission of DPW is:

"Optimal utilisation of resources in the provision and management of provincial land and buildings and the coordination of the implementation of the Expanded Public Work Programme."

2.4 Real Estate operational objective

The operational objective of Real Estate is:

"Management of immovable property utilised for government service delivery."

The risk assessment was performed taking the Real Estate operational objective into account by consistently asking the question:

"What are the major threats that could prevent Real Estate from achieving its operational objective?"

KPMG risk assessment approach

An overview of the risk assessment process followed is presented below:

Methodology

In order for any business to be effective, it must focus its attention and resources on the areas of most significant risk and concern to stakeholders. The risk assessment workshops are fundamental elements of the risk management process.

The principal aims of the operational risk workshop were to:

- Confirm DPW's vision and mission and operational objective of Real Estate;
- Confirm the significant and major risks, identified by management threatening the achievement of these objectives;
- Analyse the risks (impact / potential loss, likelihood / probability); and
- Analyse the perceived control effectiveness.

During the workshop, participants were required to provide input based on their actual knowledge and experience of Real Estate's operations and environment.

What is risk in a business environment

"Risk is inherent in business processes; it arises from actions taken in pursuit of objectives and changes in the external environment. Change in the ways companies do business, in technological developments, in the regulatory framework and the size of the business in terms of the strain such change places on its control mechanisms are all major sources of risk."

-Sir Roger Hurn (Chairman of Marconi plc)

Risk definition for the purpose of the workshop

For purposes of the workshop and implementing an effective risk management system at Real Estate, a risk / threat was defined as follows:

"Uncertain future events, which could influence the achievement of the entity's objectives."
- King II

For each risk / threat identified the following was assessed:

3.2.1.1

The impact

This is the **potential magnitude of the impact** on Real Estate's operations **should the risk / threat actually occur**. No account of existing controls is taken into consideration in assessing the impact of risks. The impact was categorised into 5 different levels, namely:

Catastrophic	Critical	Serious	Significant	Minor
--------------	----------	---------	-------------	-------

For a detailed explanation of the different categories please refer to **Appendix A**.

3.2.1.2

The probability of occurrence

This is the likelihood that the identified risk / threat will occur within a specified period of time (between 1 and 3 years) on the basis that **management have no specific / focused controls in place to address the risk / threat**. The probability of occurrence was categorised into 5 different levels, namely:

Almost certain	Likely	Possible	Unlikely	Rare
----------------	--------	----------	----------	------

For a detailed explanation of the different categories please refer to **Appendix A**.

3.2.2

Inherent risk

Inherent risk is the *product of the impact of a risk and the probability of that risk occurring before the implementation of any direct controls*. The score for inherent risk assists management and internal audit alike to establish relatively between all the risks / threats identified. Please note that at this stage no account is taken of existing controls implemented by management.

This indicator may be used to assign / measure the level of management effort / resources required to control the relevant risks and to determine the level of internal audit focus required.

3.2.3

Controls

Controls are the processes / functions / programmes that Management and the General Manager: Real Estate have put in place, and rely upon, to manage the major and significant risks. At this operational risk assessment workshop we have limited ourselves to the ranking of the perceived effectiveness of these processes.

3.2.4

Perceived control effectiveness

The participants assessed the control effectiveness based on their understanding of the control environment currently in place at BPW. This is a measure of how well management perceives the control processes to be working and effectively managing the risks. Processes / controls were categorised into 5 different levels of effectiveness, namely:

Very good	Good	Satisfactory	Weak	Unsatisfactory
-----------	------	--------------	------	----------------

For a detailed explanation of the different categories please refer to Appendix A.

3.2.5

Residual risk

This is the score of risk that Real Estate is exposed to taking into account the potential impact of the risk, the probability of the risk occurring and the related control processes which are in place to manage that risk. *Residual risk / exposure is therefore the product of the inherent risk and the control effectiveness factor.*

This information will assist decision makers in assessing the acceptability of the residual risk / exposure and in deciding whether further management action is required to effectively control the risk.

3.2.6

Management actions

Based on the relative score of the residual risk / exposure, management will need to decide whether or not they are willing to accept the identified level of residual risk / exposure.

If the residual risk is considered to be too high, then an action plan will then need to be developed outlining the identified action/s to reduce the risk to a level that is more acceptable to management and other stakeholders.

Management actions may include the re-examination of the control design and / or the business / quality objective identified earlier in the risk management process.

The action plans must clearly identify:

- The required action;
- The person responsible for implementing the action; and
- The expected date of implementation.

