

The Compensation Fund

Preliminary Report

2nd Draft

1. Introduction

The Compensation Fund provides compensation to employees who are injured or contract diseases through the course of their employment. The Fund is governed by the Compensation for Occupation Injuries and Diseases Act (COIDA) of 1993 (amended in 1997) which determines how (and by whom) the fund is administered and the conditions for eligibility for compensation.

This report looks briefly at the historical context of compensation in South Africa followed by an analysis of the current state of compensation for occupational injuries and diseases. This includes an assessment of the industry structure, the claims process, coverage and how employer contributions are determined. In addition, an analytical discussion of compensation is provided followed by issues for further research.

2. History of Compensation in South Africa

The first Workmen's Compensation Act (WCA) was passed in 1914. Prior to the passing of the act employees injured at work had to institute a common law suit against the employer for negligence. However the difficulty of proving negligence and the high cost of litigation rendered the worker's common law right minimal. Compensation would only be paid if blame could be laid directly with the employer. While the 1914 WCA only recognised injuries, amendments to the act in 1917 extended coverage to provide for specified industrial diseases. In its early form, the WCA was ineffective at providing adequate compensation because employers were not compelled to insure their workers against the risk of workplace injuries. At the same time, firms that did not have insurance could face insolvency from a serious incident, while the employee affected could face poverty. As a result, by 1930, workers, industry and government recognised the need for compulsory insurance (Budlender, 1984).

As the mining industry faced a high accident rate, the Rand Mutual Assurance Company started in 1894. By 1914 half the mines belonged to this self-insurance scheme and by 1931 (when a new WC bill came into effect) all mining companies belonged to Rand Mutual. The member companies were exempted under the 1931 bill. The 1934 WCA made insurance compulsory, through private companies rather than a state fund favoured by workers and trade unions. While the 1934 WCA had increased benefits, organised labour was unhappy with the

scheme as the premiums were too high. There were 57 insurance companies that were organised such that competition was limited. The Federated Employers Mutual Assurance Company started in 1936 in response to the situation (Budlender, 1984).

In 1941, a new coalition government was formed which included the Labour Party. The political interest of industry favoured concessions to labour to gain support for the war effort. As a result the 1941 WCA was passed in which all accidents were to be reported to a WC Commissioner. There were to be no more private compensation agreements between employers and workers. Compensation would be paid from a state fund to which all employers would contribute on the basis of companies' wage budgets. The 1941 Act aimed to institute a state scheme as well as increase benefits (Budlender, 1984). While there have been subsequent amendments to the 1941 Act (see Appendix 2) these amendments have not made significant changes to the fundamentals of the act.

3. The Compensation for Occupational Injuries and Diseases Act (COIDA) of 1993 (amended 1997)

Despite the numerous amendments of the 1941 Workmen's Compensation Act, there remained a number of shortcomings. In 1993 the Compensation for Occupation Injuries and Diseases Act (COIDA) replaced the former WCA to address these issues. Thus, while the WCA had a pay ceiling and therefore did not cover employees of higher income groups, the 1993 Act covers all employees for compensation not just those classified as 'workmen'. A possible reason for this is that employees (such as professionals, office workers etc) who do not do manual labour are less likely to claim for compensation but including them with the 'workmen' would increase the pool of funds available to pay compensation to those workers in higher risk categories i.e. there would be cross-subsidisation of lesser-paid workers by higher-paid. In addition, the COIDA also changed from only covering widows in the WCA to cover the surviving spouse irrespective of gender. Furthermore, new developments in the labour market, especially the casualisation of works through labour brokers, meant that significant numbers of workers were no longer covered under the WCA as they were no longer directly employed by the companies. Under COIDA, all types of work relationships are covered including works that have been brokered. Finally, occupational diseases under the WCA were compensated by calculating the last salary received while in employment. This meant that if a worker was diagnosed with a disease years after their employment, they would receive insufficient compensation given the inflation rate. Whereas under COIDA (Section 67:2), if the employee is no longer in employment at the time of the commencement of the disease, his calculated earnings will be based on the earnings he would most likely be earning if still working. Therefore if the employee is diagnosed with a work-related illness many years after their employment, their compensation will be in line with current prices unlike the compensation provided under the WCA.

The COIDA provides a system of no-fault compensation for employees injured or who contract diseases during the course of their employment. “No-fault compensation” is a legal rule that an aggrieved party is entitled to compensation without having to prove any other party was at fault for the accident. The entire structure of the compensation scheme in South Africa is defined within the Act. Thus, who contributes to the fund, the amount of the contribution, who is covered by the fund, the type of injuries and diseases covered by the fund as well as the size of compensation are stipulated in the Act. Furthermore, it clearly defines the procedures, the agents and their responsibilities. Any recommended changes to the compensation scheme in South Africa would result in an amendment of the COIDA. While the COIDA is supposed to cover all workers in South Africa for work related accidents and diseases, it currently excludes domestic, informally employed, independent and self-employed workers from compensation (Taylor, 2002).

It has been argued by the Compensation Fund that the rationale for the exclusion of domestic workers and informally employed is that it is logistically impossible to administer. For domestic workers it is difficult to administer and monitor as there is potential for a single employee to have multiple employers. In case of an injury, the domestic worker has to take the civil route of claiming compensation from the employer. Self-employed are excluded from the act as there is no contract of employment. Military and police as well as correctional services are generally included, except in the case of war.

3.1 Mining Diseases

Due to the nature of the mining industry, certain diseases are compensated under the Occupational Diseases in Mines and Works Act 73 of 1973 (ODIMWA). The diseases covered under this act are those that have been determined to have been contracted while performing ‘risk work’ in mines or related ‘works’ and include pneumoconiosis, tuberculosis, permanent obstruction of airways and progressive systemic sclerosis. Where mining diseases are not covered under ODIMWA, the COIDA applies and Rand Mutual is liable for all diseases as specified in the Act.

A report of the Commission of Inquiry into the Compensation for Occupational Diseases in the Republic of South Africa by the Department of Mineral and Energy Affairs in 1981 found that there is no reason for the separation of mineral related occupational diseases and other occupation diseases. Both ODIMWA and COIDA provide for the management of permanent, irreversible, incurable conditions while COIDA also provides compensation for treatable conditions. As ODIMWA deals solely with these incurable conditions it provides lump sum benefits only while COIDA provides monthly payments for permanent disablement assessed at over 30% that is related to the employee’s wage.

The current plan is the merger of the ODIMWA and the COIDA into a new act in the next three years to ensure better monitoring, reduce accidents and close gaps within social insurance. There is currently a problem of claims filed with incorrect departments, double compensation being paid, different standards between departments and lack of equity of compensation being paid. Part of the new proposed structure is to provide integrated inspection services with labour, COIDA, UIF etc. Also the funds for compensation within the department of Health and the CF will be merged. The success of this plan is dependent on the ability of the relevant ministers to agree and take the draft to cabinet (from the Cabinet decision taken in 1999) (Interview with Compensation Fund).

3.2 Employer Registration with Compensation Fund

All employers are obliged to register with a carrier which is either the Compensation Commissioner of the Compensation Fund or a designated mutual association. Employers are then required to provide their respective carrier with the particulars of their businesses. The onus is on the employer to ensure that these details remain up to date. Failure to register for Compensation constitutes an offence.

The employer is to maintain records of the earnings of employees for a period of at least four years. A health and safety representative elected in terms of the Occupational Health and Safety Act (No 85 of 1993) has the right to inspect and if necessary notify the Commissioner of any documentation that the employer should retain in terms of COIDA.

3.3 Claims Process

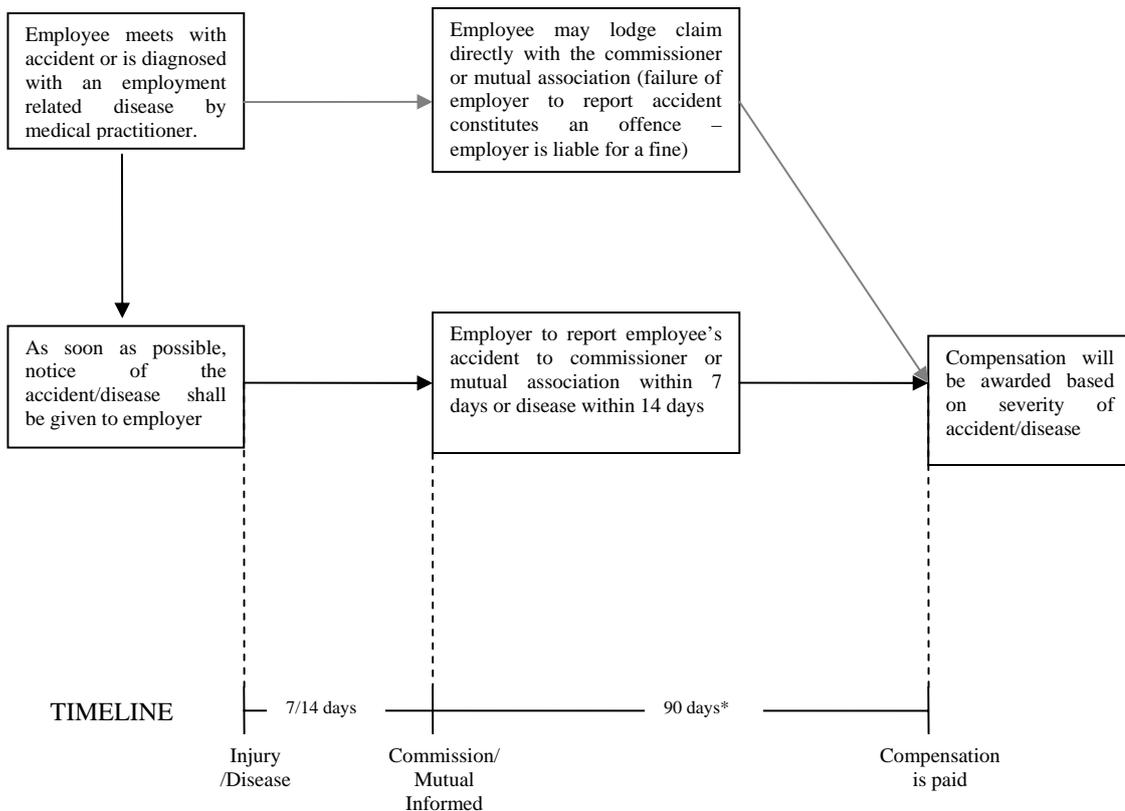
If an employee incurs an accident or is diagnosed with a work-related disease, the employee or their dependents will be entitled to compensation by COIDA. An *accident* is defined by COIDA as a personal injury, an illness or the death of the employee during the course of their employment. An *occupational disease* is a disease that has arisen out of and in the course of employment. The date of commencement of the occupational disease is the date of the first diagnosis of the disease by a medical practitioner.

