INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2020

Subject SA3 - General Insurance Specialist Advanced

Introduction

The Examiners' Report is written by the Chief Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Mike Hammer

Chair of the Board of Examiners
July 2020

A. General comments on the *aims of this subject and how it is marked*

1. The aim of the General Insurance Specialist Applications subject is to instil in successful candidates the ability to apply knowledge of the general insurance environment (in the United Kingdom and other jurisdictions) and the principles of actuarial practice to the management of general insurance business in complex situations.

2. Our expectation of a passing candidate at this stage is that, broadly, they should appear capable of stepping up to a head of function (pricing / reserving / capital) role at a small-mid sized organisation or being a senior member of a function team at a larger organisation. They should demonstrate not only a grasp of the technical aspects of general insurance actuarial work, but should also a good sense for products, the competitive marketplace, regulatory environments and the operational aspects of an insurance company. They should be able to pull these areas of understanding together to provide well rounded advice to the users of their services.

3. Consistent with previous examiners' reports, we would offer candidates two key pieces of advice – (i) read the question properly and (ii) take the time to actually think about what is going on. Further to previous reports, we would stress that candidates do not need to get the majority of the points included in this report in order to pass (there are significantly more than 100 marks available for the points in this report). Time spent making sure that you are answering the question that is asked is therefore more valuable than a panicked rush to put down as many points as possible, regardless of whether they are relevant.

4. On the first issue, candidates should always work on the assumption that the question wording has been carefully chosen. It is therefore essential to read the question properly.

5. If something is not asked for then candidates will waste valuable time writing answers that will gain no marks. These broader answers may be a logical next step to the question and so may be appropriate for candidates to discuss in a professional context. This is an exam however with a finite number of marks available and so the scope must necessarily be limited and specifically defined.

6. If a question does specifically mention something, candidates should also assume that there are definitely marks available for this aspect of the question. During the exam setting process, any content that is superfluous will have been removed. A clear implication of that is that if there are numbers provided in the question paper then there are marks available for comment and consideration of those numbers.

7. Wording of question sections should also be considered in the context of the position within the overall question. Where new question information is provided between sections, candidates should recognise that this information is specifically relevant to the following section or sections. When answering preceding question sections, candidates should not consider any subsequent information in their answers (although it may cover similar ground).

8. Various examples from this paper of recurrent failure to read the question are noted below. On the second issue, candidates should note that SA3 is the key paper at which we test candidates' broader thinking. This is generally the final paper before qualifying as a professional, and we consider a capacity for broader thinking to be one of the best indicators of a candidate's suitability to act in a professional capacity once qualified.

9. As such we aim to design exam papers so that it is difficult to pass without displaying some capacity for independent and broad thinking, as well as to heavily reward instances where these skills are displayed. When reviewing past papers, candidates should assume that the marks available for generic points are substantially less than those awarded for the more challenging points that would be the mark of high quality professional insight in a practising actuary. Marks available for list items from bookwork are lower still.

10. We strongly recommend that candidates step back and take the time to thoroughly think about what is actually going on in question situations proposed rather than simply considering numbers to be analysed with standard techniques. For example, candidates might stop to think about what claims actually are for a particular class of business, considering factors such as what actually causes the claim, who brings the claim, how it is dealt with once brought, what makes one claim small while another is substantial etc.

11. This more grounded, real world perspective will help candidates to consider such things as practical issues, stakeholders involved and their potentially diverging objectives, wider impacts, regulatory or ethical issues, inappropriateness of certain actuarial techniques for the specific situation, current economic or cyclical effects etc. This is likely to lead to significantly broader point generation (and indeed reflects the thought processes of the examiners in drafting the questions and solutions) and a more rounded understanding of the underlying risks and dynamics which should also be of value to candidates when dealing with different stakeholders in their professional life.

12. Again, some examples of this failure to think more widely on the current paper are below. More generally, we would also advise candidates to employ basic exam techniques such as well-structured answers and effective time management.

13. Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

B. Comments on *candidate performance in this diet of the examination.*

No changes were made to the way the paper was marked to reflect the online delivery. Scores were generally higher particularly on bookwork elements as would be expected with access to course notes, and this was reflected in the pass mark selected following the moderation process (script review).