4

Results

The workshop participants agreed and confirmed the vision and mission of DPW as well as the operational objective of Real Estate. The risks identified by the workshop participants of Real Estate were rated and the control effectiveness of the managing processes and / or persons currently responsible to mitigate or manage each of these risks was also assessed in terms of perceived control effectiveness.

Participation and discussion during the workshop was open and constructive. We were particularly impressed with the level of attendance of the participants.

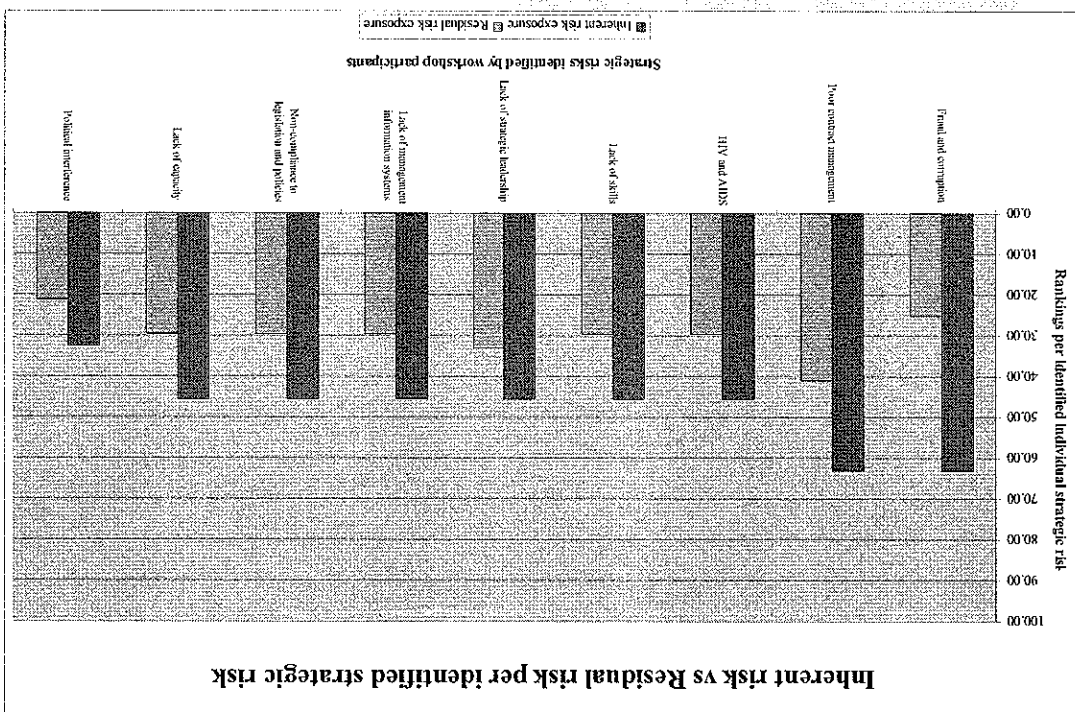
The results of the risk assessment workshop, from highest to lowest inherent risk, have been depicted graphically in **Paragraph 4.1**.

The major / significant risks currently faced by Real Estate, as identified by the participants during the strategic risk workshop, are presented in **Paragraph 4.2** from highest to lowest inherent risk.

4.1 Graphical illustrations

4.1.1 General

The identified operational risks are depicted graphically below.



4.1.2 Risk graph

The relative size of operational risks threatening the achievements of DPW's vision and mission and operational objective of Real Estate as well as the perceived control effectiveness for each of the risks, as identified by the workshop participants, are depicted graphically above from the highest to the lowest inherent risk.

The inherent nature of the risk is the assessment of the risk without specific, focused controls in place. The residual nature of the risk is the assessment of the risk taking into account the existing controls and their perceived effectiveness.

The larger the difference between the inherent and residual risk factors the more effective the controls in place are perceived to be.

The smaller the difference between the inherent and residual risk factors, the more management actions and improved control effectiveness is needed to ensure that the risk is properly managed.