There will be no periodic payments for temporary disablement (whether partial or full) that lasts for less than three days. It is only if the accident is due to the “serious and wilful” misconduct of the employee that compensation is not payable under the Act, except if the accident results in “serious disablement” or the

employee dies and leaves a financial dependent. An exception can be made in that the carrier may pay the medical expenses. (COIDA, 1993, Section 22)

Figure 1 shows the claims process once the employee has met with an accident or has been diagnosed with a work related disease. The general claims process is stipulated in chapter V of COIDA. The employee has to inform the employer of the accident or the disease where physically able. The employer then is obliged to inform the commissioner or the designated carrier of the employee’s situation within 7 days in the case of an accidents or 14 days in the case of an occupational disease. This applies from the time that the employer is made aware of the condition of the employee. The commissioner will then engage in an inquiry of the lodged claim. Once the severity of the accident or the disease have been established, the commissioner or the designated carrier will compensate the worker for lost income or any other expenses incurred through the accident or disease.

Figure 1 Claim Process under COIDA



Source: COIDA and Interviews

*Compensation Fund turnaround – Mutual Associations have faster turnaround times

If the employer fails to inform the commissioner or the designated carrier, this does not bar the employee from the right to compensation. The right of compensation applies even for cases where the employee fails to inform the employer but the employer is aware of the accident/disease through other sources. An employer that does not comply with the notification process is guilty of an offence and may be liable to pay a fine up to the full amount of compensation due to the employee. This though is difficult to administer by the carrier as the 7/14 day notification period of the employer refers to the time from when the employer was made aware of the injury/disease and not from the time of the accident or the disease diagnosis.

The injured employee is required by the carrier, when deemed necessary, to provide information and documentation. If claims have not been lodged with the commissioner or the designated carrier within 12 months after the accident or the diagnosis of the disease, the worker is not entitled to compensation.

In 2002, the Taylor report indicated that “administrative backlogs” had resulted in inefficient compensation thereby prejudicing workers who had an occupational injury or disease. However according to the carriers this has improved and the average payment turnaround time for the government fund is now 90 days. However, if all documentation is complete and correct, this can fall to 10 days. Carriers have reported that in the last 5 years improved technology has assisted companies to improve efficiency in terms of turnaround times.

3.3 Coverage

Compensation can take the form of payment for loss of earnings (tax free), travelling expenses, medical expenses or pensions. The calculations for compensation are shown in Appendix 3.

The following types of compensation are paid by the Fund or the designated carriers:

- Temporary Total Disablement (TTD) (loss of income/salary)
- Permanent Disablement (PD)
- Medical Costs
- Death benefits

Temporary Total Disablement (TTD)

Compensation in respect of TTD or incapacitation is only payable if the employee is booked off duty for more than three days. It is calculated on the employee’s salary as at the time of the accident and includes all normal allowances for example a 13th cheque. Compensation is paid at the rate of 75% of the employee’s earnings up

to a maximum prescribed by the Minister. For the first three months of TTD, the employer is obliged to pay the employee the compensation which is subsequently refunded by the carrier. After the first three months, compensation is paid directly by the carriers. If the TTD exceeds 24 months, it may be treated as permanent by the Commissioner.

Permanent Disablement (PD)

If the injury or disease results in a permanent anatomical defect, loss of function or disfigurement, which means disablement for employment, the employee is entitled to compensation in respect of permanent disablement (PD). This can include total or partial loss of a limb, impairment of movement of a joint, loss of vision or hearing, restricted lung function, loss of an organ, as shown in Schedule 2 of the Act (see Appendix 4). Schedule 2 is based on the American Medical Association guidelines. Any other PD not prescribed in Schedule 2 is assessed by the Commissioner on condition that it is consistent with the Schedule. The compensation for PD is paid either in a lump sum or a monthly pension depending on the degree of disablement.

PD assessed at 1- 30% is paid in the form of a lump sum and is calculated at 15 times an employee's monthly earnings at the time of the accident subject to a maximum and minimum of such earnings, as prescribed by COIDA. The lump sum payment in the event of PD at less than 30% is calculated pro rata to the lump sum for 30%. If the permanent disablement is assessed at more than 30%, the employee will receive a monthly pension for life. PD for 31-100% is calculated at 75% of the employee's monthly earnings subject to a prescribed maximum and minimum of such earnings. Lesser degrees of disablement (in excess of 30%) will attract pensions proportionate to the degree of disability (with 75% as the maximum baseline).

The compensation due is calculated as follows:

Compensation = (earnings x 75%) x level of disability (% according to schedule)

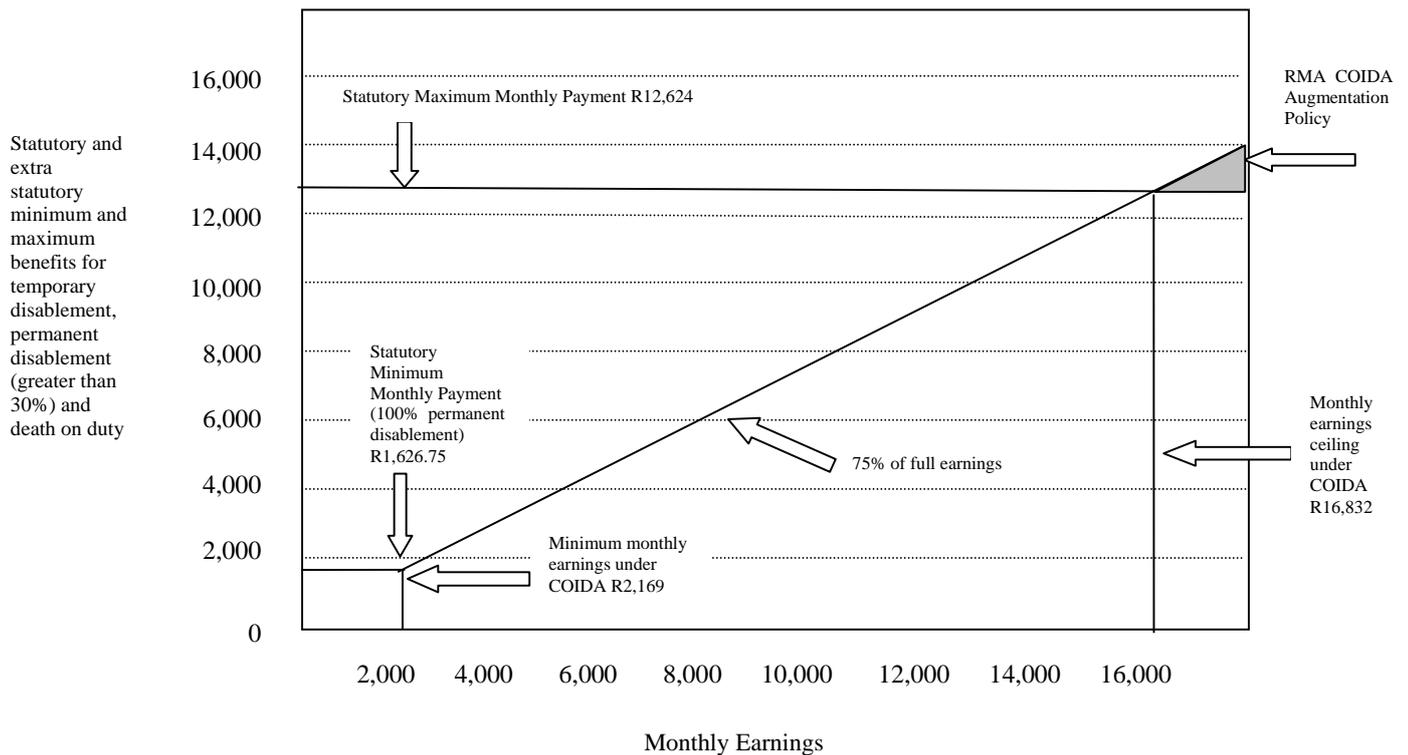
If the employee is under the age of 26 or working as an apprentice or is involved in a learnership at the time of the accident, the PD will be calculated on future probable earnings if his/her earnings at the time of the accident was less than the prescribed maximum compensation.

A 'constant attendance allowance' is also payable in cases where the employee's disablement is of such a nature that they are dependant on another person in order to sustain the basic functions of life.

The minimum and maximum benefits under COIDA for disability greater than 30% are shown below in Figure 2. Beyond the stipulated maximum of 75% under COIDA, Rand Mutual, the designated carrier for the mining

industry, provides additional compensation through its augmentation policy (shown in the grey shaded area). Under this augmentation there is no maximum amount of compensation to be paid (as determined by COIDA) – instead the employee will receive 75% of their earnings should their disability be 100% (and pro rata on disability greater than 30% but less than 100%).

