

# **Institute of Actuaries of India**

## **Subject SP2 – Life Insurance Principles**

### **December 2022 Examination**

## **INDICATIVE SOLUTION**

#### **Introduction**

The indicative solution has been written by the Examiners with the aim of helping candidates. The solutions given are only indicative. It is realized that there could be other points as valid answers and examiner have given credit for any alternative approach or interpretation which they consider to be reasonable.

**Solution 1:**

Some of the challenges faced by insurance companies in the implementation of IFRS 17 are the following:

**1. Data granularity** - The challenges faced by insurance companies are not only confined to the accounting or reporting aspects, but are also related to actuarial data, which will require more granularity and strict control. Areas such as the grouping of insurance contracts for measurement purposes will require to be more defined on a specific granular level.

For a group of contracts that are onerous at initial recognition, it will require the insurers to identify and account for the onerous business. Overcoming this challenge will require the implementation of a solid insurance data foundation and sound data integration techniques.

**2. Heavy expenditures**- For most companies, implementing IFRS 17 will mean heavy expenditures on external, skilled resources to plug the capacity gap as well as investments in data and IT. The added uncertainty around an extension of the implementation deadline could double expenditures.

**3. Internal capabilities**- Leaders must ensure all teams across the organization have the right capabilities to manage their business units' performance under IFRS 17. Actuaries, finance, and IT and data professionals must collaborate to bridge their differences in perspective, jargon, and underlying knowledge. This becomes further complicated as external parties such as technology vendors and implementation partners are also involved in the implementation of IFRS 17.

**4. Management understanding of financials** - IFRS 17 will result in a significant change in the way financials results are being presented. In the initial period this will pose an additional challenge due to lack of understanding of these new financial statements within management requiring more efforts in explanation.

**5. Selecting appropriate knowledge/implementation partner** – As part of the implementation of IFRS 17, insurers will be relying on knowledge/implementation partner for activities like knowledge sharing across the organization, impact analysis, gap analysis, integration of various sub-systems, identification, and implementation of appropriate technology/tool. Selection of an appropriate knowledge/implementation partner will also be challenging considering lack of information on their expertise and experience in implementing IFRS 17.

**6. Pricing strategy** - The portfolio construct in IFRS 17 will result in onerous contracts to be separated from profitable ones. For onerous contracts, a loss will be recognized and the same cannot be netted off against the profitable contracts. This may present as a challenge to the insurer's pricing strategy.

**7. Tracking and amortization of contractual service margin (CSM)** - The contractual service margin must be amortized over the coverage period and on a systematic basis that reflects the transfer of services provided under the insurance contracts. Insurance companies may face challenges with amortization policy choice, as the same will impact the profit emergence together with the changes in the discount rates and insurance companies will be required to track these changes.

**8. The granularity of data from the actuarial process** - This will be a significant challenge for most insurance companies, as the actuarial system must be capable of providing the level of granularity required by IFRS 17, with a focus on cash flows. These expected cash flow calculations will eventually drive revenue and profitability through the release of risk adjustment and CSM.

**9. Quality of historical data for transition** - IFRS 17 requires insurance companies to place a greater focus on the quality of data when the same is being used for transition to the new standard. The availability and quality of data for transition may have a large impact on equity and reported profits for future years after the date of the initial application.

**10. No existing system to test against** - IFRS 17 is new and fundamentally changes the presentation of insurance results in the income statement and balance sheet. There are no existing results or processes to use as a benchmark; there are no reference points to compare against.

**11. Selecting appropriate technology/tool** – As part of the implementation of IFRS 17, insurers will be required to finalize and use a technology/tool to integrate various sub-systems and implement IFRS 17. Selection of appropriate technology/tool for implementation will also be challenging considering lack of information on the capabilities of various tools available in the market and also possible challenges in integration of the shortlisted tool with the other existing actuarial & accounting systems/tools.