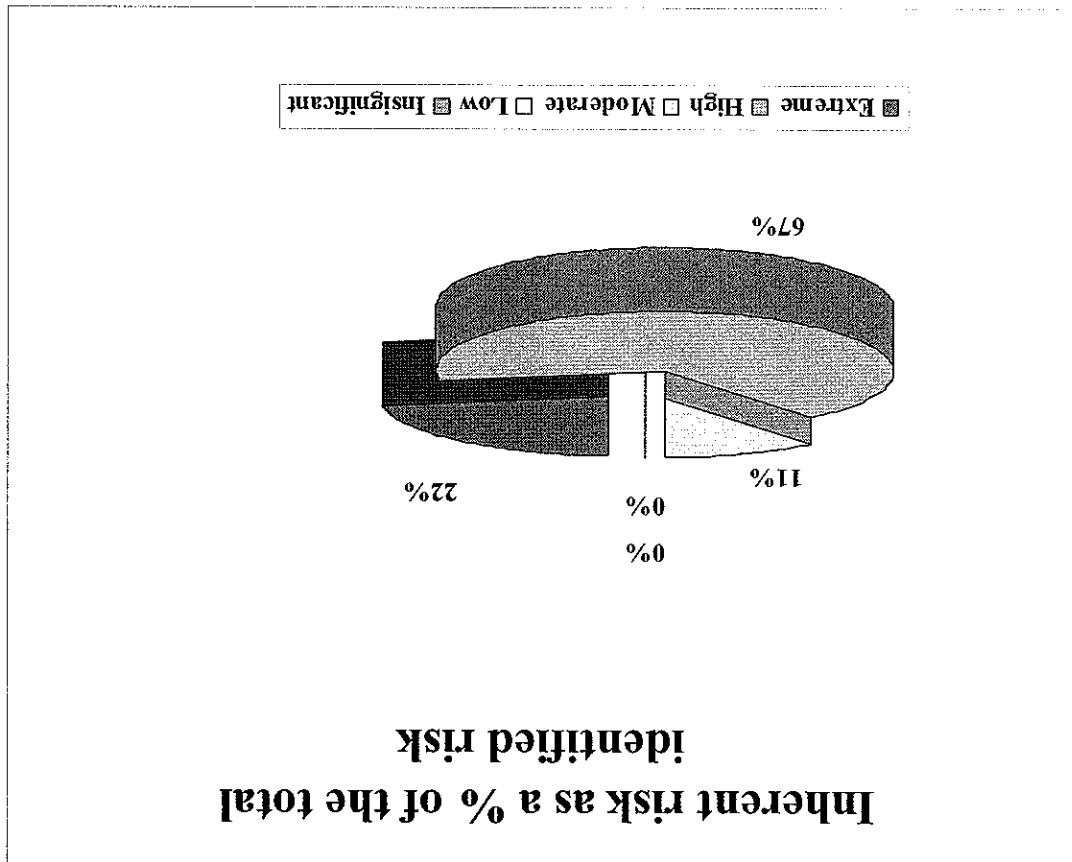
Management should take cognisance that the higher the inherent risk factor, the greater the need for control effectiveness and therefore the more management attention the item should attract in order to:

- Maintain the quality of control where control effectiveness is considered adequate; and
- Improve quality of control further where residual risk is considered to be too high.

4.1.3

Inherent risk

Of the 9 operational risks identified by Management of Real Estate 2 (22%) were assessed as extreme by the participants attending the risk workshop.



Risks rated with extreme inherent risk ratings are as follows:

- Fraud and corruption; and
- Poor contract management.

Risks rated with high inherent risk ratings are as follows:

- HIV and AIDS;
- Lack of skills;
- Lack of strategic leadership;
- Lack of management information systems;
- Non-compliance to legislation and policies; and
- Lack of capacity.

Risks rated with moderate inherent risk ratings are as follows:

- Political interference.

Risks rated with low inherent risk ratings are as follows:

- None identified by workshop participants.

Risks rated with insignificant inherent risk ratings are as follows:

- None identified by the workshop participants.