Figure 2 Minimum and Maximum Compensation Benefits



Source: Rand Mutual (2006: 11,24) Guide to the Compensation for Occupational Injuries and Diseases Act, No 130 of 1993, As Amended (updated with calculations by Compensation Commissioner in April 2007)

Medical Cost

The Commissioner is liable for the payment of the reasonable medical costs incurred by the employee as a result of an occupational injury/disease for a maximum period of 24 months from the date of injury or diagnosis of disease. However, this time period can be extended if it can be shown that the medical treatment reduces the disability. The employee is free to choose which medical service provider he wants to consult with. The fees payable by the carrier are determined annually once the Compensation Fund has consulted with representative health care provider associations for the medical industry. The fees prescribed are the only fees payable and a health care provider is not permitted to charge a different fee.

The Fund will also bear the reasonable costs for the supply, repair and replacement of artificial assistive devices necessitated by an accident or a disease as well as chronic medication.

Death Benefits

Compensation is payable to the financial dependants when an employee dies as a result of an occupational accident/disease. The surviving spouse will receive a lump sum payment of twice the monthly pension the deceased employee would have received for 100% PD. Thereafter they will further receive a monthly pension of 40% of what an employee would have received for 100% PD. The pension is paid for life. It continues even if the surviving spouse remarries. If there is more than one customary wife, the pension payable is shared equally. A civil marriage supersedes a customary one in terms of the spouse's eligibility for compensation.

The remaining 60% is spread among surviving children, whereby each child will not get more than 20% of the pension. Each child to a maximum of three under the age of 18 will receive 20% of what the employee would have received for 100% PD. Three children will thus receive 60%. If the deceased employee had more than three dependant children, they all share equally in the pension in respect of 60%. The total monthly pension paid to the surviving spouse and children cannot be more than the pension the deceased employee would have received for 100% PD. The pension for a child ceases when he/she reaches the age of 18, dies or marries before reaching 18 years of age. However, it may be extended until the child completes secondary or tertiary education or if the child is mentally and/or physically disabled. If there are more than three children, implying that each child receives less than 20%, then as soon as the oldest child is no longer eligible the remaining children will share the 60% up to the 20% maximum per child.

Table 1 Benefits to Widow/s and Child/ren

COMPOSITION OF FAMILY UNIT	% ADDITION TO STANDARD PENSION FOR WIDOW AND CHILDREN
Widow/s	40% of standard pension or a portion thereof (in the case of more than one widow)
1 st child	20% of standard pension
2 nd child	20% of standard pension
3 rd child	20% of standard pension
More than 3 children	Share 60% equally
Total not to exceed 100% of employee's accident earnings	

Source: Rand Mutual (2006) Guide to COIDA

All pensions are increased annually, depending on the availability of funds. Increases are published in the Government Gazette. The carrier pays for the burial expenses of the late employee up to a prescribed maximum.

The no-fault system of compensation allows the employee to claim compensation without having to sue the employer. Compensation as shown above is calculated according to the schedules in the act. If the employee considers the compensation inadequate and can prove negligence on the part of their employer, then the employee is entitled to increased compensation. In this case an application for increased compensation has to be lodged with the Commissioner within 24 months of the date of the accident/diagnosis of the disease. If the Director-General is satisfied that the accident/disease is due to negligence then additional compensation may be awarded as deemed equitable. The additional compensation together with any other compensation awarded may not exceed the pecuniary loss which the applicant has suffered as a result of the injury or disease. Employer negligence can also include negligence of other employees. It should be noted that employer 'negligence' can also include a defect in the condition of the premises, place of employment, material or machinery in the business concerned where the employer was aware of the defect but still failed to correct it (COIDA). The onus is on the employee to prove that the employer was 100% responsible for the workplace accident or disease. As a result very few cases of negligence have been accepted.

If the accident or disease is the fault of a co-worker (third party), and the employee successfully sues the co-worker, then the compensation fund can claim any compensation paid to the injured employee from the third party.

When employees migrate, they are given an exit medical exam, and then referred to hospitals or health centres (established by Department of Health) in their area so that they can have checkups every two years (Interview with Compensation Fund).

4. Industry Structure

The Compensation Fund is the public institution responsible for compensation under the COID Act. It is a programme under the Department of Labour. The executive authority and accounting authority is with the Minister and Director-General respectively in terms of the Public Finance Management Act, 1999. The Fund is administered by the Compensation Commissioner, who reports to the Director-General. It licenses the function in respect of certain sectors out to two private mutual companies, Federated Employers Mutual (FEM) and Rand Mutual, who are responsible for the construction and mining industries respectively. These licenses are

renewed on an annual basis based on a review of their performances by the commissioner. FEM and Rand Mutual have limited settlement powers to process claims; however they are still subject to reporting to the Minister on their activities relating to COIDA. They are monitored by the Compensation Fund to ensure compliance to the Act (and to their licensing conditions) and consistency in the application of the Act. In the event that the Minister of Labour believes that a mutual has failed to comply with the conditions imposed by the commissioner, then the commissioner may suspend or withdraw the license. But thus far, this has never happened.

Only non-profit companies can obtain such a license. In addition to the FEM and Rand Mutual, there are certain employers who are exempted from paying annual assessments to the Compensation Fund. They are individually liable to pay compensation to their employees for occupational injury/disease. These employers include the National Government, the Provincial Government and the Greater Metropolitan Councils (of which there are 11). Benefits paid by these institutions are paid in accordance with COIDA. Accidents/diseases are reported to the Commissioner in the prescribed manner and the Commissioner then is required to determine the extent of the permanent disablement suffered by the employee as well as the employer's liability. The Commissioner will then issue an award for payment by National Treasury on behalf of the exempted employer. The exempted employers are charged an administration cost per claim reported.

Table 2 Companies Responsible for Compensation (2006)

COMPANY	PUBLIC/PRIVATE	YEAR STARTED	SECTOR	# MEMBERS
Compensation Fund*	Public	1941 (WCA)	All	332,536
FEM	Private	1936	Construction	3,327
Rand Mutual	Private	1894	Mining	290

Source: Interviews, Annual Reports & Compensation Fund

* The following are exempt from the compensation fund: national and provincial government, local authorities (who have exemption certificates), municipalities (COIDA, Chapter IX, Section 84).

All other employers are required by law to register with the Compensation Fund. There is potential for firms to fall between gaps between registering with the Compensation Fund or with a mutual company. Any employer in the mining or construction sector with a satisfactory track record regarding the payment of the compensation tariff can register with their designated mutual association. However, if an employee files a claim and their employer is not registered, the claim will still be processed through the Compensation Fund.

The Compensation Fund will then follow up with the unregistered employer to impose a fine (the employer is liable for the entire cost of the compensation if they have not registered with the fund). In that respect, the Compensation Fund fulfils the function of a fall-back option for all employees even in the case that their employers have not contributed to the compensation fund.

Table 3 Industry breakdown of Registered Members (1998)

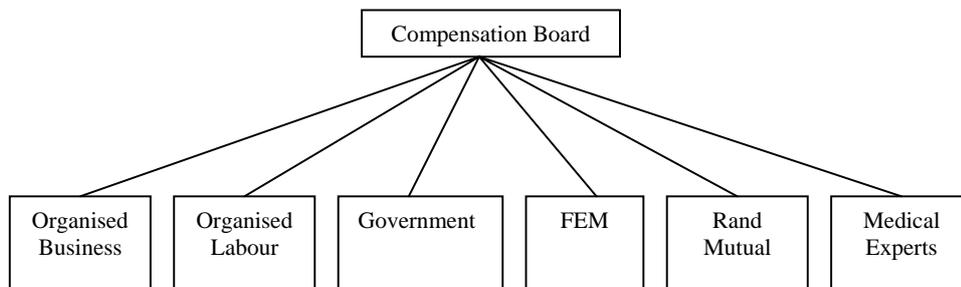
Class	Industry	Number of Employers	Number of Employees		Average per Employer
			Number	%	
1	Agriculture and Forestry	45 343	614 124	11.6	13.5
3	Fishing	245	4 688	0.1	19.1
4	Mining	1 148	90 079	1.7	78.5
5	Building and Construction	31 394	298 438	5.6	9.5
6	Food, Drink and Tobacco	9 184	272 757	5.2	29.7
7	Textiles	3 648	187 385	3.5	51.4
8	Wood	7 679	141 982	2.7	18.5
9	Printing and Paper	2 089	78 379	1.5	37.5
10	Chemical	3 951	195 436	3.7	49.5
11	Leather	756	37 060	0.7	49.0
12	Glass, Bricks and Tiles	2 976	70 724	1.3	23.8
13	Iron and Steel	31 223	579 963	11.0	18.6
14	Diamonds, Asbestos, Bitumen	2 105	20 080	0.4	9.5
15	Trade and Commerce	54 650	767 579	14.5	14.0
16	Banking, Finance, Insurance	6 362	274 627	5.2	43.2
17	Transport	11 267	377 120	7.1	33.5
18	Local Authorities	738	185 741	3.5	251.7
19	Personal Services, Hotels	38 148	467 210	8.8	12.3
20	Entertainment and Sport	2 645	37 755	0.7	14.3
21	Medical Services	9 495	188 126	3.6	19.8
22	Professional Services, N.O.S.	10 659	168 422	3.2	15.8
23	Educational Services	5 991	156 133	3.0	26.1
24	Charitable, Religious, Political and Trade Org.	5 465	80 102	1.5	14.7
TOTAL		287 161	5 293 910	100	18.4

4.1 Administrative structure of the industry

The Compensation Board is a statutory body of the Compensation Fund which advises the Labour Minister on issues such as policy matters, annual benefit increases, appointing assessors and amendments to COIDA. The board includes representatives from organised business, organised labour, government, FEM, Rand Mutual and

medical experts. All representatives are expected to consult with their constituencies on the inputs given to the Fund. Various sub-committees were established to advise the Board on matters such as improved benefits, occupational diseases, disabilities and investments.

