

# **Actuarial Society of South Africa**

## **EXAMINATION**

October 2018

### **Subject A302 — Communications**

## **EXAMINERS' REPORT**

This subject report has been written with the aim of helping candidates. This report summarises the main points that the examiners were looking for and some common problems encountered.

The examination required the candidates to draft

1. An email to their fathers outlining changes to his company linked retirement options
2. Presentation slides to outline a business case for cyber insurance

## **General Examiner’s comments**

### ***Question 1***

This question required candidates to clarify their father’s retirement options following changes to the retirement policy of his company. Candidates were required to convey their communication of the three key concepts in a balanced way with sufficient explanation of technical concepts.

Candidates were required to use the correct formatting style and tone required for an email to a parent. The tone should have been personal, warm and reassuring. Although their father may have been confused the candidates should not have come across sounding disparaging or impatient. Some candidates’ tone was very formal which was not appropriate given the situation.

Most candidates were able to explain the options for early, normal and deferred retirement to a reasonable standard. Better candidates were able to clarify the possible positive outcomes of choosing deferred retirement.

Candidates were also required to outline the concept of a living annuity by comparing and contrasting its function to that of a unit trust, or otherwise. Most candidates addressed this in some way, but better candidates were able to include discussion on the relative pitfalls and advantages associated with living annuities. Many candidates did not mention the possibility of reduced funds or practically running out of funds due to poor returns and/or high initial withdrawals. The fact that expenses could exceed income generated by the annuity even if funds are not depleted is the main disadvantage of a living annuity and should have been highlighted.

Finally, candidates were expected to outline the relative differences of purchasing an annuity in-fund out out-of-fund. Better candidates were able to infer that the investment strategy of the in-fund annuity aimed at the average factory worker would likely not be suitable for anyone in a management position.

Candidates were not required to make any recommendations but rather asked to clarify the retirement options available.

## *Question 2*

This question tested candidates’ ability to construct a persuasive presentation to an executive committee from the information given. Some of the technical information required in the presentation needed to be calculated from the information provided in the question. There was an opportunity to utilise different types of graphics and pictures to enhance the presentation.

Candidates needed to realise that they should have adjusted the first three draft slides given in the question, adjusting the title and date, creating more appropriate slide headings on the “Agenda” slide and filling in more information on slide 3. A large amount of guidance as to the expected content of the remainder of the presentation was given on draft slide 2 of the question. Generally, candidates should only have changed the agenda slide if they could improve it. There was a number of possibilities for improvement, for example perhaps changing *Estimated Premiums* and *Estimated Income* to *Projected Financials*.

Most candidates were able to include the information given in the question in their slides. However, many included too much information on their slides and used full sentences from the paper verbatim instead of restructuring the information given to suit the audience and means of communication. Better candidates were able to synthesise the information into support for the business case presented. Most candidates missed out on quantifying and outlining the current market landscape and focussed only on the drivers of demand for cyber insurance.

Better candidates were able to build an argument with the information given that would persuade the executive committee to invest more time and money in the initiative. They were also able to present the substantial amount of information provided in a visually interesting manner.

Many candidates were not able to do the simple calculations required to project the financials of the product. As a result, many came up with incorrect estimations of the expected premiums and market share.

### **Question 1 - Draft Solution**

From: Natalie <actuarynatalie@gmail.com>  
To: Andrew Pater <apater@gmail.com>  
Subject: Your retirement options explained  
(The date is entered automatically in an email.)

Dear Dad

I'm sure that it must be great to see your retirement on the horizon. After more than 35 years of hard work you certainly deserve it. I am happy to outline your retirement options and what types of living annuities are available, but I am first going to summarise exactly what a living annuity is. You will need to buy one of these, whichever retirement option you choose.

#### **Living annuities in a nutshell**

When you buy a living annuity, it provides you with an income for life. However, it does not guarantee the level of this income. If markets perform poorly or you withdraw lots of money from the annuity initially, there may be very little left to withdraw later on in life.

A living annuity functions a lot like a unit trust, with some exceptions.