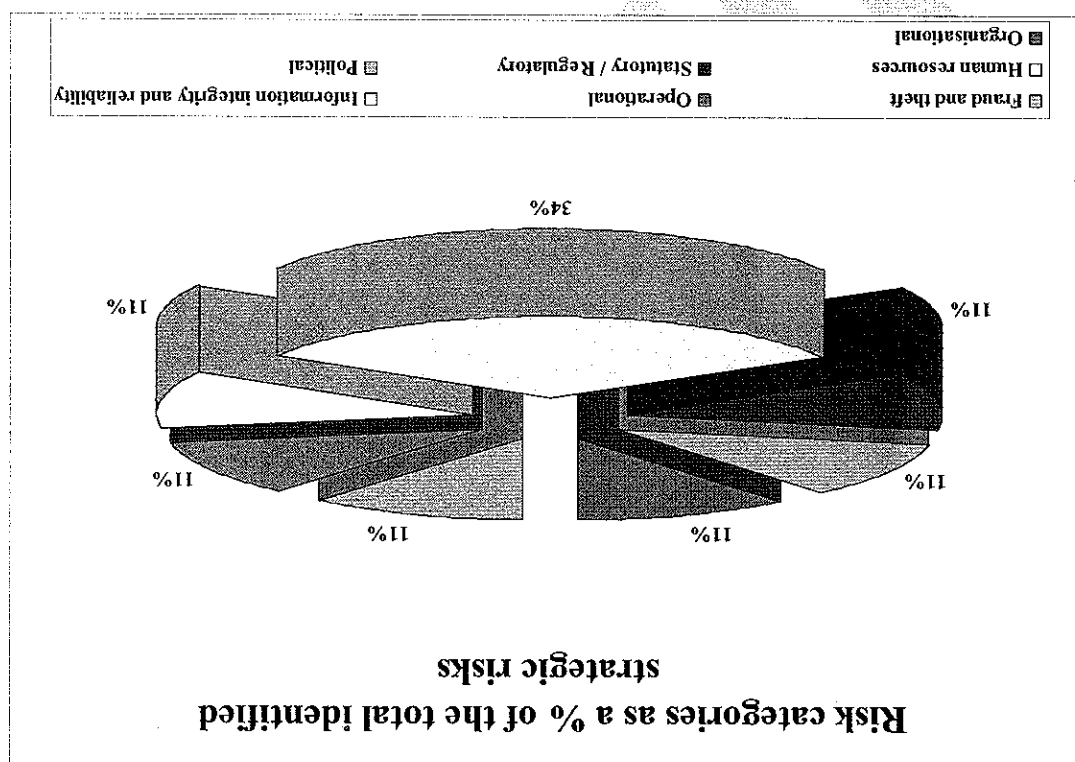
The above analysis clearly illustrates the importance of focusing and actively managing the highest risk areas first and then gradually working down the list.

The higher the inherent risk value, the greater the need for good quality controls and control effectiveness and the more Management, General Manager, Real Estate and Internal Audit attention the item should attract.

4.1.4

Identified risk categories

The 9 operational risks identified by management were categorised into 7 identified risk categories. This clearly indicates that risk from both an internal and external environment were identified. It also clearly indicates that risk from both core and support processes were identified.



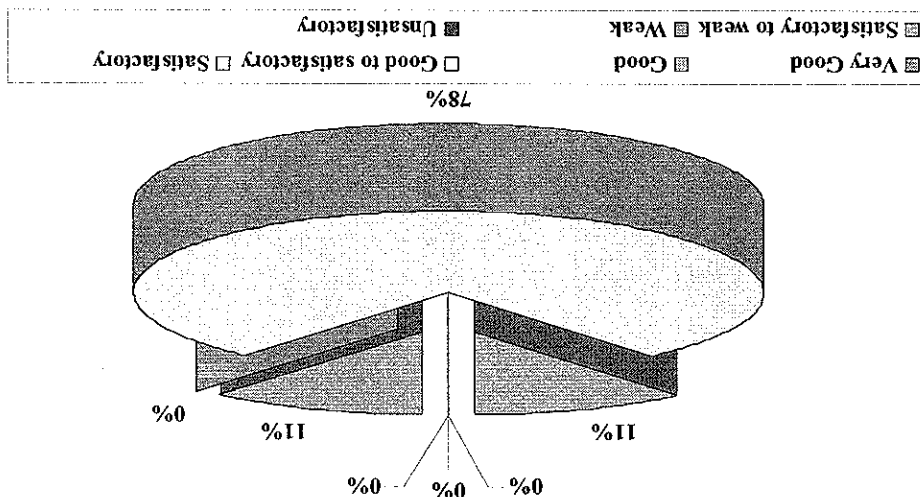
Once again Management should assess whether the assessments and this analysis is correct and take appropriate corrective action.

4.1.5

Perceived control effectiveness

As indicated above, 9 operational risks were identified by management. Of the 9 operational risks identified by management 1 (11%) was evaluated as satisfactory to weak by the participants attending the workshop.