[2 marks for explaining any of the 5 relevant points, **Max 10**]

**Solution 2:**

i)

1. By entering into the outsourcing contract, the Operational risk will increase.
2. Administration:
  - There could be increased conduct risk.
  - There could be additional data security risk of a leak of confidential data.
  - There is a risk that the staff being used to administer the business are not sufficiently skilled, particularly in understanding the company's products.
  - Therefore, this may lead to more errors and the errors may take longer to time for rectification.
  - Service standards could fall and there could be more unhappy customers and complaints.
  - There is a risk that call centre helpline and/or internet access availability may not be as extensive or as effective as at present.
  - Overall, there is therefore considerable reputational risk.  
This risk will further increase if customers have to contact outsourcing staff only.
  - There may be either significant redundancies of current staff or transfer of current staff to the outsourcing organization.
  - There is a risk that this may create both local and national reputational damage.
  - The company may underestimate the costs of managing the relationship with the outsourcing organization.
3. Systems
  - The outsourcing contract requires transfer of data from the insurer systems to the systems of outsourcing organization, which would expose the company to risks of delays in transfer, with consequent impacts on costs and service standards.
  - There is the risk of errors during data transfer.
  - Data migration may cost more than expected.
  - There is risk of a delay in system developments on the current system, which may put future new business or product developments at risk.
  - There is a risk that systems are not easily capable of being linked to other retained systems (e.g., Finance/Actuarial valuation systems).
4. Treating customers fairly (TCF)
 

Because the company is now exposed to additional risks outside its direct control, there is further risk of contravening TCF requirements.

#### 5. New business / retention

- Poor service standards could result in lower future new business, particularly for group business where administration service is critical.
- There is a risk that the focus of the company is diverted away from generating new business, while the outsourcing arrangements are being implemented or if problems arise.
- As a result of any negative reputational impact, there is a further risk of increased withdrawals.
- Lower new business and/or higher withdrawals may lead to increased risk of not meeting overhead expenses.

#### 6. Unit pricing

- The company will be exposed to the risk of lack of controls within the outsourcing organization's unit pricing function.
- This could lead to significant additional risk of providing compensation for any unit pricing errors and the cost of the resources required to rectify client records.

#### 7. Regulatory risk

- There is also a risk of regulatory intervention.
- Any irregularities could lead to fines and penalties.
- Outsourcing organization may fail to provide customers with required disclosures.

#### 8. Counterparty risk

- The outsourcing organization may not fulfil its contractual obligations in a timely and efficient manner.
- There is a risk that the outsourcing organization could default and may exit from the agreement.
  - In that circumstance, the risk that the company would not be able to take the administration back in-house sufficiently quickly to enable it to continue to provide adequate service
  - or the risk that it would not be able to find another outsourcing company quickly enough
  - or the risk that it would not be able to find another outsourcing company at an acceptable price.

#### 9. Contract

- The outsourcing contract will introduce legal risk. Poor wording may lead to disputes.
- The contract will be for a specific period and likely to have a schedule of charges to be made. The company will therefore be exposed to uncertainties at the end of that contract.
- The company may then face the potential need for in-sourcing or alternative outsourcing.

[0.5 marks for each relevant point, **Max 10**]

ii) The level of mitigation required will depend on the risk appetite of the company.

#### **Administration**

- In setting up the outsourcing agreement, the company could provide detailed process documentation for maintenance of policyholder records so that the outsourcing administrators can follow the same processes as currently.
- Only outsource the basic tasks, and leave more complex tasks in house
  - at least initially whilst the outsourcing organization staff's skill levels increase.

- Provide training to the outsourcing organization during the transitional period, also evaluate on potentially transferring some of its staff to the outsourcing organization to provide the required training.
- Ensure new systems are thoroughly tested.
- Build in sample checking of basic administration tasks– the samples may be more extensive initially whilst the arrangements are made.
- Restrict access to confidential data.
- Set appropriate performance standards for the outsourcing organization with payments/penalties dependent on reaching certain levels.
- Build appropriate service level agreements in the contract.
- For example, turnaround times including call centre opening times.
- Monitor key risk indicators such as numbers of complaints.
- Manage redundancies and related communications carefully, working with unions (where relevant).

### **Systems**

- Develop a detailed project plan.
- This should cover transfer of data to new systems, the development of product structures, and the links to in-house systems (e.g. Finance/Actuarial, Sales etc.)
- Have thorough testing of the data and valuation, comparing them before and after the transfer.
- Likely to do the transfer in tranches, starting with the most recent tranche.
- Older cohorts would be migrated only when the first migrated cohorts have been thoroughly tested.
- Outsourcing organization should have data recovery sites.

### **TCF**

- The company will need to continually monitor its TCF performance.
- It should require the outsourcing organization to provide appropriate management information to allow the company to monitor compliance.
- The company may only transfer customer facing functions after the outsourcing organization has proved it can cope with basic administration.