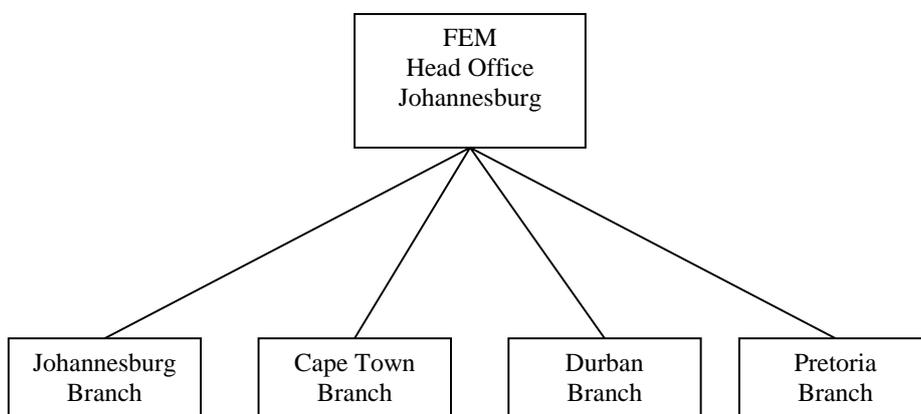
Figure 3 Compensation Board



Source: Compensation Fund Annual Report 2006

The Federated Employers Mutual Assurance Company (FEMA) started in 1936 in response to the passing of the Workmen’s Compensation Act in 1934. The Act of 1934 obliged all industrial employers to insure against accident or injury of their employees. Insurance at the time was underwritten by conventional insurance companies which made it unaffordable to builders. The result was the formation of FEMA (which later became FEM) which offered affordable coverage for the building industry. An integral part of the organisation was the idea that a non-state company could provide better service than an “impersonal state fund” (<http://www.fema.co.za/femahistory.htm>).

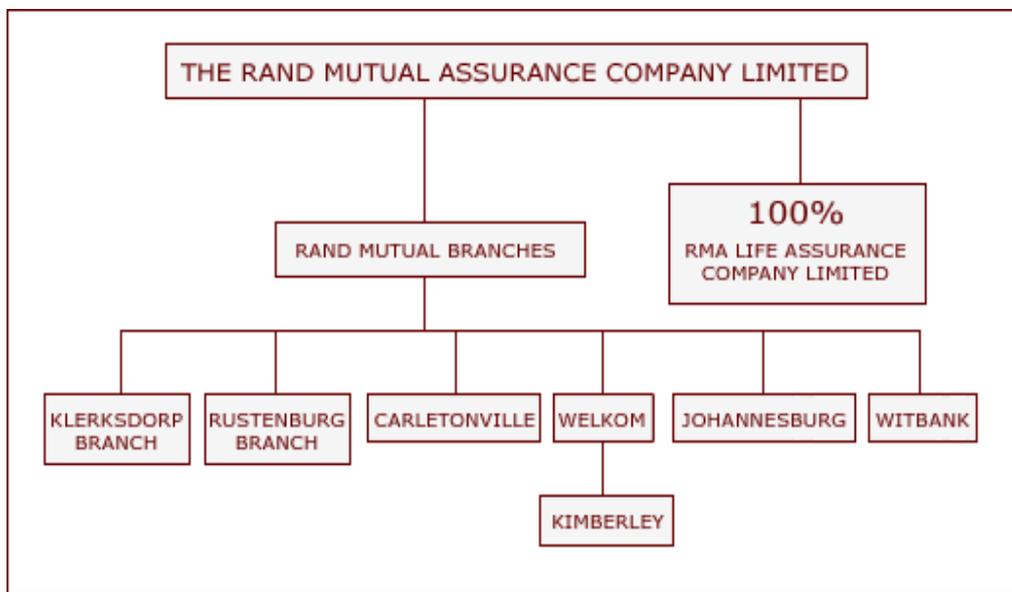
Figure 4 FEM Structure



Source: FEM Annual Report 2005

The Rand Mutual Assurance Company Limited was founded by three mining companies on the Witwatersrand in 1894. It was a non-profit insurance company (whose shareholders are its members) established to administer compensation to employees injured during the course of their employment in the mining industry. In 1941, the Workmen’s Compensation Act was propagated, and Rand Mutual was given a licence by the state to continue to underwrite workers compensation in the mining industry. With the implementation of the COIDA in 1993, Rand Mutual retained its license to underwrite worker’s compensation in the mining industry. Currently, Rand Mutual insures 98% of the mining industry and is on a drive to get the remaining 2% who are currently with the Compensation Fund. These companies require clearance of their bad debts before Rand Mutual is allowed to underwrite them.

Figure 5 Structure of Rand Mutual



Source: Rand Mutual Website http://www.randmutual.co.za/about/group_structure.html

4.2 Revenue and Expenditure of Various Carriers

According to the COIDA (Section 16), the Compensation Fund and the other carriers are responsible for payment of compensation, medical expenses and other pecuniary benefits to employees (or on their behalf) where no other person is liable for the payment. Furthermore, the Compensation Fund reimburses the National Revenue Fund (NRF) for the remuneration of the Compensation Commissioner while paying the Director General for his services and/or expenditures incurred. The Compensation Fund is also responsible for paying the costs of medical examinations of employees and should witnesses be required, their expenses also.

Table 4 Revenue and Expenditure by Carrier

CARRIER	MEMBERS - EMPLOYERS	2005 (R'000)		
		INCOME FROM PREMIUMS	CLAIMS INCURRED	RESERVES/ INVESTMENTS
Compensation Fund	332,536	2,567,200	1,391,546	6,888,713
FEM	3,327	173,767	213,395	892,096
Rand Mutual	290	255,187	587,649	792,633

Source: Annual Reports/Compensation Fund

The difference between the collected revenues and the expenditure are kept as surplus revenues (Reserves/Investment in Table 4) for unforeseen liabilities and for the smoothing of added wage (tariff) cost to the companies.

4.2.1 REVENUES

All carriers generate revenue through the assessment of their members. These assessments are based on their members total wage bill and the tariff which the companies have to pay. Thus, the revenue collected depends on:

$$\text{Assessment} = \frac{\text{Earnings (wage bill)} \times \text{tariff}}{100}$$

All employers are required to provide their respective carriers with their employee data and have to ensure that this data is updated. The tariff is then calculated for an entire industry subclass. Because the various industries have different risk ratios with respect to the frequency and severity of accidents, each industry subclass is evaluated and given its separate tariff. The idea of these tariffs is to ensure that the carriers have sufficient funds to compensate workers for accidents and diseases while remaining solvent. They get calculated and evaluated annually (see Appendix 6 for the tariffs of the various subclasses).

The Compensation Fund calculates the tariffs not based on actual risk ratios (frequency and severity of accidents and diseases) but uses aggregated claims cost data of previous years as well as the expected revenue from their members' assessments. The Compensation Fund then calculates the subclasses' tariffs in such a way that the expected revenue covers the expected costs of the subclass, i.e. that the subclass breaks even (See Appendix 7). The tariff therefore increases in cases of a continuous build up of a deficit by the subclass and reduces in the continuous built up of a surplus by the subclass.

The Compensation Fund admits that the revenue generated through their members' assessments was less than their claims cost. The deficit was covered through the interest earnings of the Compensation Fund's reserves. This is due to two problems: firstly, there is an enforcement problem where it is difficult to monitor the collection of money. The tariffs are calculated on the potential revenue which the Compensation Fund should be able to collect if all members paid. But the data that is used to calculate the expected revenue from the subclasses by the tariff section of the Compensation Fund is not aligned with the data set of the financial section of the Compensation Fund which monitors the collection of revenue. Thus, non-payments as well as incorrect payments cannot be picked up easily. Secondly, the Compensation Fund is liable for compensation of all workers even where their employers have not contributed to the Compensation Fund.

While FEM uses the same tariffs as the Compensation Fund, Rand Mutual calculates its own tariff rates based on actuaries risk evaluations. These tariffs are generally lower than the Compensation Fund tariffs. This seems to be possible for Rand Mutual because it has significantly fewer members which make the handling of their members' information easier.

Reductions and loading

The Compensation Fund can adjust tariffs to reward or penalise employers. This is used to create incentives for employers to effectively reduce accidents and to align the cost of the assessment with the actual claims cost of the companies.

Generally, the subclass tariffs apply to all companies of that specific subclass. But, when the three year average of an individual company's claims cost is 62 ½ % or less of the company's three year average assessment then the individual company can apply for a reduction of the tariff below the tariff of the subclass. Thus, the individual company has built up a surplus over the last 3 years.

Reductions will only be considered for companies who have been in business for at least three years, have a good track record with the Compensation Fund in terms of regular assessment payments and the updating of employee information and who pay more than the minimum assessment. The reduction is approved by the Compensation Fund's supervisor of the tariff section and the assistant manager. The size of the reduction depends on the claims history of the individual company and the surplus build-up of the company's assessment over its claims costs (see Appendix 8).

On the other hand, when the three year average of an individual company's claims cost is higher than the company's three year average assessment, then the Compensation Fund can consider a reloading of that company's tariff. In such a case the individual company has built up a deficit with the Compensation Fund.

The purpose of reloading is not to recover past cost but to create an incentive for the individual company to reduce accidents and prevent that the deficit becomes unsustainable. Therefore, the percentage increase of the tariff should not increase the financial burden of the company to such an extent that it cannot financially operate. Rather, the reloading of the tariff should simply create an incentive to reduce accidents and increase workplace safety. In that regard, the reloading should still make it financially viable for the employer to implement accident prevention measures.

The initial loading of the tariff is based on the average assessment of the company.

Amount of average assessment (3 years)	Initial percentage loading of tariff
Less than R400	30%
From R400 to R3 999	20%
From R4 000 to R9 999	15%
R 10 000 and higher	10%

Should the company continue to build up a deficit despite the initial loading, then the Compensation Fund can increase the loading (see Appendix 9).