Perceived control effectiveness as a % of the total risks identified

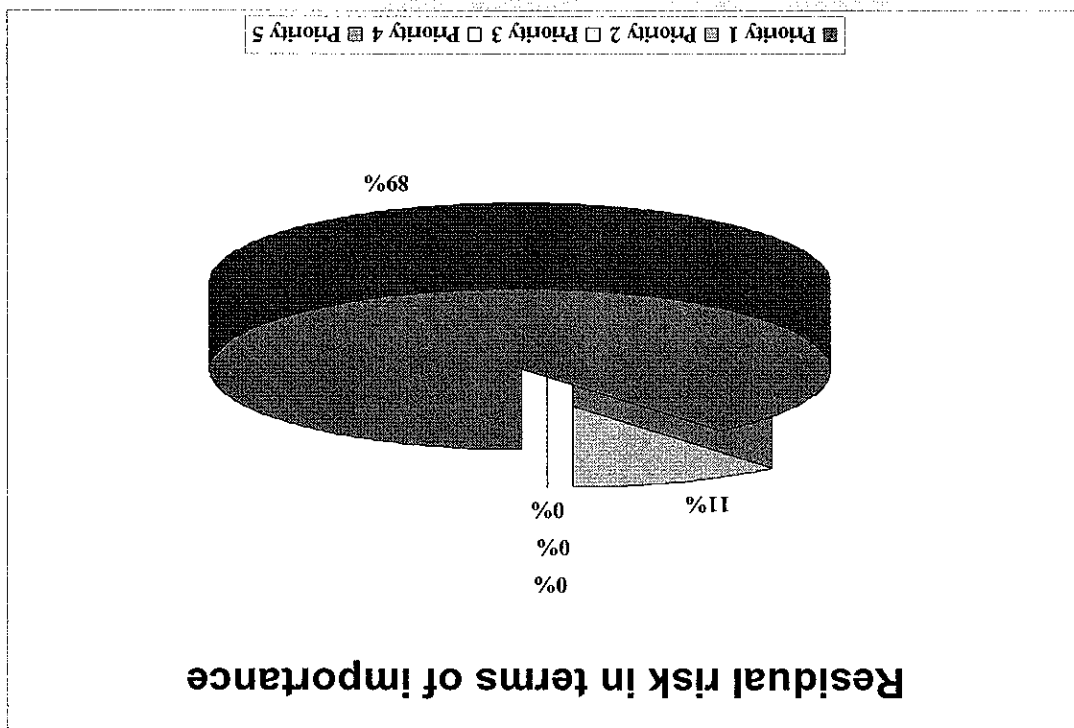


89% of controls managing the risks are perceived to be either satisfactory or good. Management should assess whether the assessments and this analysis is correct and take appropriate corrective action.

4.1.6 Residual risk

The residual graph represents the highest assessed risks faced by Real Estate after taking into account the existing controls and their perceived control effectiveness. The higher the residual risk, the greater Real Estate's exposure to loss or loss of opportunities. These areas should be a guide as to the priority for management effort and the allocation of resources to improve the design / quality of control and control effectiveness.

The graph below indicates the residual risk in terms of importance / priorities.



The KPMG Risk Methodology classifies and defines residual risk as the following priorities:

- Priority 1:** The risk is intolerable and requires action to further mitigate the exposure;
Priority 2: The risk is intolerable and requires management intervention to further mitigate the exposure;
Priority 3: This risk exposure exceeds the current risk appetite and should be monitored to ensure prompt intervention if so required;
Priority 4: The risk exposure is tolerable; and
Priority 5: Risk may be over controlled.

As indicated in the graph above, all of the identified and assessed risks in terms of residual risk are assessed as requiring management intervention.

Strategic risks rated as **Priority 1** risks are as follows:

- Fraud and corruption;
- Poor contract management;
- HIV and AIDS;
- Lack of skills;
- Lack of strategic leadership;

- Lack of management information systems;
 - Non-compliance to legislation and policies; and
 - Lack of capacity.
- Strategic risks rated as Priority 2 risks are as follows:*
- Political interference.
- Strategic risks rated as Priority 3 risks are as follows:*
- None identified by workshop participants.
- Strategic risks rated as Priority 4 risks are as follows:*
- None identified by workshop participants.
- Strategic risks rated as Priority 5 risks are as follows:*
- None identified by workshop participants.

4.2 Summary of operational risks confirmed during the workshop

Strategic risk number	Risk description	Consequence of risk	Link to strategic focus area	Risk categories	Link to dependency profile	Risk owner	Impact	Likelihood	Inherent risk exposure	Current controls	Perceived control effectiveness	Additional Actions	Residual risk exposure
1	Fraud and corruption	Financial loss Harm to reputation Inability to meet targets Cost inefficiencies Poor quality of service delivery	1	Fraud and theft	Key assets Alliances	Managers	70.00	0.90	63.00	Implemented disciplinary procedures for transgressors Minimum information security standards Reporting of fraud incidents to Risk Approved Fraud Prevention Plan for DPW Fraud Awareness Campaigns (Induction) Segregation of duties within Real Estate Approved and implemented delegation of authority Reporting of fraud related activities to SAPS and Public Service Commission	0.40	Vigorous implementation of fraud strategy Deadline date: 31 March 2007 Responsible Official: Managers	0.55
2	Poor contract management - Legal liability due to breach of contracts - Use of consultants - Lack of continuity	Inability to meet targets Cost inefficiencies Poor quality of service delivery Financial loss as a result of litigation	1	Operational	Key assets Segmentation	Senior Managers	70.00	0.90	63.00	Signed lease agreements, contracts and Service Level Agreements Developed and implemented work plans Deeds of sale Commitment letters Deed of donations	0.65	Investigate the possibility of acquiring rental management software Deadline date: 31 March 2007 Responsible Official: General Manager: Real Estate	0.55