### **New business / retention**

- Careful communication will be needed with key distributors and where necessary, with customers.
- This should include details of how it affects them.
- There will be a need to ring-fence any resources involved in developing and selling new business, so that their focus is not diverted.
- Monitor persistency performance regularly via management information.
- Conduct sensitivity analysis on persistency assumptions to build into the outsource contract.

### **Unit pricing**

- Parallel pricing could be carried out for a period.
- There will be a need for an in-house monitoring/checking of unit prices, so that any errors/issues can be recognized quickly.

- A detailed process for dealing with errors and compensation will need to be developed with the outsourcing organization (also to ensure that any issues are quickly identified and dealt with)

#### Counterparty risk

- Significant due diligence on the outsourcing firm would need to be undertaken including investigating financial strength, credit rating (if applicable), current skill/staff levels and discussions with any third parties already using the company.
- Continuous monitoring of these items.
- The outsourcing firm's track record for administering this type of contract would be considered.
- Regular visits (insurance company management to outsourcing organization) should be arranged.
- The insurance company may ask its auditors (internal and external) to review the outsourcing organization.
- Have a back up plan in case of default.
- Ensure the contract facilitates the transfer of proprietary administration software and staff in the event of outsourcing organization insolvency.

#### Contract

- The legal contract will need to be carefully worded.
- This should include appropriate break points and actions to be taken if appropriate standards are not met.
- The contract should also include the compensation payments to be made.
- The contract should give clarity as to who is responsible for paying regulatory fines for poor service.

[0.5 marks for each relevant point, **Max 15**]

**[25 Marks]**

**Solution 3:** The following may be the probable reason for difference between the maturity proceeds received by Mrs ABC and Mrs XYZ:

- The death sum assured for the policy purchased by Mrs XYZ may be higher than the policy purchased by Mrs ABC. For example, guaranteed death benefit for Mrs XYZ might have been 150% of base sum assured and lower for Mrs ABC.
- The terminal bonus may be significantly higher for Mrs ABC's policy than Mrs XYZ's. It is more likely to be due to Mrs ABC's policy having a materially higher accrued asset share than Mrs XYZ.
- The difference may be due to different investment strategies between the two firms resulting in higher overall investment returns for Company ABC. For example, Company ABC may have invested more in equities which, on average, would likely have produced a higher average return over a period of that length.
- It may have been able to do this because it had a higher level of free assets and hence had more investment freedom to mismatch.
- Or even if the two companies had similar equity proportions, the choice of stocks may have been better for Company ABC. Company ABC may have switched into less risky assets, such as fixed interest or cash, just prior to a recent market crash.
- The investment expenses incurred by Company ABC may be less than Company XYZ. For example, due to the size of the funds under management, with Company ABC having higher overall funds

and so benefiting from economies of scale and thus from lower overall expenses. Or the difference may be due to whether in-house or external fund managers are used.

- Similarly for administrative expenses, which might be lower for Company ABC, e.g. due to having more efficient processes.
- Company ABC may have paid lower commission on its with profits policies. This may be dependent on the size of the company and their influence on commission and distributors.
- It will also depend on the distribution channel used, which could differ between the two companies, e.g. Company XYZ might have used independent financial advisers, which require competitive commission levels, whereas Company ABC has its own salesforce.
- Mrs ABC may be younger than Mrs XYZ or have a healthier lifestyle and hence the deductions for life cover may have been lower.
- Or, the table of mortality assumptions used by Company ABC may have been generally lighter, e.g. because it generally sells to a lower mortality socio-economic group or location than Company XYZ. Or, Company XYZ may have suffered high actual mortality losses and charged these to asset shares.
- The cost of capital charged may have been lower for Company ABC (or it may not charge for cost of capital). For example, Company XYZ may have been newly established and so more capital constrained and therefore decided it was important to charge a cost of capital used to support its new business.
- Taxation may be more onerous in Company XYZ e.g. due to the mix of other business written.
- There may have been higher profit transfers to shareholders in Company XYZ than in Company ABC because the shareholder proportion applying to the fund is higher (e.g. 20% rather than 10%).
- The grouping of policies assumed in the final bonus declaration may differ between ABC and XYZ. For example, Company ABC may group over more policy terms, whereas Company XYZ may group over fewer policy terms or vice versa.
- Company ABC might apply a different smoothing approach as compared to Company XYZ, e.g. it might smooth less or over a shorter period of time and there have been very good recent investment returns, so the Company ABC policyholders will gain more from such returns.
- The two companies may be targeting different percentages of asset share for payouts.
- In Company ABC, the amount paid on surrender may be much lower than in Company XYZ and the profits on surrender are distributed as part of the final bonus.
- Company ABC may have declared a one-off "special" bonus e.g., because of restructuring its with profits fund, e.g., distribution of estate.
- The proceeds received by Mrs XYZ may have been wrong (probably due to operational error in the process)

[Each relevant point needs to be described in detail, 1 mark for each relevant point, **Max 15**]

#### **Solution 4:**

- i) The main uses of data for actuarial analysis:
- premium rating, product pricing, determining contributions
  - setting provisions
  - experience analyses
  - risk management, including using underwriting and reinsurance.
  - investment
  - accounting
  - management information
  - marketing
  - administration.