An individual company will not be reloaded with a higher tariff if the higher claims cost is due to a single accident or multiple accidents resulting from a single incident (group accident). Furthermore, should it be financially impossible for the individual company to pay the higher tariff, then the burden of the individual company's higher claim cost will be spread across all companies of the subclass by increasing the tariff of the entire subclass. The Compensation Fund and the FEM use the same tariffs as calculated by the Compensation Fund. Rand Mutual uses its own tariffs established by actuaries. Rand Mutual's tariffs are lower than the Compensation Fund tariffs due to the fact that only mining companies which are in good standing are allowed to register with Rand Mutual. Furthermore, because the members of Rand Mutual, i.e. the mining companies themselves, are in control of running Rand Mutual, there is an incentive to keep injury and disease claims to a minimum. This incentive and their ability to monitor the small number of members allows them to keep claims relatively low and that in turn allows Rand Mutual to implement a lower tariff on its members.

Table 5 Administration Costs & Average Claims of Carriers

COMPANY	2005		
	ADMINISTRATION COST AS % OF PREMIUMS	ADMINISTRATION COST AS % OF CLAIMS	AVERAGE CLAIM (R'000)
Compensation Fund	16%	29%	6.249
FEM	15%	12%	24.472
Rand Mutual	28%	12%	15.026

Source: Annual Reports (2005)

4.3 RESERVES

All the companies have large reserves due to the need for “lifetime liability.” However, as per COIDA, the companies do increase or decrease premiums based on health and safety records and give firms rebates (Interviews with Compensation Fund, FEM and Rand Mutual).

The Fund also holds responsibility for the Reserve Fund which can consist of both cash and investments (refer to Table 4). The Director-General is responsible for determining the size of the Reserve Fund. The Reserve Fund is deemed necessary to provide for unforeseen demands on the Compensation Fund and to stabilize assessment tariffs. The Compensation Commissioner is authorised to make payments out of the reserve (COIDA, 1993, Section 19).

Furthermore, each Mutual Associations has to pay securities to the Compensation Fund in order to cover their liabilities. Securities deposited will be used solely in the event of the mutual association’s default. Should the security not be required, the Minister of Labour may return a portion of it back to the mutual. Securities are calculated using the life expectancy of the pensioner (using statistics from 1991) and the capitalised value of expected funds needed to ensure security of that pension. One criticism has been the use of 1991 life expectancies instead of more recent data. But according to the Compensation Fund, the life expectancy of their members is greater than that of the general South African population. In the near future the Compensation Fund expects to have sufficient data on their pensioners to calculate life expectancies for their population sample.

6. Issues for Further Research

South Africa is a unique country with varying levels of development. As such the first world models for social insurance adopted by the government do not always provide comprehensive cover and potentially there is a need for a unique model to be developed.

Issues of Policing:

Comparing the number of registered companies to the number of companies of the BR and the SARS (UIF?) it becomes clear that not all employers fulfil their obligation. The Mutual Associations do not have this problem as only companies in good standing with the Compensation commissioner are allowed to register with their respective Mutual associations.

In order to reduce non-compliance of companies, various policing structures have been put into effect. If for example Health and Safety inspectors go to companies on any aspect (including UIF) they will check that the employer pays compensation tariffs. Furthermore, if companies put in tenders they have to prove that they belong to the Fund or a Mutual Association. The Mutual Associations have less “muscle” than the Compensation Fund as only the Fund has the ability enforce penalties.

Issues of information:

All three companies promote awareness of compensation for occupational diseases and injuries. The Compensation Fund uses radio talk shows and travelling national campaigns to boost awareness. Training takes the form of informing both employers and employees in reporting procedures. However, employers are not compelled by law to display posters in the workplace regarding compensation as is the case for UIF. However the Occupational Health and Safety (OHS) Act complements COIDA as companies with more than 50 employees are required to have an OHS Committee which is mandated to sensitise employees to the COIDA (Interview with Compensation Fund).

The future plan is for Occupational Health to be taught as part of the curriculum for doctors. Currently the main medical schools in the country offer a Post-Graduate Diploma in Occupational Health. It equips doctors to identify and prevent occupational diseases and injuries. The Compensation Fund has sponsored two doctors to complete this diploma already (Interview with Compensation Fund).

Awareness is a specific goal for the Compensation Fund (together with the UIF, SARS, and OHS) especially with regards to SMEs, the taxi industry and other industries where awareness is problematic. There is currently a panel of experts in occupational health reviewing the list of covered diseases and injuries as well as other functions which are not legislated such as training and raising awareness (Interview with Compensation Fund).

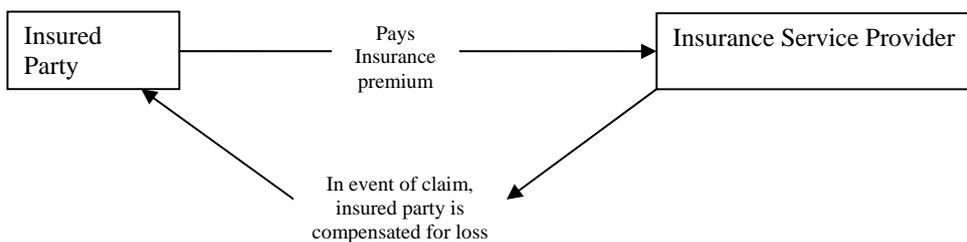
FEM and Rand Mutual also promote awareness. FEM undertakes drives to improve awareness and workplace safety. Rand Mutual undertakes training of trade unions, medical professionals and administrators at membership companies on how to file claims (Interviews with FEM and Rand Mutual).

Moral Hazard

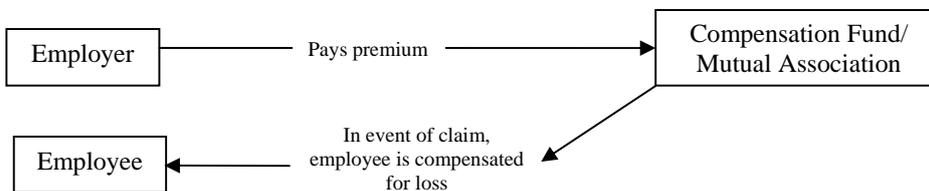
A potential issue is that of Moral Hazard (the minimum compensation for disability in some cases exceeds wages, therefore there is an incentive to intentionally injure oneself). In addition, if a person is disabled to the extent that they obtain a pension, they can still work and obtain additional income (they do not lose their pension if they find a job after the disability) (Interview with Compensation Fund).

Figure 8 Traditional Insurance vs. Compensation

Traditional Insurance



Compensation



As is outlined in Figure 8 the structure of the compensation fund is different to traditional insurance forms. Instead of the beneficiary contributing to the fund, only the employer contributes to the fund while the employee is the sole beneficiary.

Moral hazard case emerges because the government may not necessarily be able to distinguish an accident originating from carelessness from one originating from a random event. COIDA stipulates that any compensation is based on “no-fault” compensation for the employee. In the case that the employee injures himself on purpose, then only in the event of death or severe disability will compensation be paid so that the financial dependents of the employee are not worse off. This increases the possibility of moral hazard as an employee who on purpose injures himself to such an extent that he is permanently disabled will still be compensated even if the compensation commissioner knows that the act was on purpose.

7. Some Theoretical and Normative Considerations

What seems to emerge from our findings so far is that the market may not be performing its communication function adequately (Hayek 1945): there seems to be market failure at work. The market failure seems to manifest itself in the form of an information externality (Garzarelli 2006). Simply put, there may be information problems that impede a market clearing: the market seems not to be effectively communicating the presence of the compensation services. Hence, social efficiency may not be maximized. This observation requires some elaboration.

Even though the Compensation Fund, FEM, and Rand Mutual may each be efficient in the nonprofit sense¹, we may be facing a case where the presence of information problems may not let markets clear. Our sense is not that there is a lack of supply of compensation. Rather, our sense is that there is ignorance about its supply. As a result, we may have that if the provision of the compensation funds were to be regulated then there can be a signalling function that otherwise would be absent (Spence 1973): the regulation of compensation funds can render workers more aware about their rights to compensation.

This begs the question: what kind of corrective measure is called for? Or, to pose the same question more precisely, what kind of regulation could the government implement whose benefits would more than outweigh its costs? To answer this question we must begin by considering what can be at the origin of the information externality.

One source of the externality are arguably transaction costs (*inter alia*, Coase 1937, 1960, Williamson 1985, 2005; Langlois 2006). Transaction costs refer to “search and information costs, bargaining and decision costs, policing and enforcement costs. Yet ... fundamentally ... the three classes [of costs] reduce to a single one – for they all have in common that they represent resource losses due to lack of information” (Dahlman 1979, p. 148).

Not all employers register with the Compensation Commissioner. One may reasonably speculate that this is so because there may be perverse incentives to avoid full information disclosure. For instance, in the case of Rand

¹ The three companies – the Compensation Fund, FEM, and Rand Mutual – are nonprofits. In the case of nonprofits, the traditional efficiency criterion of economics – namely, marginal cost equal marginal benefit – is not applied. That is to say, unlike profit oriented organizations nonprofits do not have an objective function to maximize for efficiency, such as the profit one. What matters in the context of nonprofits is a subjective objective, namely, an objective that is defined by the nonprofit itself. For instance, a nonprofit may have the mission to prevent AIDS in the world, and one specific objective could be to reduce, over a five year period, registered AIDS cases by 1% per year in a specific country. The outcomes of this objective are then measured against the costs of the applied strategy and compared to analogous strategies. This comparison is subsequently used to subjectively assess the efficiency of a nonprofit (e.g., Hansmann, 1996, pp. 227-286).

Mutual, as mentioned above, there is an incentive to minimize claims because the “principals” of the Rand Mutual are the mining companies themselves. In other cases, there seems to be ignorance on behalf of employers about the mandatory registration. In any event, the picture that emerges is one of barriers to transactions, that is, the transaction costs are naturally high because of the governance structures of some compensations funds.

Creating a new government agency taking over the role and functions of the existing funds does not seem appropriate to obviate the transaction problem. There is the risk of creating a white elephant, namely, an agency whose operational costs far outweigh the benefits of its existence (cf. Demsetz 1969). Moreover, there is the related issue that, as specified earlier, from a non-profit, operational viewpoint the current funds are indeed efficient.