*Limpopo Province Department of Public Works
Draft Real Estate Operational Risk Assessment Report
15 December 2006*

Strategic risk number	Risk description	Consequence of risk	Link to strategic focus area	Risk categories	Link to dependency profile	Risk owner	Impact	Likelihood	Interrent risk exposure	Current controls	Perceived control effectiveness	Additional Actions	Residual risk exposure
- Five										Physical inspections Coordination with legal services		Develop formalised property inspection plan Deadline date: 31 March 2007 Responsible Official: District Managers (Residential) and Senior Manager: Property Management (Commercial and Offices) Initialise liaison forum meetings with other departments Deadline date: 31 March 2007 Responsible Official: Senior Manager: Property Management Identification of contract management training Deadline date: 31 March 2007 Responsible Official: Senior Managers Property Management and Senior Manager: Land Management	

*Limpopo Province Department of Public Works
Draft Real Estate Operational Risk Assessment Report
15 December 2006*

Strategic risk number	Risk description	Consequence of risk	Link to strategic focus area	Risk categories	Link to dependency profile	Risk owner	Impact	Likelihood	Inherent risk exposure	Current controls	Perceived control effectiveness	Additional Actions	Residual risk exposure
3	HIV and AIDS - absenteeism - low productivity	Poor productivity Inability to meet targets Financial loss Institutional memory loss	1	Human resources	Key assets	General Manager	70.00	0.65	45-50	Implemented Employee Awareness Programme Approved and implemented HIV / Aids Policy Implemented HIV / Aids awareness campaigns Use of condominiers and posters etc Implemented Voluntary Counselling and Testing	0.65	Discuss possibility of inviting EAP for awareness Deadline date: 31 January 2007 Responsible Official: General Manager	
4	Lack of skills - relevant specialised skills - mismatching	Cost inefficiencies Inability to meet deadlines and targets Poor quality of service delivery	1	Human resources	Key assets	Senior Managers Managers	70.00	0.65	45-50	Annual training plan Implemented Performance Management System Informal in-service training Multi-skilling (job rotation)	0.65	Communicate needs to Human Resources for inclusion in annual training plan Deadline date: 31 March 2007 Responsible official: General Manager	
5	Lack of strategic leadership - silo management - lack of coordination within DPW - poor communication - lack of managerial support	Silo Mentality Poor performance Poor quality of service delivery Inability to meet deadlines and targets	1	Organisational	Strategic Management Process	General Managers Senior Managers	70.00	0.65	45-50	Attendance and participation of Monthly management meetings Attendance and participation of Strategic planning meeting Attendance and participation of Management forum	0.73	Implement monthly sub-directorate meetings Deadline date: 28 February 2007 Responsible Official: Managers	

*Limpopo Province Department of Public Works
Draft Real Estate Operational Risk Assessment Report
15 December 2006*

Strategic risk number	Risk description	Consequence of risk	Link to strategic focus area	Risk categories	Link to dependency profile	Risk owner	Impact	Likelihood	Inherent risk exposure	Current controls	Perceived control effectiveness	Additional Actions	Residual risk exposure
6	Lack of management information systems - debt management - property management - breakdown of IT system	Inability to meet deadlines and targets Poor decisions Cost inefficiencies Poor quality of service delivery Financial loss	1	Information integrity and reliability	Key assets	Senior Managers	70.00	0.65	45.50	Attendance and participation of Quarterly Integrated Forum meeting Intranet Circulars and Memorandums Approved and implemented 5 Year Strategic Plan Participation and attendance of annual Lekgotla Implemented Performance Management System Monthly reporting against targets Approved and implemented delegation of authority	0.65	Investigate the possibility of acquiring rental management software Deadline date: 31 March 2007 Responsible Official: General Manager Identify specific training needs and communicate to General Manager: Real Estate Deadline date: 28 February 2007	

*Limpopo Province Department of Public Works
Draft Real Estate Operational Risk Assessment Report
15 December 2006*