A number of specific comments are provided next to the questions where there were repeated reasons for candidates to score badly. These include recurring issues with failure to read the question properly, lack of consideration of secondary factors to assist with point generation (e.g. stakeholders, operational issues, market & competition impacts, regulation etc) and time management.

C. Pass Mark

The pass mark for this exam was 63.
388 candidates presented themselves and 127 passed.

Solutions

Q1

(i)

- Events that have not occurred in the historical claims experience [½]
- ..but should be allowed for in a best estimate that allows for all possible future outcomes [½]
- Any appropriate reference to SII [½]
- Valid example [½]
- Also known as binary events [½]
- Can be both positive or negative [½]

Credit was given for other answers similar to 2019 & prior core reading

[3, Max 2]

(ii)

Advantages

- Overall reserves will be higher if they also include ENIDs [½]
- ..providing greater protection for policyholders / reduces chance of insolvency [½]
- Appropriate comments on forcing insurers to consider the completeness of the dataset / what they're missing [½]
- May be more consistent with international standards [½]
- May be more consistent with pricing or other approach / encourage additional thinking [½]
- ..with unexpected issues
  - For example asbestos having driven some of the most material insurance market losses in the past [½]
- ..this may help insurers to manage their policy wordings more effectively to avoid exposure to unintended risks [½]
- ..or to buy more appropriate reinsurance cover to protect against extreme events [½]
- ..or to more sensibly manage their aggregations of exposure [½]

Disadvantages

- ENID allowances are inherently difficult to quantify as by definition they are items that haven't happened [½]
- Limiting the credibility of any ENID allowances / spurious accuracy [½]
- ..and introducing time costs to the market to produce estimates [½]
- ..documenting ENID approach [½]
- ..regulating ENIDs [½]
- ..ensuring ENID treatment is consistent across insurers [½]
- Adding additional reserves increases costs for the insurance market [½]
- ..which is likely to be passed on to customers [½]
- ..and may reduce international competitiveness if they are not required globally [½]
- ..unlikely to cause capital strain as probability weighted [½]
- ..but conversely unlikely to provide any meaningful protection against a meaningful tail event [½]
- ..as only a probability weighted reserve is held [½]

[10½, Max 6]

(iii)

Property catastrophe

1) extreme CAT event such as a meteor strike, or a CAT that is beyond the range of outcomes in the insurer's history [1]
2) change in building standards following an event impacting rebuilding costs, or known CAT events manifesting in different ways such as NZ EQ, Katrina levees [1]

Motor excess liability

1) Ogden, MOJ reforms, PPO legislation or some other form of regulatory driven shock that hasn't happened historically [1]
2) significant individual loss event
   For example
   - Selby or major motorway pileup or some other type of event that hasn't been represented in the insurers data [1]

Adverse development Cover

1) new types of latent claims [1]
2) regulatory change impacting claims handling or costs [1]
3)

Credit was given for any valid examples - they had to be something potentially covered by the particular type of reinsurance (e.g. not a new catastrophe for the ADC).
No credit was given for one word answers without context for why it's not in data.
If two essentially similar versions, half mark was given for second one.

(iv)

- The use of a stochastic model in itself does not remove the need to allow for ENID events [1]
- Internal models are generally parameterised around internal claims history and views on "reasonably foreseeable events" [1]
- ..in which case the mean of the distribution wouldn't reflect ENIDs even if the distribution covers a range of outcomes that are not in the history [1]
- ..particularly if the mean of the distribution has been calibrated back to some kind of business plan [1]
- Some standard techniques eg, Mack may underestimate the extremes of events [1]
- Can parameterise in a way that does generate extremes leading to a higher mean than the input data however in which case may be fine [1]
- The property catastrophe business may well be modelled using a third party catastrophe model, which often contains a range of potential outcomes based on seismological or meteorological analysis [1]
- ..these could be argued to provide broad coverage of ENIDs [½]
- ..or at least to expand the range of the dataset to the point where there is little remaining ENID potential [½]
- Not holding ENIDs may cause issues with stakeholders [1]
  For example
  - regulators [½]
  - reinsurers [½]
  - auditors [½]

    - rating agencies [½]
- ..although the size of any "missing" ENID allowance may be low relative to best estimate provisions [1]
- ..and low relative to the uncertainty in best estimate provisions [½]
- ..particularly for a reinsurer with this business mix [1]
- The reinsurer may be holding some level of implicit margin within their "best estimate" [1]
- ..although this could also be used in deterministic methods to avoid the need for ENIDs [1]

[15½, Max 6]

[Total 20]

Even with bookwork access definitions for (i) were of variable quality.