What currently seems to be lacking is a government authority that polices standards and, to a lesser extent, sets standards. The transaction-cost reducing properties of common standards are well-known (Kindleberger 1983). Moreover, in this case, standardization would positively affect national shared-growth objectives: a reduction in transaction costs generally increases productivity (Wallis and North 1986).

More generally, standardization by government intervention is often called for in cases, such as the present one, where there are insufficient private incentives to fully pay for the benefits enjoyed by others when sponsoring a standard. Differently put, this is a manifestation of the public-good character of standardization (e.g., Berg 1989a,b; Lecraw, 1984). Another way to think about the matter is along the following lines. If it is difficult on behalf of the Compensation Funds to spontaneously coordinate their efforts in order to overcome information problems, then there is scope for government intervention for there is a socially suboptimal quantity of investment in standardization (cf. Tasse 1982).

Therefore, what seems to be called for is a government agency that assures that the minimum compensation standards are respected, a process that begins with assuring the mandatory registration. The new agency would be more vested with the authority of policing that the standards are respected than with standard-setting authority. Take note in fact that when there is already an industry in place, as is our case, where there are already some standards of reference – even if the standards are not fully implemented – a government agency should rely on the existing standards rather than try to develop its own (cf. Besen and Johnson 1986).

To sum up: it is our impression that this is a case where government intervention may be called for not for the obviation of the more familiar physical and spatial externalities, such as nuisance and pollution, but for an

externality resting on information problems. It is important to stress, however, that such an intervention is not an easy one, and, if undertaken, will have to strictly follow efficiency criteria of the traditional kind. For example, the quality of the compensation provided after regulation must not only reflect equity considerations, but also be delivered at efficient cost. One does not want to replace a market failure with a government one.

References:

1. Berg, Sanford V. (1989a). "The Production of Compatibility: Technical Standards as Collective Goods." *Kyklos* 42(3): 361-383.
2. Berg, Sanford V. (1989b) "Technical Standards as Public Goods: Demand Incentives for Cooperative Behavior." *Public Finance Quarterly* 17(1): 35-53(January).
3. Besen, Stanley M. and Leland L. Johnson 1986. *Compatibility Standards, Competition, and Innovation in the Broadcasting Industry*. Santa Monica, California: The RAND Corporation, November. Available at: <http://www.rand.org/pubs/reports/R3453/>
4. Budlender, D (1984) "The Workmen's Compensation Act" *South African Labour Bulletin* 9(4):22-41 February
5. Coase, Ronald H. (1937) "The Nature of the Firm," *Economica* (N.S.) 4(16): 386-405 (November).
6. Coase, R. H. (1960). "The Problem of Social Cost," *Journal of Law and Economics* 3(1): 1-44(October).
7. Compensation for Occupational Injuries and Diseases Act (COIDA) of 1993 (amended 1997)
8. Compensation Fund website <http://labour.gov.za/>
9. Dahlman, Carl J. (1979). "The Problem of Externality," *Journal of Law and Economics* 22(1): 141-62(April).
10. Demsetz, Harold (1969). "Information and Efficiency: Another Viewpoint," *Journal of Law and Economics* 12(1): 1-22(April).
11. Department of Mineral and Energy Affairs (1981) *Report of the Commission of Inquiry into Compensation for Occupational Diseases in the Republic of South Africa*
12. Federal Employer's Mutual Assurance Company Annual Report (2005)
13. Federal Employer's Mutual Assurance Company website www.fema.co.za
14. Garzarelli, G. (2006). "Cognition, Incentives, and Public Governance: Laboratory Federalism from the Organizational Viewpoint," *Public Finance Review* 34(3): 235-257(May).
15. Hansmann, H. (1996). *The Ownership of Enterprise*. Cambridge, Mass.: The Belknap Press of Harvard University Press.
16. Hayek, Friedrich A. von (1945). "The Use of Knowledge in Society," *American Economic Review* 35(4): 519-530(September).
17. Kindleberger, Charles P. (1983). "Standards as Public, Collective and Public Goods." *Kyklos* 36(3): 377-396.
18. Langlois, Richard N. (2006). "The Secret Life of Mundane Transaction Costs," *Organization Studies* 27(9): 1389-1410 (September).
19. Lecraw, Donald J. (1984). "Some Economic Effects of Standards." *Applied Economics* 16: 507-522.

20. Musgrave, R. M. (1959). *The Theory of Public Finance*. New York: McGraw-Hill.
21. Occupational Diseases in Mines and Works Act 78 of 1973 (as amended)
22. Pigou, A. C. (1932.) *The Economics of Welfare* (fourth edition). London: Macmillan.
23. Rand Mutual Assurance Company Limited Group Annual Report (2005)
24. Rand Mutual Assurance Company Limited (Rand Mutual) (2006) *Guide to Compensation for Occupational Injuries and Diseases Act No 130 of 1993, as amended*
25. Rand Mutual Company website www.randmutual.co.za
26. Spence, M.A (1973). "Job Market Signaling," *Quarterly Journal of Economics* 87(3): 355-374(August).
27. Taylor, V (2002) *Transforming the Present, Protecting the Future Consolidated Report*
28. Tasse, Gregory (1988). "The Role of Government in Supporting Measurement Standards for High-Technology Industries." *Research Policy* 11: 311-320.
29. Wallis, J. J. e D. C. North (1986). "Measuring the Transaction Sector in the American Economy, 1870-1970." In Engerman S. L. e R. E. Gallman (a cura di) *Long-Term Factors in American Economic Growth*, Vol. 51 of the Income and Wealth Series (pp. 95–161). Chicago University of Chicago Press.
30. Williamson, Oliver E. (1985). *The Economic Institutions of Capitalism*. New York and London: The Free Press.
31. Williamson, Oliver E. (2005). "The Economics of Governance," *American Economic Review, Papers and Proceedings* 95(2): 1-18(May).

Interviews:

1. Compensation Fund (Kefilwe Tselane)
2. FEM (Thelma Pugh & Gys McIntosh)
3. Rand Mutual (Anthony Carter)
4. Professor Robert Vivian at Wits University

Appendix 1 Companies Responsible for Compensation

Fund Manager	Rand Mutual	Federated Employers Mutual Assurance Company	Government Compensation Fund
Public/Private	Private	Private	Public
Sector Covered	Mining	Construction	Rest
Founded	1894	1936	1941
Website	http://www.randmutual.co.za	http://www.fema.co.za/	http://www.labour.gov.za/
Physical Address	Head office: 16th Floor Edura Building 41 Fox Street Johannesburg	Head office: Building 2, 1st Floor 101 Central Street Houghton	Compensation House Cnr Hamilton and Soutpans Streets Pretoria
Postal Address	PO Box 61413 Marshalltown 2107	Private Bag 87109 Houghton 2041	PO Box 955 Pretoria 0001

Appendix 2 Laws Repealed by 1993 COIDA

LAWS REPEALED

No. and year of law	Title	Extent of repeal
Act No. 30 of 1941	Workmen's Compensation Act, 1941	The whole
Act No. 27 of 1945	Workmen's Compensation Amendment Act, 1945	The whole
Act No. 36 of 1949	Workmen's Compensation Amendment Act, 1949	The whole
Act No. 5 of 1951	Workmen's Compensation Amendment Act, 1951	The whole
Act No. 51 of 1956	Workmen's Compensation Amendment Act, 1956	The whole
Act No. 7 of 1961	Workmen's Compensation Amendment Act, 1961	The whole
Act No. 21 of 1964	Workmen's Compensation Amendment Act, 1964	The whole
Act No. 58 of 1967	Workmen's Compensation Amendment Act, 1967	The whole
Act No. 9 of 1970	Workmen's Compensation Amendment Act, 1970	The whole
Act No. 27 of 1970	Second Black Laws Amendment Act, 1970	Section 2
Act No. 60 of 1971	Workmen's Compensation Amendment Act, 1971	The whole
Act No. 11 of 1974	Workmen's Compensation Amendment Act, 1974	The whole
Act No. 28 of 1977	Workmen's Compensation Amendment Act, 1977	The whole
Act No. 8 of 1979	Workmen's Compensation Amendment Act, 1979	The whole
Act No. 24 of 1981	Workmen's Compensation Amendment Act, 1981	The whole
Act No. 29 of 1984	Workmen's Compensation Amendment Act, 1984	The whole
Act No. 35 of 1987	Workmen's Compensation Amendment Act, 1987	The whole
Act No. 40 of 1990	Workmen's Compensation Amendment Act, 1990	The whole

Source: COIDA Schedule 1, p46

Appendix 3 Manner of Calculating Compensation

	NATURE OF DISABLEMENT	DEGREE OF DISABLEMENT	NATURE OF BENEFITS	MANNER OF CALCULATING BENEFITS
1	Temporary	Total	Periodic Payments	75% of monthly earnings to max earning of R15,820 pm i.e. R11,865 max compensation
2	Permanent	30%	Lump Sum	15 times monthly earnings (min of R28,215 and max of R132,930 compensation)
3	Permanent	Less than 30%	Lump Sum	As calculated for 2 in the same proportion as the degree of permanent disablement.
4	Permanent	100%	Monthly Pension	75% of monthly earnings to a min earnings of R1,881 pm and max earning of R15,820 pm i.e. compensation between R1,410.75 and R11,865 pm.
5	Permanent	Greater than 30%, Less than 100%	Monthly Pension	As calculated for 4 in the same proportion as the degree of permanent disablement.
6	Fatal	Dependent no children	Lump Sum	Twice the employee's monthly pension payable under 4
7	Fatal	Dependent and child/ren	Monthly Pension	40% of monthly pension payable under 4 to dependent
8	Fatal	Dependent and child/ren	Monthly Pension	20% of monthly pension payable under 4 for first child, decreasing in % for subsequent children. Total to dependent and children not to exceed 100%
9	Fatal		Funeral Costs	A reasonable amount of funeral costs to maximum R9,200.