Strategic risk number	Risk description	Consequence of risk	Link to strategic focus area	Risk categories	Link to dependency profile	Risk owner	Impact	Likelihood	Inherent risk exposure	Current controls	Perceived control effectiveness	Additional Actions	Residual risk exposure
7	Non-compliance to legislation and policies - non-adherence to work ethics - change in legislation - misinterpretation of roles and mandates	Possible prosecution Financial loss Negative publicity and harm to reputation	1	Statutory	Key assets External forces and agents	Managers	70.00	0.65	45-50	Disposal plan (guidelines) Information Technology support from GITO Use of FINEST and BAS Attendance and participation at monthly management meetings Monthly rental meetings	0.65	Develop compliance checklists in areas of operations Deadline date: 30 April 2007 Responsible Official: Managers Develop formalised property inspection Deadline date: 31 March 2007 Responsible Official: District Managers (residential) and Senior Manager: Property Management (commercial and office)	45-50
										Approved and implemented departmental policies and procedures Supervision and reviewing processes Awareness campaigns Approved and implemented Annual Business Plan Use of compliance checklists Inspections Attendance and participation at provincial state land disposal committee Signed code of conduct Signed oath of secrecy Implemented Performance Management System			

*Limpopo Province Department of Public Works
Draft Real Estate Operational Risk Assessment Report
15 December 2006*

Strategic risk number	Risk description	Consequence of risk	Link to strategic focus area	Risk categories	Link to dependency profile	Risk owner	Impact	Likelihood	Inherent risk exposure	Current controls	Perceived control effectiveness	Additional Actions	Residual risk exposure
8	Lack of capacity - lack of staff - constant changes in organisational structure	Inability to meet targets and deadlines Poor quality of service delivery Institutional memory loss	1	Human resources	Key assets	General Manager	70.00	0.65	45.50	Outsourcing of certain functions Use of Interns Counter offers to staff leaving Attendance and participation at monthly management meetings Attendance and participation at quarterly labour forums Report to Treasury on vacancies Approved organogram for Real Estate Approved Annual Business Plan linked to approved organogram and budget	0.65	implement weekly follow-ups with Human Resources to fill vacancies Deadline date: 31 January 2007 Responsible Official: Senior Managers and Managers	
9	Political interference	Inability to meet targets Inability to meet deadlines	1	Political	External forces and agents	General Manager	50.00	0.65	32.50	Legislation and mandate Bi-weekly EXCO meetings Imbizo Approved and implemented 5 Year Strategic Plan Implemented policies and procedures relating to political interference	0.65	None identified	21.43

5

The way forward

Having completed the Real Estate risk assessment (a key step in the overall risk management process), management now needs to focus on ensuring it understands the risk universe within which it operates. Achieving the operational intent within the risk universe involves identifying what has to be managed and ensuring that such management and control actually takes place timeously and effectively.

The operational level risk assessment workshop has provided a basis for commencing the implementation of a formal risk management framework at Real Estate.

The next challenge is to develop and implement a structured plan for implementing effective and ongoing risk management at Real Estate.

This should include the following key phases and steps, amongst others:

5.1.1.1 Project planning

Develop a detailed project plan to implement Enterprise-wide Risk Management at Real Estate, meeting the key requirements of:

- The Public Finance Management Act;
- the King Report on Corporate Governance (King 2); and
- the Standards of the Institute of Risk Managers of South Africa.

5.1.1.2 Risk awareness and strategy

- Develop and rollout an ongoing risk management awareness and training programme for all levels of management – to build upon the current level of understanding and knowledge.
- Establish ownership and accountability for risk management within Real Estate - incorporate risk responsibilities in key management mandates, charters, performance contracts, job descriptions, etc.
- Include risk management as a key agenda item on key meetings, e.g. Executive Management.
- Gradually formalise and approve a risk strategy that is aligned with and supports the achievement of Real Estate's operational direction.

5.1.1.3 Risk management structures and culture

- Ensure an independent committee is formally charged with overseeing the risk management process – this may form part of the Executive Committee mandate or may be allocated to a separate body that reports back at Executive Committee meetings.
- Appoint / identify a dedicated “Chief Risk Officer” responsible for coordinating and analysing Real Estate’s risk management and assurance efforts on an ongoing basis, and reporting to key stakeholders.
- Establish a team of “Risk Champions” who will work closely with the “Chief Risk Officer” and will drive the risk management initiatives within their respective directorates.