#### *Similarities with unit trusts*

You choose where to invest your accumulated retirement money out of the choices offered by the annuity provider. Your investment grows or shrinks depending on the return earned by the underlying investment. Money is withdrawn from the fund to provide you with an income and to meet annual expenses related to administration and asset management. You bequeath the remaining value of your living annuity to your heirs when you die.

#### *Differences to unit trusts*

South African law limits how much income you receive from a living annuity to between 2,5% and 17,5% of your investment every year. This means that, although you never run out of money, you may have very little left after several years of high withdrawals. This is especially true if returns have been low over this period. No subsequent deposits are allowed into a living annuity.

#### **Retirement options**

You may retire at any time before age 65 and on any birthday between ages 65 and 70 thereafter. A retirement before age 65 is called an early retirement. Normal retirement occurs at age 65 and any retirement after that is called a deferred retirement.

If you opt for a deferred retirement, you must resign from permanent employment at BigCo on any birthday between ages 65 and 70. That said, you may continue to earn an income from another source. The amount that you have accumulated in the BigCo Retirement Fund until then remains in the Fund until your eventual retirement. You make no further contributions to the Fund after your resignation. However, your accumulated amount continues to earn Fund investment returns and incur expected fees of 1% p.a. on this value.

Whichever of the three retirement options you choose, you will be required to buy a living annuity at retirement. You’ll buy it with the amount that you have accumulated in your Fund up until then.

**Living annuity types**

You are allowed to buy a living annuity from a provider outside of the Fund or you may choose an in-fund living annuity. In-fund living annuity fees of approximately 1% p.a. are significantly lower than average fees of around 2.9% p.a. charged elsewhere. On the other hand, annuities offered outside of your fund may offer more suitable investment choices. In-fund annuities tend to offer the best investment options for the average retiree but as a director, your needs may differ from theirs.

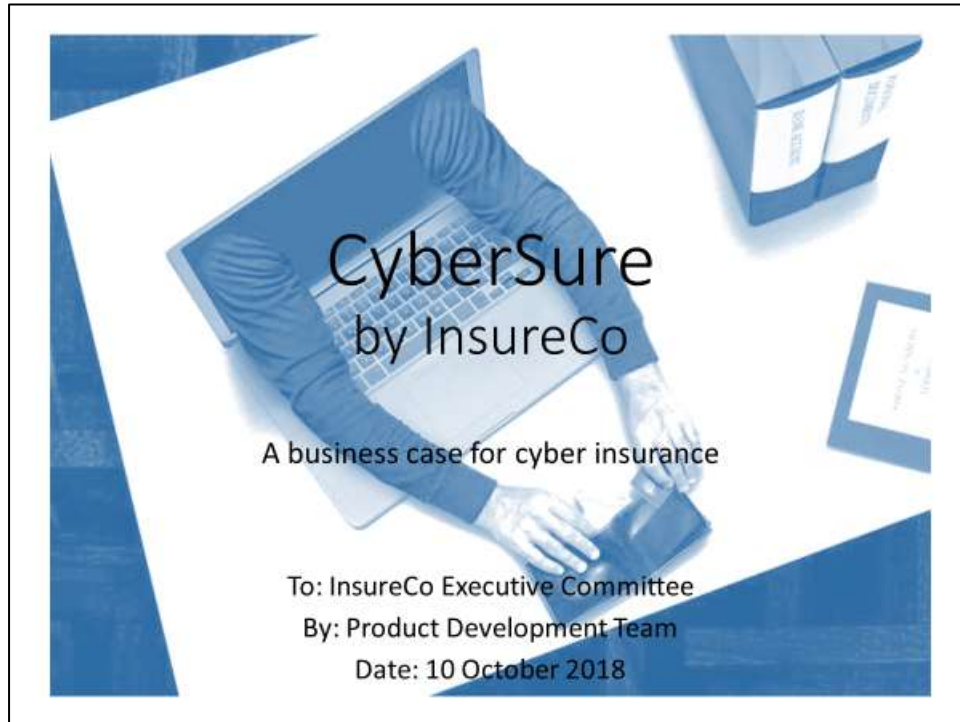
To sum up, your two new choices are: remain in BigCo Retirement Fund after normal retirement date and/or invest in a living annuity within the Fund.

Please shout if I can help you with your retirement choices. We all want the best for you and Mom.