Source: COIDA Schedule 4, p50 and Rand Mutual(2006)

Appendix 4 Degrees of Permanent Disablement

Injury	Percentage of permanent disablement
Loss of two limbs	100
Loss of both hands, or of all fingers and both thumbs	100
Total loss of sight	100
Total paralysis	100
Injuries resulting in employee being permanently bedridden	100
Any other injury causing permanent total disablement	100
Loss of arm at shoulder	65
Loss of arm between elbow and shoulder	65
Loss of arm at elbow	55
Loss of arm between wrist and elbow	55
Loss of hand at wrist	50
Loss of four fingers and thumb of one hand	50
Loss of four fingers	40
Loss of thumb:	
both phalanges	25
one phalanx	15
Loss of index finger:	
three phalanges	10
two phalanges	8
one phalanx	5
Loss of middle finger:	
three phalanges	8
two phalanges	6
one phalanx	4
Loss of ring finger:	
three phalanges	6
two phalanges	5
one phalanx	3
Loss of little finger:	
three phalanges	4
two phalanges	3
one phalanx	2
Loss of metacarpals:	
first, second or third (additional)	4
fourth or fifth (additional)	2
Loss of leg:	
at hip	70
between knee and hip	45 to 70
below knee	35 to 45
Loss of toes:	
all	15
big, both phalanges	7
big, one phalanx	3
toes other than big toes:	
four toes	7
three toes	5
two toes	3
one toe	1
Loss of eye:	
whole eye	30
sight	30
sight except perception of light	30
Loss of hearing:	
both ears	50
one ear	7

Total permanent loss of the use of a limb shall be treated as the loss of the limb.

Any injury to the left arm or hand and, in the case of a left-handed employee, to the right arm or hand, may in the discretion of the Director-General be rated at ninety per cent of the above percentage.

If there are two or more injuries the sum of the percentages for such injuries may be increased, in the discretion of the Director-General.

Source: COIDA Schedule 2, p47

Appendix 5 Workplace Diseases Covered by COIDA

Diseases	Work
	(a) Any work involving the handling of or exposure to any of the following substances emanating from the workplace concerned:
Pneumoconiosis-fibrosis of the parenchyma of the lung	organic or inorganic fibrogenic dust
Pleural thickening causing significant impairment of function	asbestos or asbestos dust
Bronchopulmonary disease	metal carbides (hard metals)
Byssinosis	flax, cotton or sisal
Occupational asthma	the sensitizing agents- (1) isocyanates (2) platinum, nickel, cobalt, vanadium or chromium salts (3) hardening agents, including epoxy resins (4) acrylic acids or derived acrylates (5) soldering or welding fumes (6) substances from animals or insects (7) fungi or spores (8) proteolytic enzymes (9) organic dust (10) vapours or fumes of formaldehyde, anhydrides, amines or diamines
Extrinsic allergic alveolitis	moulds, fungal spores or any other allergenic proteinaceous material, 2,4 toluene-di-isocyanates
Any disease or pathological manifestations	beryllium, cadmium, phosphorus, chromium, manganese, arsenic, mercury, lead, fluorine, carbon disulfide, cyanide, halogen derivatives of aliphatic or aromatic hydrocarbons, benzene or its homologues, nitro- and amino-derivatives of benzene or its homologues, nitroglycerine or other nitric acid esters, hydrocarbons, trinitrotoluol, alcohols, glycols or ketones, acrylamide, or any compounds of the aforementioned substances
Erosion of the tissues of the oral cavity or nasal cavity	irritants, alkalis, acids or fumes thereof
Dysbarism, including decompression sickness, baro-trauma or osteonecrosis	abnormal atmospheric or water pressure
Any disease	ionising radiation from any source
Allergic or irritant contact dermatitis	dust, liquids or other external agents or factors
Mesothelioma of the pleura or peritoneum or other malignancy of the lung	asbestos or asbestos dust
Malignancy of the lung, skin, larynx, mouth cavity or bladder	coal-tar, pitch, asphalt or bitumen or volatiles thereof
Malignancy of the lung, mucous membrane of the nose or associated air sinuses	nickel or its compounds
Malignancy of the lung	hexavalent chromium compounds, or bis chloromethyl ether
Angiosarcoma of the liver	vinyl chloride monomer
Malignancy of the bladder	4-amino-diphenyl, benzidine, beta naphthylamine, 4-nitro-diphenyl
Leukaemia	benzene
Melanoma of the skin	polychlorinated biphenyls
Tuberculosis of the lung	(1) crystalline silica (alpha quartz) (2) mycobacterium tuberculosis or MOTTs (mycobacterium other than tuberculosis) transmitted to an employee during the performance of health care work from a patient suffering from active open tuberculosis
Brucellosis	brucella abortus, suis or mellitensis transmitted through contact with infected animals or their products
Anthrax	bacillus anthracis transmitted through contact with infected animals or their products
Q-fever	coxiella burneti emanating from infected animals or their products
Bovine tuberculosis	mycobacterium bovis transmitted through contact with infected animals or their products
Rift Valley Fever	virus transmitted by infected animals or their products
Hearing impairment	(b) Any work involving the handling of or exposure to any of the following: excessive noise
Hand-arm vibration syndrome (Raynaud's phenomenon)	vibrating equipment
Any disease due to overstraining of muscular tendonous insertions	repetitive movements

Source: COIDA Schedule 3, p48

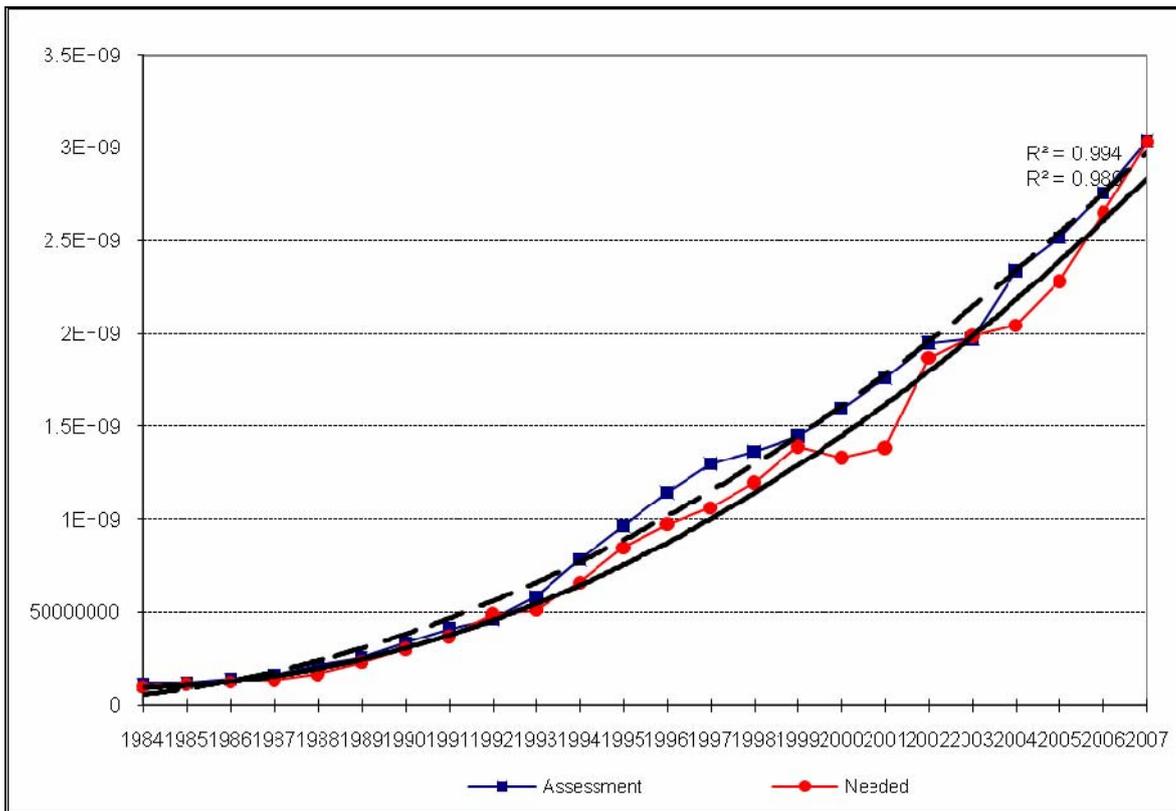
Appendix 6: Tariffs for Subclasses, 2000 -2006