5.1.1.4 Integrated risk assessments and risk management activities

- Maintain the Operational Risk Register current and up to date – including a formal risk identification and assessment process conducted at least annually.
- Incorporate the identified operational risks into both the operational plan for 2007 / 2009 and the annual plans.
- Allocate responsibility for each individual major risk to a senior (and accountable) member of management (risk owner) – including the implementation of management action plans to improve levels of control where required.
- Regular management / monitoring of the identified exposures through:
 - Further development of specific action plans to address individual exposures;
 - Allocation of individual officials responsible for action plans;
 - Setting of due dates / implementation of time frames;
 - Development of key performance indicators by which the success of the improved controls can be measured; and
 - Facilitation of sub-process level risk workshops.
- Sub-process level risk workshops should be conducted to reach consensus regarding:
 - Related sub-process level objectives and risks;
 - The alignment of the above with operational focus areas as well as the risks identified in this report;
 - Controls which management relies upon to manage those risks;
 - Perceived and desired effectiveness of those controls; and
 - Areas considered to be lacking in control, which would require further management action.

- Integrate the active monitoring of identified risks and related controls (including the allocation of individual "risk owners") into the ongoing activities of the Directorates, Management, General Manager, Real Estate and the Risk Committee;
- Ensure there is regular report-back by the "risk owners" on the status of the risks and related internal controls – This should be performed as part of the normal management activities, e.g. monitoring performance against "risk based" business plans and budgets.

A Real Estate specific risk management framework developed through this process will not only ensure that best practice corporate governance requirements are adhered to but will also improve the effectiveness of management in discharging their own management and governance responsibilities.

Acknowledgements

We would like to thank the General Manager, Real Estate and all workshop participants of Real Estate for their cooperation and participation in the workshop.

Draft Real Estate Dependency Profile

24

Appendix B - Assessment tables

Below are the tables used to size the risks according to the potential impact of the risk, the likelihood that the risk will occur, as well as the effectiveness of existing controls. The following three tables provide the legends for the respective decisions required during the workshop.

Qualitative assessment of impact

The table below was used to assist management in quantifying the impact of a specific risk occurring.

Impact	Continuity of Supply	Safety & Environmental	Technical Complexity	Financial
Catastrophic	100 Risk event will result in widespread and lengthy reduction in continuity of supply to customers of greater than 48 hours	Major environmental damage Serious injury (permanent disability) or death of personnel or members of the public Major negative media coverage	Use of unproven technology for critical system / project components / technical interdependencies between system / project components	Significant cost overruns of >20% over budget Affect on revenue / asset base of >10%
Critical	70 Reduction in supply or disruption for a period ranging between 24 & 48 hours over a significant area	Significant injury of personnel or public Significant environmental damage Significant negative media coverage	Use of new technology not previously utilised by the entity for critical systems / project components	Major cost overruns of between 10 % & 20 % over budget Affect on revenue / asset base of between 5% & 10%
Serious	50 Reduction in supply or disruption for a period between 8 & 24 hours over a regional area	Lower level environmental, safety or health impacts Negative media coverage	Use of unproven or emerging technology for critical systems / project components	Moderate impact on revenue and assets base
Significant	30 Brief local inconvenience (work around possible) Loss of an asset with minor impact on operations	Little environmental, safety or health impacts Limited negative media coverage	Use of unproven or emerging technology for systems / project components	Minor impact on revenue and assets base
Minor	10 No impact on business or core systems	No environmental, safety or health impacts and/or negative media coverage	Use of unproven or emerging technology for non-critical systems / project components	Insignificant financial loss

Qualitative assessment of probability of likelihood

The table below was used to assist management in quantifying the likelihood of a specific risk occurring.

Likelihood	Qualification Criteria	Rating
Almost Certain	The risk is almost certain to occur in the current circumstances	0.90
Likely	More than an even chance of occurring	0.65
Possible	Could occur quite often	0.40
Unlikely	Small likelihood but could happen	0.20
Rare	Not expected to happen - Event would be a surprise	0.10

Qualitative assessment of perceived control effectiveness

The table below was used to assist management in quantifying the perceived effectiveness of controls to mitigate or reduce the impact of specific risks.

Effectiveness	Qualification Criteria	Rating
Very Good	Risk exposure is effectively controlled and managed	0.20
Good	Majority of risk exposure is effectively controlled and managed	0.40
Satisfactory	There is room for some improvement	0.65
Weak	Some of the risk exposure appears to be controlled, but there are major deficiencies	0.80
Unsatisfactory	Control measures are ineffective	0.90

Inherent Risk

The table below was used to categorise the inherent risk exposure of the identified risks into the 5 different categories.

Inherent Risk	Rating
Extreme	≥ 50
High	≥ 35 < 50
Moderate	≥ 25 < 35
Low	≥ 15 < 25
Insignificant	< 15

Residual Risk

The table below was used to categorise the residual risk exposure into the 5 different categories.

Residual Risk	Rating
Priority 1	≥ 25
Priority 2	≥ 17.5 < 25
Priority 3	≥ 12.5 < 17.5
Priority 4	≥ 7.5 < 12.5
Priority 5	< 7.5