[Each point carries 0.5 marks, **Max 3**]

ii)

a) Data checks-

1. A data reconciliation between 'current/now' and the previous model run.
2. Group data into large blocks (not model points) such as products subdivided by year of entry.  
Test that: Data at previous investigation + new business written/business revived – business gone off the books = data at current investigation.
3. Use this to check items such as policy numbers, premium, sum assured, units by fund (for linked business).
4. While doing this check, it is also useful to check the movement data against appropriate accounts data.
5. Check for consistency-
  - This means checking that the averages by class (eg products by year of generation) of important values such as premium and sum assured are sensible, and that the ratios of sums assured to premiums are reasonable,
  - and consistent with last year.
6. Check for unusual values. Such as very large sums insured, or unusual ages, or total units held of zero. Also check for groupings in specific years or specific premium sizes.
7. Perform spot checks of the data held on systems against paper admin files.
8. Finally, look at the valuation analysis of surplus. Any major discrepancies should be investigated as they may indicate data problems. [Each point carries 1 mark, **Max 6**]

b) Impact of data errors on capital requirement of company:

The data problems may increase capital requirement of the company in following ways:

- Contingency loading – If data is not accurate the regulator may ask the insurer to keep additional reserve for data errors or add contingency loading.
- Free assets – If there are errors in investment data, the insurer is required to keep higher free assets or investment mismatch reserve. [Each point carries 1 mark, **Max 2**]

**[11 Marks]****Solution 5:**

i)

- I. Premium rate- Premium should be sufficient to cover cost of guarantee, hence can meet guarantee payment as and when arise.
- II. Product design-
  - Impose high charges
  - The choice of unit fund and fund switches could be restricted
  - Improve persistency of the product
- III. Risk Management techniques-
  - Liability hedging - involves choosing assets which match the liabilities so that they move consistently with each other, thus hedging the underlying market risk that arises from the existence of the guarantee e.g. using appropriate put options in the case of this guarantee.
  - Guarantees and options can be hedged dynamically, that is by rebalancing the underlying hedging portfolio as market conditions change.
  - Reinsurance- May be able to transfer the cost/risk to a third party to run the fund and cover the guarantee.
- IV. General Points -
  - Caps could be placed on the amount of business e.g. maximum premium per policy or limits on volume of new business.
  - There should be monitoring of expected and actual costs.
  - Underwriting at policy stage to remove anti selection
  - Withdraw the product from market if loss making.

[One mark for first two points of risk management technique and other points 0.5 mark, Total 5]

ii) The sale of products via internet is to improve profitability of insurance company.



The following factors may be considered:

1. Expenses-

- The insurance company is paying a fixed charge to price comparison site for each policy purchased. There is savings of commission for each policy hence expenses to procure insurance business is less than broker and tied agent channel. The insurance pays commission or fixed fee to broker and tied agent which is higher than internet sale.
- There may be cost of developing internet infrastructure.

2. Volume and mix of business-

- Internet can reach a wide population and consumers are now comfortable using the internet to buy many different types of products, including financial products
- Internet sale may meet customers' needs to get policy quotations and complete policy at their convenience with simple procedures - Ease of buying a policy
- Customers are now able to obtain information about the product including product quotations for themselves from price comparison website or insurer company's website.
- This may increase volume of business for the insurance company and lead to economies of scale for expenses and investment income.
- Internet sale is more preferred by young population hence the experience of the insurer may improve. The mix of business will shift to young population.

There may be switch to smaller sum assured policies for internet sale hence reduced cross subsidy between small and large sum assured policies.

The target market of broker is high net worth customers and hence reduction in number of large sum assured policies.