Love  
Natalie

Words: 580

**Question 2 - Draft Solution**



## Agenda

- What is cyber risk?
- Is there demand for cyber insurance?
- What is the supply of local cyber insurance?
- How does Cybersure work?
- What does Cybersure provide?
- What could CyberSure cost?
- What could CyberSure earn?
- Recap and Proposal

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## What is cyber risk?

Risk that the failure of IT infrastructure can lead to:

- Financial Losses**
  - Loss of data
  - Loss of intellectual property
  - Regulatory fines
  - Legal costs
- Disruption of business**
  - Loss of revenue
- Reputational damage**
  - Loss of client confidence

### High profile incidents

**2018:**

- Major insurer data breach – extent as yet unknown

**2017:**

- WannaCry Ransomware - 230 000 computers in 150 countries
- 30 million South African title deed records exposed
- 1.6 million media house customer accounts exposed

**2016:**

- Major broadcaster’s websites hacked

**2006 and 2009:**

- South African banks hacked and documents released on 2 occasions

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## Is there demand for cyber insurance?

- Cyber insurance is the fastest growing insurance sector globally
- Annual Losses in SA
  - R 2.2 billion
- Frequency of attacks:
  - SA 31<sup>st</sup> out of 117 countries and 1<sup>st</sup> in Africa
- Top business risk according to reinsurers

**Expected Growth - Global Annual Premiums**

**Regulation is increasing demand:**

**Data Protection Directive (Europe)**

**POPI (South Africa)**

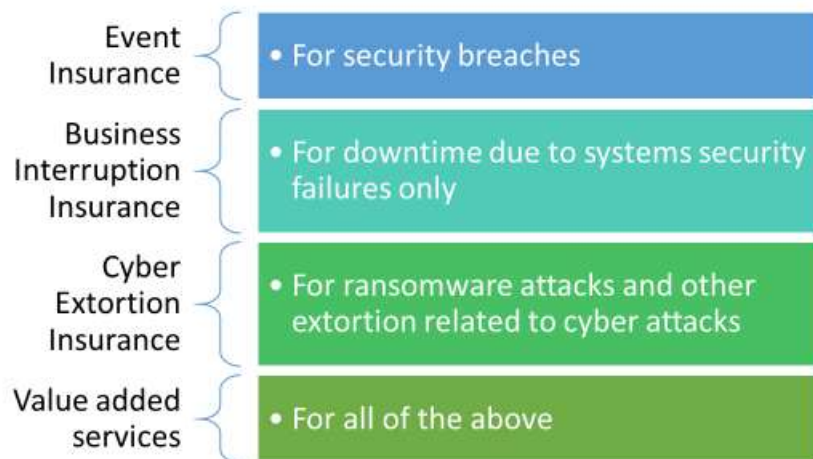
## What is the supply of local cyber insurance?

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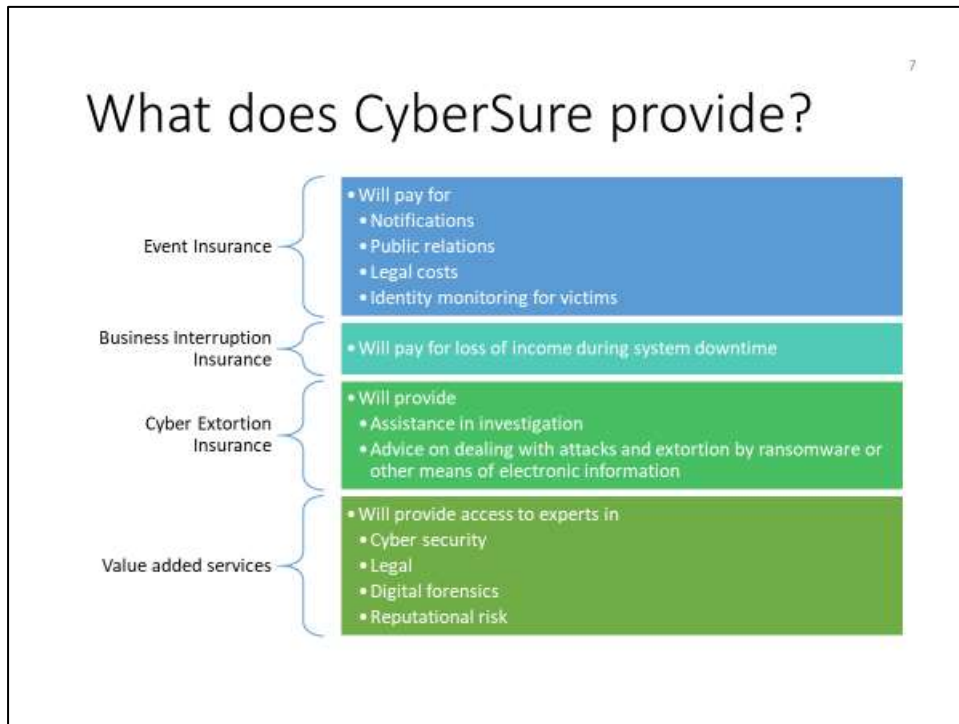
- South African market
  - R500m annual premium income
  - small compared to losses incurred
- Only a few sales can capture a high market share
  - market is new and still developing
- SMEs overlooked by existing providers
- Large growth potential for new providers

