

## Notes and Comments on the “PAPER ON THE DEVELOPMENT OF STANDARD FORMULAE FOR CALCULATION OF LOSS OF EARNINGS, LOSS OF SUPPORT AND GENERAL DAMAGES FOR THE ROAD ACCIDENT FUND (RAF) – Public Comment Paper”

### Introduction

The “Paper on the development of standard formulae for calculation of loss of earnings, loss of support and general damages for the road accident fund” (“the paper”) presents a potential solution to (alleged) subjective, inflated, inequitable and inconsistent claim amounts and awards. However, we have several concerns with the proposals in the paper, and note that critical detail is omitted e.g. the source(s) of data for some key parameters and metrics. Our concerns could be categorised as follows:

- The legality of the proposal
- Data
- Averaging of awards (as opposed to individual assessment)
- The practical aspects of implementing the system
- Some specific statements/assertions in the proposal (see Annexure A)

The paper is extensive, and we therefore do not provide an exhaustive commentary, but rather address what we believe to be some of the key issues.

We also note that our experience and expertise relate mostly to Loss of Earnings (“LOE”) and Loss of Support (“LOS”) calculations. Our insights and commentary in respect of General Damages are limited.

### Legality of the proposal

The premise of the paper is that the RAF is a social benefit organisation, and much of the proposed approach and calculation methodology is contingent on this assumption. We defer to legal expertise in this regard. We note that our understanding is that the RAF is better described as a social insurer, and that compensation is determined on an individual basis. Our commentary is therefore based on the view expressed by Prof Hennie Klopper<sup>1</sup>:

*“The current view of the RAF management and Board that the RAF dispenses social benefits is contrary to the origin, history, basis and content of what is contained in the RAF Act. In addition, the characteristics of SA’s current RTCV compensation system does not support a conclusion that it is a social benefit system:*

- *It is funded by a dedicated charge derived from a levy on fuel sold and not from general tax.*
- *Compensation is determined on an individual basis and not for the benefit of society as a whole and must be proven by a claimant at his own cost and risk.*
- *Compensation is not subject to any means test.”*

### Data and Averaging

Par 197 of the proposal reads: *“The principle driving the proposed solution is to ensure as much objectivity as possible. This entails the use of statistical evidence as much as possible to*

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<sup>1</sup> <https://www.derebus.org.za/is-the-road-accident-fund-a-social-benefit-or-a-public-insurance-scheme/>

*estimate for earnings at the start of normal employment as well as the potential for future earnings.”*

We agree, in principle, that data can and should be used to reduce subjectivity. However, in the proposal there are numerous references to data (and models/algorithms that will use the data as inputs), without sufficient clarity regarding the sources, accessibility, accuracy and relevance of the data. We note that even basic data such as typical earnings for NQF qualifications and Paterson levels are limited to a few corporate surveys, that represent less than 25% of the formally employed workforce. The courts have accepted that the earnings published from STATSSA data is not sufficiently accurate and reliable, therefore subject to reporting and interpretation errors. Due to this, corporate survey earnings are mostly used in calculations. Yet the RAF proposes to use datasets that represent more complicated figures and probabilities that arguably has less data underpinning them. For example, the following paragraphs allude to datasets that are not existent/publicly available to our knowledge.

*Par 227: Earnings can be estimated based on average earnings for that industry classification. The RAF will utilise information from credible sources to assist in estimating the average earnings per industry category for an individual who doesn't have a matric certificate.*

*Par 232: RAF will use relevant data sources to assist in estimating the average earnings per industry category for an individual who has a matric certificate.*

*Par 249: For this sub-cohort, the model will then estimate the probability of the individual who Graduates college/university securing employment into one of the industry classifications considered based on the graduate choice of study.*

Further, when considering the following statements, it raises some pertinent questions:

*Par 264. We will make use of data and research on the following data points for example:*

- 264.1. Graduation probabilities across the different NQF levels,*
- 264.2. Employment probabilities by industry given qualifications,*
- 264.3. Earnings potential for graduates' securing employment both pre- and post-accident*

### Questions

1. What data will be used and from which sources? For example, par 225 states “*The model will need to estimate the likelihood of failure to matriculate, i.e., failing to obtain a Matric certificate (for whatever reason). Based on desktop research, it is reasonable to expect that the Department of Basic Education (DBE) and/or Statistics South Africa (Stats SA) might be able to provide this information.*” Potential sources are cited but there is no certainty of information/data even for comparatively simple metrics such as this.
2. What research will be conducted, when and by whom? When will the results be ready for use in the proposal calculation models/systems?
3. How will accuracy and relevance of data be ensured? (Noting the lack of credibility of STATSSA earnings data).