3. Improve efficiency of business-

- Internet sale have simple underwriting and hence speedy completion of the proposal. This will improve efficiency of business.
- Less costs needed to train staff to "sell" products although might still need expertise on call centres.
- The sale through broker may lead to antiselection as broker tries to get best terms for their clients and they have a good bargaining power. Hence the business obtained from broker may not be profitable for the insurer.
- In order to obtain incentives tied agent may offer policies to customers by non-disclosure resulting in offering policies to prospects which do not meet underwriting requirements fully.

4. Competitors may be using internet sale.

5. The insurer can use lower costs to reduce its premiums in an attempt to increase market share

6. Utilise existing platforms or brand already in place, so may have a competitive advantage

[Both advantages and disadvantages of each point should be covered, each valid point carries 0.5 marks, Total 4]

iii) The insurer company may face the following risks-

1. **Exposure or concentration risk-** The insurer may depend on only one price comparison site for its business. The insurer may have business from one geographical area or same target market.

Mitigation -

- Select a range of different price comparison sites, so the insurer is not over-exposed to any one price comparison site

- improve the chances of maximising business sold
- diversification of business through selling the products at different geographical locations, different age group customers of varying sum assured, customers having different locations

2. **Mis-selling Risk:** There is a risk that policyholders didn't understand the policy being purchased because no advice being given. The sales literature or marking literature may not be clear.

Mitigation -

- Ensure that any information on each price comparison sites is correct and up to date
- Ensure marketing material is clear, fair and not misleading to avoid claims of mis-selling
- Consider "online" chats to help or make terms and conditions simple and clear, or simplify the product such that there are no ambiguous claims

3. **Reputational Risk** – The insurer may get bad publicity if there is lapse on part of price comparison site. E.g. not displaying the premium rates properly, not maintaining up to date information, issuing invalid quotes e.g. not in line with product features

Mitigation -

- Only deal with genuine and reputable price comparison sites
- Monitor the information / premium rates shared by comparison site
- Ensure that price comparison websites are applying any product limits (e.g., maximum / minimum age, premium size etc) so only valid quotes are issued

4. **Business volume risk-** There may a very high volume of business for a particular product which may cause new business strain and higher capital requirement.

Mitigation -

- Monitor the volume of business from comparison website. If there is huge volume from only one website/one product
- Engage with multiple price comparison sites for higher diversification

5. **Business mix risk-** The business mix may skewed to a large number of small sum assured policies or one of the target markets. This may lead losses if there is cross subsidy in pricing of the product. E.g. low contribution to fixed expenses by small sum assured policies

Mitigation:

- The company could select different price comparison sites, to improve chances of attracting business with different sum assured
- ensuring a wider range of potential policyholders to obtain business mix as assumed in pricing the product
- monitor the mix of business very closely

6. **Fraud risk-** There may be risk that the customers may not disclose material information while filing proposal form leading to non-disclosure. Possibly more fraudulent claims if the claims process is automatic.

Mitigation:

- Strengthen claims underwriting. The claims are settled as per policy terms & conditions.
- Obtain the documentary evidence e.g. death certificate, doctor's certificate to authenticate the claims.
- Monitor claims experience so that it should not depart from underwriting experience

7. **Low profitability-** The business coming through could be less profitable than expected due to poor underwriting of the potential policyholders. This may lead to competitive premium rates which may be unable to cover future expenses and claims.

Mitigation:

- the company could try to influence the questions being asked on the sites to reflect appropriate price being charged to the policyholder
- monitoring premium rates more frequently
- ensure good quality of data and good accounting & audit process

[Max 1 mark for description of each risk and Max 0.5 mark for mitigation details of each risk,

**[8]**

**[17 Marks]**

**Solution 6:**

- i) The insurance regulator in the country wants to review its regulations and supervisory practices from time to time because:

1. To comply with changes in government legislation or changes to government policy or changes in policy resulting from a change of government. E.g. There could be directions from government to settle health insurance claims faster during pandemics.
2. To adopt global best practices or advices offered by international associations. E.g. moving to risk based solvency approach from factor based solvency.
3. To meet the customers' needs which have changed over the time. E.g. customers prefer online sale rather than traditional sales channels. Hence regulator is required to formulate a new set of regulations for online channels/
4. To meet the requirements of the insurers as they need flexible market conditions for launching innovative products and to address changes in market practice, products, skills and technology.
5. Regulation has a cost. There is direct cost of compliance of the regulations by insurance companies. The regulator will look to amend its regulations and supervisory practices to ensure that the costs for companies complying with the regulations does not become excessively onerous.
6. The regulator collects data from industry for various areas like investment, market practices like claims settlement, grievances, etc. The data requirements may change over the period as some data become redundant or new practices may emerge. To address this the supervisory practices are changed.
7. The regulator would need to review the regulations and supervisory practices to implement improvements and amendments in regulation as regulations may become out of date.
8. Over the period the regulator gains experience and as a result regulations and/or supervisory practices are updated to reflect the same.
9. The regulator may find that regulations are having an impact it did not expect.
10. General points:
  - Changed product innovation process.
  - Products may no longer meet the needs of consumers as the external environment changes.
  - Changed competition in market with other financial products.
  - A change in consumer protection mechanisms developed by the market itself.
  - Alteration in the behaviour of consumers, who may be given a false sense of security and a reduced sense of responsibility for their own actions.