Some answers to part (ii) were limited and often repetitive, basically all candidates appreciated that they were quite difficult to estimate with some offering multiple versions of essentially that point. Many candidates didn't seem to have thought through the relatively limited protection ENIDs would offer if there actually was a material new event or claim type, and as usual candidates tended to miss marks for thinking through practical, operational, competitive or other secondary effects.

In part (iii) a lot of candidates scored full marks quite easily, although some doubled up (e.g. a meteor strike and a volcano) or put down events that wouldn't really work (e.g. a new catastrophe on ADC cover).

Part (iv) was fairly badly answered in general. A number of candidates didn't grasp the main focus of the question (i.e. a model parameterised with the data wouldn't generate ENID allowances at the mean just because it's stochastic) and a lot of those that did then didn't think through other factors e.g. 3rd party CAT models or intentionally parameterising to include a margin over data, and again many missed marks for thinking through additional impacts e.g. to stakeholders such as regulators (considering stakeholders can frequently help to generate marks).

Q2

(i)

<u>Lower than average in some countries due to</u>

- Poverty [½]
- Lack of financial education [½]
- Poor value products provided by local insurers [½]
- Lack of trust in local insurers to pay out when liable [½]
- Lack of confidence in insurer solvency [½]
- Culture of self-insurance [½]
- Culture of community support / protection [½]
- Religious restrictions on insurance
  For example
    - sharia [½]
- Government restrictions on foreign insurers [½]

- Government dominance of the market as state provider [½]
- Basic healthcare or other benefits negate need for insurance [½]
- Government requirements increase barriers for entry for new insurers [½]
- Onerous capital requirements discourage investment in insurers [½]
- Restrictions on distribution from
  For example
  - banks [½]
- Lack of compulsory products [½]
- Low level of natural disasters / weather [½]
- Court system doesn't award high liabilites [½]
- ..or punitive damages [½]
- Lower litigiousness [½]
- Underdeveloped market for claims management type firms [½]
- Lack of insurers due to lack of expertise or data [½]
- ..political stability [½]
- GDP is out line with other economic activity e.g. major commodity export [½]
- ..or gdp figures are of limited credibility
  For example
  - large black market not adequately captured [½]

Credit was given for converse points for higher penetration

Other valid points [½]

[12, Max 6]

(ii)

- Insurance is a form of protection by protecting individuals against extreme events and so impacts wellbeing and the government may want to ensure this for society [1]
- Might work out cheaper/economical for government to have insurance sector booming as reduces burden on government revenues responding to disasters [1]
- Having a deep insurance market increases the country's GDP, improves economic health of the country [1]
- Direct and indirect employment relating to the insurance sector [1]
- Improves confidence for investors, both nationally and overseas [1]
- Pooling of risk [1]
- Reduce financial crime [1]
- Better awareness of risk factors & improved risk management [1]
- May increase tax revenue for government [½]

Other valid suggestions [1]

[8½, Max 3]

(iii)

- Premium subsidies from the government [1]
- Compulsory products for consumers e.g. motor third party in the UK [1]
- Make business loans easier for insurers to obtain [1]
- Speed-up licence approvals in the country [1]
- Educational campaigns in school or conventional means
  For example
  - television, paper ads, etc. [1]
- Improve confidence either through better regulation or marketing campaigns [1]

- Make capital requirements more sophisticated or less onerous. They might be overly prudent and a material barrier for entry / one size fits all model [1]
- Rate control for insurers so that products are more affordable and may cause insurers to underwrite better [1]
- Levies on insurers to form a protection fund which may increase trust by consumers [1]
- Enforce minimum volumes for certain products for insurers to ensure insurers push sales [1]
- Lower taxation for insurers to make it more attractive for insurers to enter [1]
- Remove VAT/other sales good tax (if any) from premiums to lower cost for consumer [1]
- Make insurance more accessible by allowing other sectors to sell/distribute insurance (if not allowed currently) [1]
- Government could have a state funded insurer offering products to all subsidised by taxes [1]
- Increase the implications for insurance fraud- make it a criminal offense
- Allow foreign players into the market [1]