4. How will it be ensured that data is sufficiently granular (i.e. goes into sufficient detail) to ensure the metrics have individual application, as opposed to being based on broad groups? For example, par 222 states *“to ensure an objective and equitable calculation, we propose that the projected earnings follow the general prospects of the average South African School student based on statistical evidence as much as possible.”* This indicates that the intention is not to evaluate the individual’s loss, but rather apply a population metric and hence arrive at some kind of average (we note that population metrics are useful as a reference, and will apply to some individuals, but certainly not all).

**Practical aspects**

The proposal implies significant data gathering, analysis, model development, systems development and enhancement etc. Assuming the proposal clears the first hurdle (legality), it will likely require significant costs and time to develop the entire proposed solution. The proposed models, data and systems will encapsulate:

1. the entirety of the South African primary to tertiary education entry and pass rates,
2. all possible careers’ employment probabilities, transition probabilities and earnings at various stages
3. the impact of numerous potential injuries

It will likely take years for such a project if it is adequately funded and the personnel working thereon are fully focused on the task. However, the RAF is operationally and financially constrained, and the proposal makes no mention of how and when the current system will transition to the new system, what the estimated costs are, and how the RAF will ensure focus and continuity. There’s a risk of the proposal being “pie in the sky” and we suggest that a measured and contained approach is taken to prove the concept first. In our view, a more practical (and legal) approach is to use data to equip the RAF’s experts and staff to dispute and disprove inflated or unrealistic claims within the current legal and operating framework.

**Annexure A****Additional comments on statements/assertions in the proposal**

We include further comments on statements and assertions contained in the Executive Summary of the proposal:

Par 3: What is the nature of the subjectivity referred to, considering that the damages calculated/determined is for the individual claimant?

Par 3: Can the RAF give examples of the non-uniform judgements from the professionals mentioned. We strongly dispute material incidence of discrepancies in judgement/assumptions used by actuaries practicing in this field.

Par 6 and in general: we support data-driven approaches that will increase accuracy and remove subjectivity. We note however that the requirement is that the individual's damages and loss must be assessed, and the individual compensated accordingly. This will necessitate assessing the individual, as apposed to a broad-based formulaic approach. The approach suggested by the RAF is similar to that in the UK (Ogden tables) which has valid criticisms. Judge of Appeal Van Blerk in *Erasmus v Davis* stated 'the quantification of damages is not done according to formulae or hackneyed practice rules'<sup>2</sup>

Par 9: *"derivation of a formula to calculate General Damages (GDs), cannot be based on anything else but the criteria that has already been established for the qualification for GDs."* We do not disagree with this in principle but the statement set a very narrow approach and has to be justified.

*"a process of benchmarking against other social systems-based compensation benefits"*  
Which systems? How were they benchmarked and compared?

Par 10: *"The VLGD shall be determined using methods of the statistical nature and be benchmarked against other jurisdictions, where such exist."*

Detail regarding statistical methods, basis of value, benchmarks etc is lacking (e.g. will United States be used as a benchmark for general damages?). Choice of method and benchmarks may introduce subjectivity on a systemic level.

Par 11: On what basis will the cap be justified and determined?

Par 19 to 21: Introduction of average in determining WPI moves away from individual assessment. Is it justified? Does it clear the legal hurdle?

Par 27 to 29: we agree in principle that pre-existing conditions (PECs) have to be factored in to determining WPI due to accident. The proposal lacks detail on if and how they will assess the pre-accident presence and severity of PECs, and what their impact is on the post-accident WPI.