[Points indicated 1 to 9 carries 1 mark and point number 10 carries half mark, **Total 6]**

ii)

- a) The 'management box' for a fund consists of units that have been created but are not owned by policyholders, at any point in time. These units are therefore owned by the life insurance company itself. [1]
- b) The risks the insurer is exposed to in operating a box management system -
1. **Investment risk-**
    - The insurer will be exposed to the investment risk of holding a large number of units for its own account.
    - There is an increased investment risk, depending on the assets in the underlying fund
  2. **Expense risk-**
    - Higher expense risk due to additional work for administering the box assets
    - Higher dealing expenses than expected
  3. **Policy and other data risk**
    - There will be additional risk in maintaining records of box investments in unit funds
    - A risk that the valuation of assets is incorrect
    - Potential risk for pricing errors due to additional administration of box assets
  4. **Liquidity risk-**
    - The assets held in management boxes may represent a liquidity risk
  5. **Operational Risk-**
    - Failure of appropriate management systems and controls
    - There is a risk that the unit pricing process does not have appropriate controls and systems to identify box management
    - Failure of potential outsourcing organizations who do unit pricing
      - there may be problems with control – setting down guidelines as to how large a box is maintained, what to do in the event of severe market movements or large unit purchases / encashments
  6. **Regulatory risk-**
    - Regulatory risk - the fund may not be permitted by regulation..
    - there may be regulatory restrictions, e.g. on the use of specific assets
    - Potential risk to capital requirements if underlying assets attract higher capital

[Each risk carries 1 mark, Total 5]

[12 Marks]

### **Solution 7:**

- i) Data used for monitoring experience:
- The basic requirement is that there is a reasonable volume of stable, consistent data, from which future experience and trends can be deduced.
  - *Consistent* means that, when comparing the experience of one group with another, the data used as a basis for the calculations for each group should be:
    - a. in a similar form
    - b. preferably extracted from the same source
    - c. grouped according to the same criteria
    - d. equal in terms of reliability.
  - The data needs to be divided into sufficiently homogeneous risk groups, according to the relevant risk factors.
  - It should be balanced against the danger of creating data cells that have too little data in them to be credible.
  - The level of detail in the classification of the data depends upon the volumes of data available. The volume of data will not only indicate whether or not an analysis will produce meaningful

results, but it will also indicate the extent to which data can be subdivided without leading to similar problems. For example, it may be necessary to group data on two-year age bands rather than single-year bands if volume of data is not adequate.

- It is necessary to have data on the exposure to risk, divided into the same cell structure as the experience data. An analysis of experience is not valid unless experience and exposure to risk are matched. [Each point carries one mark, Max 4]

ii) Steps to be taken by insurance company to manage and control expenses:

- regularly monitor actual expenses against the expected expenses and check to see whether they are higher than expected
- regularly monitor new business; e.g. cost of sales versus volume of new business/expense allowances for new business
- regularly monitor withdrawal rates; for example, checking that overheads remain proportional to the volume of in-force business
- Matching of charges and expenses by amount and time
- implementing cost control measures in the event of expenses exceeding budget. For example, merge the branch offices if two offices are located in same geographical area.
- increasing operational efficiencies, for example increasing automation to reduce the cost of more expensive manual tasks
- having a robust business planning process for future periods, for example ensuring in future periods expense levels are proportional to the projected volume of inforce business and new business
- contracting out administration to a third party who assumes the expense risk, for example outsourcing routine activities like dispatch to a third party
- implementing robust operational procedures with monitoring of effectiveness e.g. to reduce the risk of additional costs being incurred rectifying errors
- For a long-term contract, some of the charges in the contract may be reviewable and hence if actual expenses are different the charges can be revised.

[Each point with example carries one mark, Max 6]

**[10 Marks]**

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