[15, Max 6]

(iv)

<u>Advantages</u>

- Government may profit from this so can spend the profits on other wellbeing programmes for society [½]
- Increases competition in the insurance market and may increase penetration [½]
- Improves likelihood that poor families will get comprehensive health cover [½]
- May reduce healthcare system costs where families claim through policy [½]
- Might generate good volumes of data on poorer families that could be used to improve other services [½]
- Easier to have single product [½]
- May be cheaper [½]
- May be more trusted as a government product [½]
- Coverage may be better understood as well publicised product [½]

<u>Disadvantages</u>

- Government may be losing money on this product as this is a low cost product and causing insurers to lower premiums and generate losses also [½]
- ..might lead to greater chance of insolvencies [½]
- ..might make licence applications decrease as another barrier for entry for newcomers and so does not increase penetration of insurance [½]
- As it covers three things - a policyholder may not need all 3
  For example
  - doesn't drive so no need for motor so might not be an attractive product and thus low volumes [½]
- Government is loss making means that needs to plug in holes for the losses which is likely to be done via taxes which lowers business profits [½]
- Cover may also be low and not meet policyholders need [½]

Max 2 for advantages and Max 2 for disadvantages

Other valid points advantages and disadvantages for any relevant stakeholders [½]

[7½, Max 4]

(v)

- Loss portfolio transfer - transferring all the liabilities and renewal rights to an insurer [1]
- Novation [1]
- Business Transfer [1]
- Quota share reinsurance - reinsure 100% or another lower percentage of business and do not renew any policies [1]
- Run-off (or hybrid run-off with other solutions). Do not capture any new business and instead just maintain policies until they naturally do not renew [1]
- Sell the business to another insurer or strategic investor or a private equity. There are even run-off specialists that buy these businesses also [1]

[6, Max 3]

No credit was given for commutations as not valid

(vi)

<u>Sale of business</u>

- Finality for government [½]
- Can be quick depending on finding counterparty [½]
- Can realise some value from renewal rights [½]
- No costly or publicised court approval processes [½]
- May be able to realise some value from investments in systems / processes / staff etc depending on counterparty [½]
- +/- price may be good or bad [½]
- May be limited counterparties [½]
- Reputational risk if managed badly [½]

<u>Run off</u>

- Slowest removal of liability and doesn't ever achieve full legal finality even if reserves are immaterial [½]
- No direct costs [½]
- ..although increasing inefficiency over time particularly if running off to full exhaustion [½]
- Outsourcing may mitigate the cost implications [½]
- Could be effective as part of hybrid method with partial run-off then other exit strategy once uncertainty is limited [½]
- Would lose any remaining value in renewal rights [½]
- ..unless sold separately [½]
- May run off relatively quickly given nature of product [½]
- May need to buy additional RI for runoff [½]
- May be difficult to retain adequate quality staff during runoff [½]

<u>Reinsurance</u>

- Doesn't achieve legal finality as remain liable for claims if reinsurer becomes insolvent [½]
- May not be full risk transfer depending on terms [½]
- May / may not be able to pass on claims handling & operational responsibility to reinsurer [½]

- Wider market for reinsurance so may be greater range of potential counterparties [½]
- Faster to implement subject to finding appropriate counterparty [½]
- Price could be good or bad [½]
- Would still have ongoing reporting requirements [½]
- Would still have credit risk and resulting capital requirements [½]
- Wouldn't be able to close down the company so would retain ongoing costs
  For example
  - auditors etc [½]

<u>LPT / Novation / Business Transfer</u>

- Complete removal of liability [½]
- Retains cover for the policyholders [½]
- Would allow company to be completely shut down with no ongoing expenses or responsibility [½]
- May or may not be good price [½]
- May realise some value from renewal rights or other
  For example
  - systems [½]
- Legal process can be time consuming [½]
- ..costly [½]
- ..and public [½]

Credit was given for any answers that draw distinctions between these methods. If chosen more than one of these methods, credit given multiple times

[17½, Max 8]

[Total 30]

Parts (i)-(iv) were generally well answered.