## How does CyberSure work?

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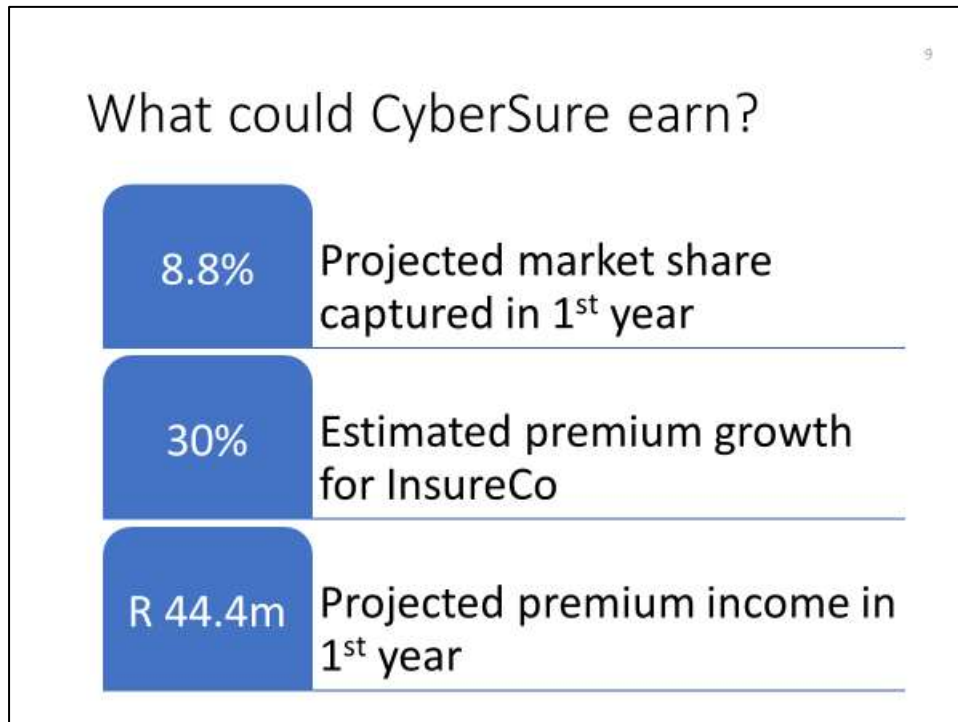


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## What could CyberSure cost?

Projected Basic Annual Premiums Per Insured		
	Small/Medium Business	Large Business
Low Risk	R 101 250	R 135 000
Medium Risk	R 506 250	R 911 250
High Risk	R 3 375 000	R 5 062 500

Premiums include expected cost of claims and a 35% loading for expenses and profit



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## Recap and Proposal

**Recap**

- Cyber risk is increasing
- High profile events → Increased risk awareness
- Regulation driving demand for cyber insurance
- High expected insurance growth globally and locally

**Proposal:**

- Product development team should
  - Conduct further market research
  - Continue product development to launch CyberSure within the next 6 – 12 months



**END OF EXAMINERS’ REPORT**