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<sup>2</sup> *The divergent approaches of English and South African courts, when considering actuarial expert testimony in the matter of an award for damages for future loss of earnings after a damage-causing event* par 9.2 - H.L.M. du Plessis

*“The exact formula will be derived post research on obtaining appropriate and testing the suitability of various formulas to arrive at the best fit.”* Statement leaves one with a vague, if not complete lack of sense of the method and impact. Clarity needs to be provided.

Par 30: We agree narrative test introduces risk of subjectivity, but what guarantee is furnished that proposed solution will bring greater accuracy? Much detail still hidden.

Par 31 to 37: The presence of uncertainty and risk of subjectivity noted; this however does not detract from basis that the individual’s loss of patrimony need to be assessed as accurately as possible.

Par 34: Statement that the RAF is a social benefit scheme is not accepted. This impacts much of the proposal and could render the entire document irrelevant if the proposed solution is unlawful.

Par 40 to 42: The proposed approach is based on data-driven averages for cohorts instead of assessing the individual’s loss of patrimony.

Our general comments regarding data are applicable. We note the proposed use of transitional probabilities, which will require data that may not exist/be readily available with adequate granularity.

Par 45: Maintenance is often payable after divorce; the ex-spouse’s dependency does not cease in our view (see par 293.5 of proposal)

Par 46: Which data will be used to assess the probability of remarriage. We note recent judgements where it is noted that remarriage will not necessarily result in financial support, and any view thereon is highly speculative. Note the following statement by Hon Judge J Tolmay in *Esterhuizen v RAF*: *“I am of the view that it must also be borne in mind that a second marriage may not result in financial support. There is the possibility that the second marriage may not last and that the financial support, if gained may be lost. The second husband may also not be in a financial position to give the necessary financial support. Consequently, the possibility that the remarriage may not result in financial support must also be taken into consideration when the remarriage contingency is determined. To determine the Plaintiff’s prospects of remarriage and the possibility of financial support is to gaze into the proverbial crystal ball.”*

One should also ask whether they will factor in the probability that spouse is even worse off financially after remarriage?

Par 47: The same considerations regarding data and individual loss of patrimony as raised above.

Par 48 Clarity needs to be provided on what data will be used and how it’s accuracy and relevance will be ensured

Par 49 to 54: System design is interesting but note the cost and difficulty in getting systems on time, will full functionality and user friendly.

Par 60 etc: *The RAF is a Schedule 3A Public entity according to the Public Finance Management Act (PFMA). In its current form as a fault-based, road accident social benefit compensation scheme in South Africa.*

We will not comment extensively on the legal framework, save to note that the premise of the proposal seem to be that the RAF is a social benefit scheme., which is not accepted.

Par 71: Blaming delays and inefficiencies on the system without any introspection and comment on the RAF's strategic and operational failures.

Par 72: In our view, claims that are not eligible and inflated claims should be dealt with within the current legal framework; the RAF should defend itself and their experts should be equipped with the relevant data and insights to ensure fair settlement.

We do not comment on medical costs.

Par 120: *There seems to be inconsistent co-relation between current economic data, labour market performance, employment data, university and school completion rates, and other socio-demographic data that is used to inform these estimates. The overall conclusion is that the estimates are largely subjective.*

This may be true but then surely the RAF's experts should be able to determine postulations that are aligned to the realities above and can therefore be demonstrated to be more correct than any observed subjectivity.

Par 124.5 : *Unreliable and unrepeatable Actuarial model and stated assumptions.*  
Can the RAF back up this statement with adequate examples? We highly doubt it!

Par 129: Indicates insufficient resources and the RAF's side!

Par 141 -142: Mortality tables. RAF uses Tables 2 to 5. The South African Life Tables 1984 – 86 were classified along racial lines, with only tables denoted as White (W) and Coloured (C) being constructed from actual data. Tables 2 and 5 are the corresponding W and C tables, whereas Table 1 assumes lower mortality than Table 2, Tables 3 and 4 are blends of W and C, and Table 6 is worse than C.