In parts (v) & (vi) no marks were available for commutation which would be impractical for a high volume product sold to consumers. Otherwise answered fairly well as largely bookwork

Q3

(i)

<u>Participating on Syndicate process</u>

- Much easier to enter as a corporate name, just provide capital [½]
- Would need to provide FAL as a Lloyd's name [½]
- Would need to get capacity on an existing syndicate [½]
- Could participate in capacity auctions to get freehold capacity [½]
- May be able to negotiate directly with capacity owners rather than participating in auctions [½]
- May be able to negotiate leasehold rather than freehold capacity which will be cheaper but comes with fewer rights [½]
- Can participate on multiple syndicates [½]
- Availability of preferred syndicates may be limited / expensive [½]
- Would need to set up a corporate member [½]

- Would need a members agent [½]
- Would be allocated capital requirements by Lloyd's through the member modeller based on the SCRs submitted by the syndicates and the capacity shares [½]
- Would need to come into line (i.e. put up funds requested) for one of the relevant coming into line dates [½]

<u>Process for establishing wholly owned subsidiary</u>
- Regulatory authorisations [½]
- Hiring underwriters [½]
- Hiring range of back office staff [½]
- Premises [½]
- Systems [½]
- Licenses [½]
- Marketing [½]
- Provide capital to support plan [½]
- If Lloyd's some other steps, corporate member / managing agency etc [½]
- May be able to use outsourcing / turnkey provider [½]

<u>Contrasting processes</u>
- Establishing a wholly owned subsidiary would take longer [½]
- ..and cost significantly more [½]
- ..and may take longer to achieve relevant market presence [½]
- May still be done regardless of greater costs & effort [½]
- May be lower cost long term as retains all profits [½]
- Gives greater control [½]

[14, Max 8]

(ii)
- Insurance policies written at Lloyd's are backed by three levels / links of capital set aside by Syndicates, Members and Lloyd's itself [1]
- Syndicate level assets are the first port of call for any claims [½]
- Premiums are held in trust and profits are not released until all liabilities have been accounted for [1]
- Members' funds held in trust by Lloyd's [½]
- Each member must provide enough funds to cover their underwriting at Lloyd's [1]
- Members' funds are only used if syndicate level assets are exhausted [1]
- Members underwrite for their own account and are not liable for other members losses [½]
- Lloyd's central assets are available for the rare occurrences where the first two levels of assets prove insufficient [1]
- Central assets are not actually guaranteed to be available to meet liabilities [1]
- Central capital comprises the New Central Fund (NCF) plus other central assets [1]

[8½, Max 4]

(iii)
- RITC is an agreement under the Lloyd's system of three-year accounting [½]
- A Lloyd's syndicate takes on business for just one year [½]

- Managing agents are required to close syndicates by RITC at the end of the third year if they can do so [½]
- Under RITC the members of the closing year syndicate agree with the reinsuring party [½]
- ..that the reinsuring party will assume responsibility for handling [½]
- ..and paying all liabilities of the closing syndicate [½]
- arising from all insurance business underwritten by the syndicate and allocated to the closing year [½]
- The reinsuring party is usually the subsequent opening year of the same syndicate.[½]
- But could be an open year of another syndicate or Centrewrite [½]
- Under RITC the managing agent of the ceding syndicate calculates a sum of money appropriate to meet all future liabilities and expenses [½]
- and the managing agent of the receiving syndicate makes the same assessment [½]
- The same managing agent is likely to represent both syndicates and therefore needs to be seen as acting impartially [½]

[6, Max 5]

(iv)

- At the end of 36 months there may be fundamental uncertainty regarding the liabilities [½]

  For example
  - large unresolved reinsurance disputes [½]
  - claims that are under dispute [½]
  - influx of late claims [½]
  - potential reinsurance failures [½]