Sub-class	2000	2001	2002	2003	2004	2005	2006
0111	R1.70	1.70	1.67	1.67	1.72	1.72	1.89
0114	R1.73	1.73	1.70	1.70	1.77	1.77	1.77
0116	R2.72	2.99	2.99	3.11	3.14	3.14	3.14
0118	R1.43	1.43	1.43	1.43	1.44	1.44	1.58
0300	R3.46	3.98	3.98	3.98	3.98	3.98	3.78
0400	R5.27	5.27	5.27	5.27	5.27	5.27	5.80
0411	R2.69	2.69	2.69	2.69	2.69	2.69	2.47
0420	R1.38	1.38	1.38	1.38	1.38	1.38	1.38
0440	R3.55	3.55	3.50	3.50	3.50	3.50	3.68
0441							0.00
0500	R2.20	2.20	2.20	2.20	2.20	2.24	2.24
0501	R1.54	1.59	1.59	1.59	1.59	1.59	1.59
0502	R8.26	8.26	8.26	8.26	8.26	8.26	8.26
0505	R6.06	6.06	6.06	5.88	5.88	5.88	5.41
0512	R2.55	2.55	2.55	2.55	2.55	2.55	2.42
0521	R0.83	0.85	0.85	0.85	0.85	0.85	0.81
0530	R4.00	4.12	4.12	4.12	4.33	4.33	4.33
0531	R1.56	1.56	1.56	1.56	1.56	1.56	1.64
0532							0.00
0600	R1.70	1.70	1.70	1.79	1.79	1.79	1.97
0601	R0.93	0.93	0.90	0.90	0.93	0.93	1.02
0610	R1.17	1.17	1.17	1.17	1.17	1.17	1.17
0612	R0.90	0.90	0.90	0.90	0.90	0.90	0.90
0613	R0.95	0.95	0.92	0.92	0.92	0.92	0.92
0621	R1.45	1.45	1.45	1.45	1.45	1.45	1.45
0622	R1.13	1.13	1.13	1.22	1.22	1.22	1.29
0630	R0.91	0.91	0.91	0.86	0.86	0.86	0.86
0640	R0.99	0.99	0.99	0.95	0.95	0.95	0.95
0641	R0.87	0.87	0.87	0.87	0.87	0.87	0.83
0642	R0.96	0.96	0.96	0.96	0.96	1.10	1.10
0643							0.00
0650	R0.50	0.50	0.50	0.50	0.50	0.50	0.50
0700	R0.83	0.83	0.83	0.83	0.83	0.83	0.83
0701	R2.06	2.06	2.06	2.06	2.06	2.06	2.22
0712	R0.74	0.74	0.74	0.70	0.70	0.70	0.70
0720	R0.21	0.23	0.23	0.23	0.24	0.24	0.24
0801	R3.26	3.26	3.26	3.26	3.26	3.26	3.26
0810	R1.63	1.63	1.63	1.63	1.63	1.71	1.71
0811	R0.79	0.79	0.79	0.79	0.79	0.79	0.79
0900	R0.60	0.60	0.60	0.60	0.60	0.62	0.62
0910	R1.38	1.38	1.38	1.38	1.38	1.38	1.38
1000	R1.21	1.21	1.21	1.17	1.17	1.17	1.08
1005	R0.73	0.73	0.70	0.70	0.70	0.70	0.70
1020	R0.86	0.86	0.86	0.86	0.86	0.86	0.86
1021							0.00
1025	R0.85	0.85	0.85	0.80	0.80	0.80	0.88
1030	R0.47	0.47	0.45	0.45	0.45	0.45	0.43
Sub-class	2000	2001	2002	2003	2004	2005	2006
1040							0.00
1041	R0.61	0.61	0.61	0.57	0.57	0.57	0.57

1050	R0.50	0.50	0.53	0.53	0.53	0.55	0.55
1052	R1.14	1.14	1.14	1.14	1.14	1.14	1.14
1053							0.00
1100	R1.25	1.25	1.25	1.16	1.16	1.16	1.07
1105	R0.30	0.33	0.33	0.33	0.35	0.35	0.35
1200	R0.85	0.85	0.85	0.80	0.80	0.80	0.84
1201	R1.92	1.92	1.92	1.88	1.88	1.88	1.79
1210	R0.99	1.04	1.04	1.04	1.05	1.05	1.05
1211	R1.98	1.98	1.98	1.90	1.90	1.90	2.00
1220	R1.48	1.54	1.54	1.54	1.54	1.54	1.62
1230	R2.26	2.26	2.26	2.08	2.08	2.08	2.29
1300	R1.00	1.04	1.04	1.04	1.04	1.20	1.80
1301	R1.86	1.86	1.86	1.86	1.86	2.01	2.01
1331	R0.80	0.80	0.80	0.80	0.80	0.80	0.80
1340	R1.13	1.15	1.15	1.22	1.22	1.22	1.38
1350	R0.65	0.65	0.65	0.65	0.65	0.65	0.68
1360	R0.33	0.33	0.33	0.33	0.33	0.33	0.33
1361	R0.75	0.75	0.75	0.75	0.75	0.75	0.75
1363	R0.85	0.85	0.85	0.89	0.89	0.89	0.89
1400	R0.24	0.26	0.26	0.26	0.26	0.26	0.26
1401	R1.05	1.05	1.05	1.05	1.05	1.05	1.05
1420	R2.24	2.31	2.31	2.31	2.31	2.54	2.54
1511	R0.66	0.66	0.66	0.66	0.66	0.66	0.66
1520	R0.27	0.29	0.29	0.29	0.31	0.31	0.31
1532	R0.48	0.48	0.45	0.45	0.45	0.45	0.43
1540	R0.50	0.50	0.48	0.48	0.48	0.48	0.48
1542	R1.10	1.10	1.10	1.13	1.13	1.13	1.13
1550	R0.46	0.46	0.46	0.46	0.46	0.46	0.46
1600	R0.15	0.15	0.13	0.13	0.13	0.13	0.12
1610							0.00
1701	R0.60	0.60	0.60	0.55	0.55	0.55	0.55
1710	R2.16	2.16	2.16	2.16	2.16	2.16	2.16
1711	R4.31	4.31	4.31	4.31	4.31	4.31	4.31
1715	R1.05	1.08	1.08	1.08	1.08	1.08	1.16
1720	R0.50	0.50	0.48	0.48	0.48	0.48	0.48
1722	R3.76	3.81	3.81	3.81	3.81	3.81	3.62
1723	R1.06	1.10	1.10	1.10	1.10	1.10	1.16
1730	R0.32	0.32	0.32	0.32	0.32	0.32	0.29
1745	R0.56	0.56	0.56	0.54	0.54	0.54	0.54
1750	R0.74	0.74	0.74	0.74	0.75	0.75	0.81
1800	R0.90	0.93	0.93	0.93	0.93	0.93	0.93
1810							0.00
1820	R0.70	0.70	0.70	0.70	0.70	0.70	0.70
1900	R0.50	0.50	0.47	0.47	0.47	0.49	0.49
1910	R0.74	0.74	0.74	0.74	0.74	0.74	0.74
1920	R0.06	0.06	0.06	0.06	0.06	0.06	0.06
1940	R1.35	1.35	1.35	1.35	1.35	1.35	1.35
1960	R0.38	0.38	0.36	0.36	0.36	0.36	0.36
Sub-class	2000	2001	2002	2003	2004	2005	2006
1970	R3.29	3.29	3.29	3.29	3.29	3.29	3.29
1975			1.00	1.00	1.00	1.00	1.00
2000	R0.45	0.45	0.45	0.45	0.45	0.45	0.43
2010	R0.55	0.55	0.55	0.52	0.52	0.52	0.49

2011	R5.15	5.15	5.15	5.15	5.15	5.15	5.15
2020	R1.20	1.22	1.22	1.22	1.22	1.22	1.34
2100	R0.16	0.16	0.15	0.15	0.15	0.15	0.14
2110	R0.55	0.57	0.57	0.57	0.57	0.57	0.57
2200	R0.38	0.38	0.38	0.36	0.36	0.36	0.36
2210	R0.14	0.14	0.13	0.13	0.13	0.13	0.13
2300	R0.20	0.20	0.19	0.19	0.19	0.19	0.19
2320	R1.19	1.19	1.19	1.19	1.19	1.19	1.19
2410	R0.40	0.40	0.40	0.40	0.40	0.40	0.40

Appendix 7: Graphical presentation of Tariff calculation.



Appendix 8: Calculation of Tariff Reductions

<i>Reductions</i>	<i>When company had NO CLAIMS COST over 3 years and:</i>	<i>When company had CLAIMS COST over 3 years but less than assessment but:</i>	<i>Size of tariff reduction</i>
1		Built up surplus is 1 ½ to 2 times higher than the highest costs in the last three years	10%
2		Built up surplus is 2 to 3 times higher than the highest costs in the last three years	11-20%
3	Built up surplus is between R500 000 and R1 000 000	Built up surplus is 3 to 4 times higher than the highest costs in the last three years	21-30%
4	Built up surplus is more than R1 000 000 and less than R2 000 000	Built up surplus is 4 to 5 times higher than the highest costs in the last three years	31-40%
5	Built up surplus is more than R2 000 000 and less than R3 000 000	Built up surplus is 5 to 6 times higher than the highest costs in the last three years	41-50%
6	Built up surplus is more than R3 000 000	Built up surplus is more than 6 times higher than the highest costs in the last three years	Discretion of Assistant manager

Source: Compensation Fund Statistician, 2007

Appendix 9: Calculation of Tariff Reloading: First Increase

Amount of average assessment over last 3 years	Percentage Loading
Less than R400	Increase the loading to 45%
Between R400 to R4 999	Double the loading but make sure that the loading is not more than the percentage calculated as described below.
Between R5 000 to R9 999	Double the loading but make sure that the loading is not more than the percentage calculated as described below.
R10 000 and higher	Calculate the percentage increase that equates the employer's assessment to his claims costs based on his average assessments and costs of the last 3 years. Increase the loading to half of this percentage. Break-even point is calculated as: $\frac{\text{Costs}}{\text{Assessment}} \times 100 - 100$

Example 1:

The average assessment of an employer is R17 340. The average cost is R65 432. The built-up deficit over three years is R144 276 and the last 4 years were deficits. The calculation will be as follows:

% increase to give an assessment of R65 432 = $\frac{65\ 432}{17\ 340} \times 100 - 100 = 377 - 100 = 277$. Half of this is: $277/2 =$

138.5 Thus, the loading will be 139%.

Calculation of Loading: second and further increases

Amount of average assessment over last 3 years	Percentage Loading
Less than R400	Double the loading but make sure that the loading is not more than the percentage calculated as described below.
Between R400 to R4 999	Double the loading but make sure that the loading is not more than the percentage calculated as described below.
Between R5 000 to R9 999	Double the loading but make sure that the loading is not more than the percentage calculated as described below.
R10 000 and higher	Calculate the percentage increase that equates the employer's assessment to his claims costs based on his average assessments and costs of the last 3 years. Increase the loading to this percentage. Break-even point is calculated as: $\frac{\text{Costs}}{\text{Assessment}} \times 100 - 100$

Example 2:

The employer's rate should have been increased by 139% (as was shown in the example 1). But, after 2 years it is clear that the employer has not reduced accidents. The average assessment is now R20 741 while the average cost is R126 521. The calculation of the second loading will be:

% increase to break-even = $\frac{126\ 521}{20\ 741} \times 100 - 100 = 610 - 100 = 510$. Thus, the employer's rate should be increased

by 510%.