The reasons most damages actuaries use Life Table 2 (South African Life Tables 1984 – 86) regardless of race or income are as follows:

1. The racial construct of the tables is fundamentally discriminatory. It is based on data at a time when people's access to economic opportunities, healthcare, and other factors that improve mortality was hindered by law, based on their race. Currently, all South Africans have access to better economic opportunities and healthcare regardless of their race, and hence one would expect a commensurate improvement in their mortality experience.
2. The overall South African life expectancy has generally improved since the mid-point of the tables (1985). According to the World Bank, life expectancy at birth in 1985 was 62 (years) and in 2021 it was 72, down from a pre-Covid high of 66 in 2019<sup>3</sup>. The Statistics South Africa

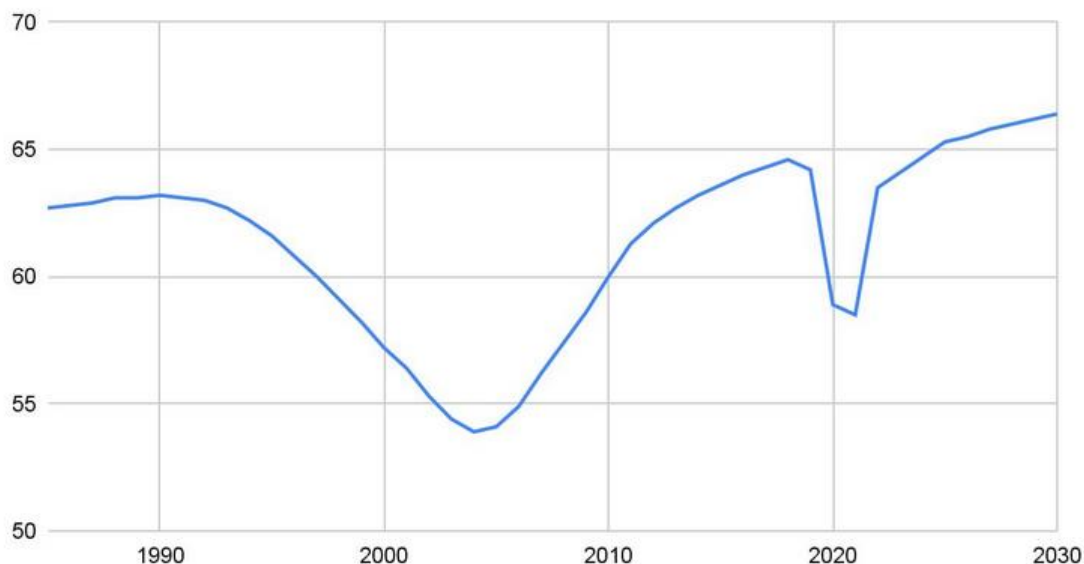
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<sup>3</sup> <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=ZA>

2022 life expectancy is 62.8 years<sup>4</sup>. We regard the life expectancy in 2021 as a post-Covid low point and can already see an improvement in the 2022 data.

Various sources indicate the expected improvement in projected life expectancy in 2024, such as the Thembisa HIV model (64.7 years – see chart below)<sup>5</sup> and [www.macrotrends.net](http://www.macrotrends.net) (65.1 years)<sup>6</sup>.

### Life Expectancy at Birth



- There is a continued worldwide improvement in life expectancy and the rate of improvement is far higher in developing countries. According to the World Health Organisation, worldwide *“life expectancy at birth (years) has improved by 6.52 years from 66.8 years in 2000 to 73.3 years in 2019”*<sup>7</sup>. We expect this trend to continue, strengthening the case to use lighter mortality.

Life Table 2 is the table with the best mortality (actual data), and hence it is inferred that the improvement in overall life expectancy supports the case to use Table 2 for all persons.

- Two judgements support the case to remove the racial classification from the tables (and hence validate the use of Life Table 2):
  - Singh v Ebrahim (413/09) [2010] ZASCA 145 (26 November 2010)
  - AB & ID v MEC for Health and Social Development, Western Cape Provincial Government (27428/10)

A data-driven approach is conspicuously absent in the RAF’s use of Tables 2 to 5!

<sup>4</sup> <https://www.statssa.gov.za/?p=15601>

<sup>5</sup> [https://thembisa.org/content/downloadPage/ProvOutput4\\_6](https://thembisa.org/content/downloadPage/ProvOutput4_6)

<sup>6</sup> <https://www.macrotrends.net/global-metrics/countries/ZAF/south-africa/life-expectancy>

<sup>7</sup> <https://data.who.int/countries/710>