- Both the audit report and statement of actuarial opinion will indicate that fundamental uncertainty exists [1]
- Where great uncertainty exists the syndicate can remain open and is treated like any other open syndicate [½]
- The RITC process may not be concluded if there is no natural receiving syndicate For example if the syndicate has stopped writing new business [1]
- The syndicate may remain open until such a time as the liabilities are more certain and therefore a suitable reinsurer can be found [1]
- Centrewrite may agree to accept RITC [½]
- Release of profits is deferred (although probably not profitable if cannot RITC) [½]

[7, Max 5]

(v)

- Reasonable and well supported suggestion, should generally be a multiple of the RITC premiums on prior years [4]

  Notes to marking team – there is no specific right answer for this question, requiring candidates to think about the figures presented relative to a new underwriting year's premium. Candidates should give some consideration to factors such as:
- *RITC premium will only relate to the exposures not paid in the initial three years so particularly on a short tailed class the RITC premium would be lower than an underwriting writing year*

- *Underwriting year would have aimed to write to a profitable loss ratio so underwriting year premium may have a higher margin than RITC premium (or conversely syndicate has gone into runoff so loss ratio may be over 100%)*
- *Depending on reinsurance, RITC premium (reflecting net exposures) may be lower than gross underwriting year premiums*
- *Consideration of trends in the data*
- *Consideration whether 2017 may be partial year as going into runoff*
- *Comments on other classes they may have written, e.g. which may have longer tail*

Broadly allow one mark per element considered above (or other valid suggestions) max of 3 marks, and the 4th mark for arriving at a sensible overall suggestion.

(vi)

- Deliberate margins unwinding [1]
- Major claims emerging after the transaction (probably more currency) [1]
- Errors in reserves [1]
- Case estimates wrong due to poor data provided [1]
- Demand surge affects [1]
- Expense overrun [1]
- Emergence of latent claims? [1]
- Inflation [1]
- Legislation [1]
- Currency [1]
- Reinsurance default [1]

[11, Max 3]

(vii)

<u>a) Best estimate of liabilities</u>

- Need all the data on the business written in 2017 and also from RITC from previous years in the 2017 account [½]
- Would start with existing reserving info from the syndicate [½]
- ..and SAOs or any other external reserve reviews available [½]
- Analysis approach depends on type of reinsurance written [½]
- Quota shares could be reserved like insurance business [½]
- Lower layer excess could also be reserved using standard methods [½]
- Higher layer excess or stop loss could require more stochastic methods [½]
- Chain ladder or BF as standard methods [½]
- Frequency severity or other stochastic [½]
- General reserving approach comments
  For example
  - granularity etc [½]
- Would need to understand major claims [½]
- ..business mix [½]
- ..changes to processes
  For example
  - claims handling [½]
- ..any specific IBNER / event IBNR [½]
- Should prioritise based on materiality [½]

- Use benchmarks where available [½]
  For example
  - for individual CAT events e.g. incurred / ultimate [½]

b) Uncertainty in the liability estimate

- Use stochastic modelling to see how actual results may vary from the best estimate [½]
- Or scenario testing [½]
- Reinsurance nature of the business means there is likely to be significant uncertainty [½]
- If the syndicate is exposed to relatively small amounts for example a working layer, it may be able to use stochastic reserving methods [½]
- simulation methods, eg Bootstrapping the over dispersed Poisson model [½]
- analytical model based on specified distributions such as Mack model [½]
- But these methods need large volumes of data to parameterise [½]
- And are therefore inappropriate for catastrophe exposed ranges [½]
- Understand why previous RITC quotes have been insufficient [1]
- Understand major claims or events [½]
- Quality of cedant data or loss estimates [½]

c) Trends in the data

- What basis, or bases were used with previous estimates? [½]
- If assume consistent basis look at the trend in the previous figures [½]
- Treating 2015 as an outlier there seems to be a trend of deteriorating experience [½]
- Or it could be that the managing agent recognized the early years RITC premium was overly cautious and removed some of this caution when assessing outstanding liabilities for subsequent years [½]
- Or the nature of the risks underwritten by the syndicate may have become more risky over the years as their experience increased [½]
- The trend, and in particular the figures for 2016 will make it difficult to find other syndicates to take on the liabilities [½]
- Given the trend in the figures a possible reinsurer would want to add a significant margin in order to take on the risks [½]
- And would want to undertake a very detailed analysis of the business written over the last two years [½]
- inflation [½]
- rate change [½]

d) Data requirements

- Essentially the reinsurer wants a good understanding of the liabilities to be taken on [½]
- And to understand the reasons why the RITC seems to have been constantly undercooked over recent years [½]
- Has geographical exposure changed [½]
- Has the type of reinsurance offered changed [½]
- What disasters/"one-offs" have occurred [½]
- Latent claim possibility? [½]
- List of all policies [½]

- Expenses [½]

Other valid points [½]

Other valid data examples e.g. claims listing, triangles etc [½]

Appropriate use of data / numbers in the question to inform the answer [½]

[24, Max 8]

(viii)

- The receiving syndicate is taking on uncertainty whilst the ceding syndicate is "buying certainty" so should be a margin [½]
- The greater the uncertainty, the higher the premium that should allow for this [1]
- Syndicate S may have very few or no names in common with Syndicate R. Syndicate S has therefore to make a pure business decision on whether to accept the RITC in return for taking on the liabilities [1]
- Commercial property reinsurance after three years is likely to be heavily weighted towards individual large claims and events with greater uncertainty [1]
- Therefore S will require a high margin to allow for the risk it takes on [½]
- If the data is not complete or unclear in any aspect this represents a further risk for S and hence a further margin would be sought [½]
- Operational costs` [½]
- Expenses [½]
- Cost of capital [½]
- Competition [½]
- Synergies - ability to achieve claims handling improvements and deliver margin [½]
- Investment return - market conditions / internal appetites etc [½]
- Following losses on RITC may want higher margin to protect against future uncertainties [½]
- Data uncertainties [½]
- Operational readiness may affect the margin that S requires to take this on [½]

[9, Max 5]

(ix)

<u>Managing loss run-off</u>

- Availability of claims handling expertise to manage the run-off of the business [1]
- ..may fail to realise the value in the portfolio if they don't have right claims management experience for the particular business being RITCd [1]
- ..the remaining risk is likely to be dominated by a few large claims so this could be significant [1]
- ..although if the claims are already in the reinsurance layer this may not be as critical as any variation would predominantly affect the reinsurer [1]
- ..and may be less critical if it's a follow market portfolio as could rely on claims handling capabilities of the lead [1]
- Are there any claims disputes that would be inherited [1]
- Would the assets in which the RI premium is paid be sufficiently liquid for the liabilities being taken on [1]
- Will also need other run-off capabilities
  For example
  - actuarial or finance [1]

<u>IT & systems</u>

- Are the underwriting / claims / data systems compatible? [1]
- Does S have the capability to manage the data migration or to manage distinct underwriting systems [1]
- What licensing issues might there be with R's current data systems [1]
- What timescales are possible to manage the IT transition [1]

<u>Resource & capacity</u>

- Does S have the capacity to quote for, win and manage the transition of this business? [1]
- Would S operate the ongoing business with existing resources or hire additional resources? [1]
- Would any staff or assets migrate with the RITC [1]
- Would Lloyd's or the PRA have any concerns with capacity to manage this RITC process [1]

<u>Other factors</u>

- Need to implement in capital / pricing / other modelling [1]
- Integration with risk framework [1]
- Any other counterparties / disputes / arrangements involved
  For example
  - coverholders / brokers [1]

Other valid suggestions [1]

Other valid suggestions [1]

[Max 8]

[Total 50]

In part (i) the question related to the process of entering the market so the majority of marks were allocated to considering that aspect.

Parts (ii)-(iv) were answered well as would be expected for bookwork content in an open book exam

Part (v) many candidates didn't attempt. Some attempted but missed key issues around relativity between RITC and UY premium, Those that did make a reasonable attempt generally scored full marks

Part (vi) was again well answered as largely bookwork

Answers for part (vii) were mixed with a number of candidates not generating much of a range of distinct points covering all sections

In part (viii) most candidates answered well other than those who misunderstood and answered about SII risk margins

In part (ix) many candidates appeared low on time, with a number also failing to focus on operational aspects.

[Paper Total 100]

END OF EXAMINERS' REPORT