

# Model Office Projections



## Case Study

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*13 June 2013*

# Agenda

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- I. Background on current situation
- II. Analysis of rationale behind proposed changes
- III. Checks to validate market research
- IV. Model projections with implementation of changes
- V. Calculation of impact on profitability in model office
- VI. Discussion of considerations with AFH / AA
- VII. Alternative Strategies
- VIII. Conclusion

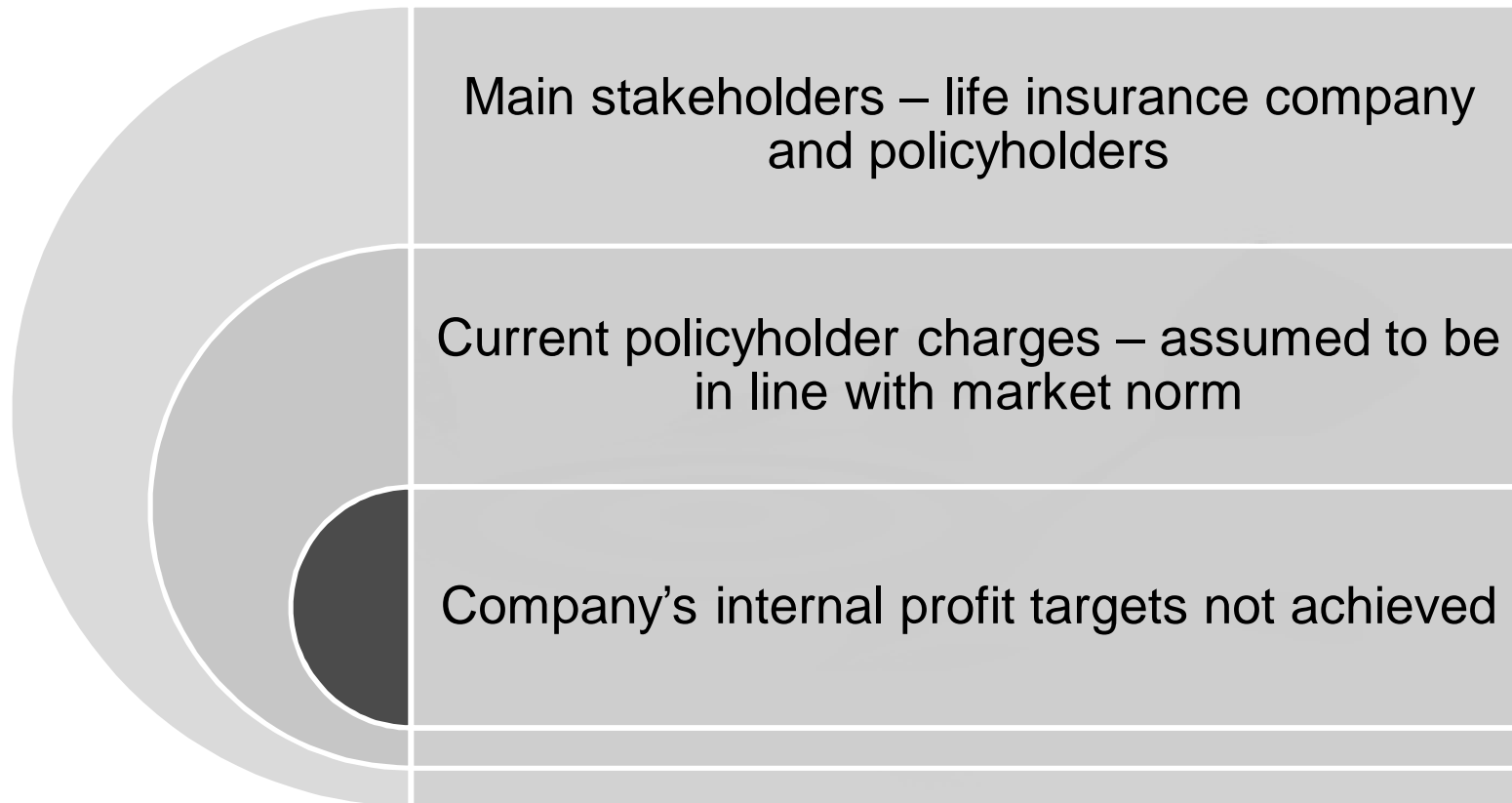
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# Background – The Company

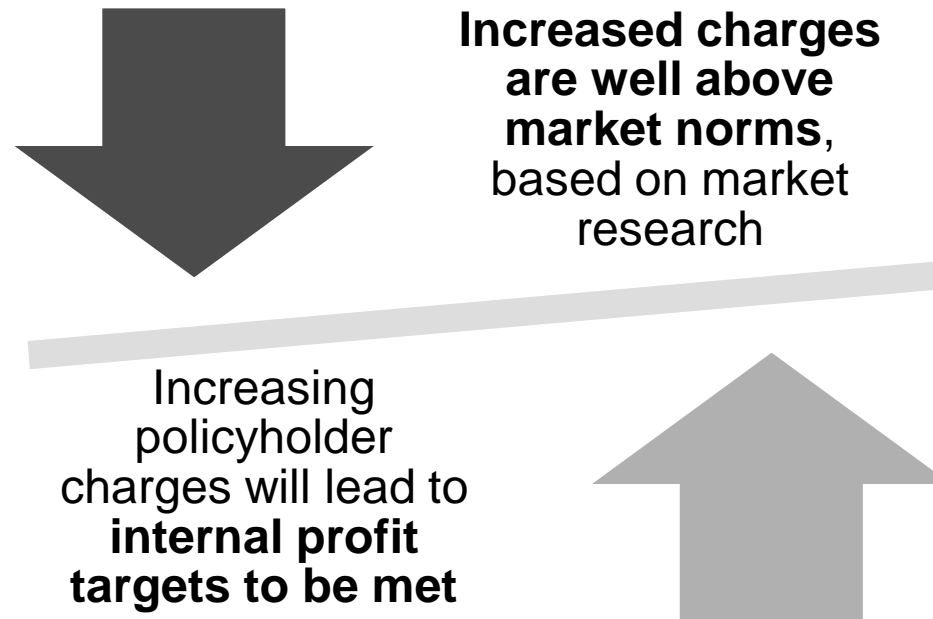
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# Background – Current Proposal

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Current proposal is to increase charges to policyholders



# Background – Assessment

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Assessment needs to be done from two perspectives

## 1. Forecasting actuary

Direct responsibility is to provide forecasts but can provide opinion on suitability of changes based on investigations

## 2. Actuarial Function Holder / Appointed Actuary

Direct responsibility for assessing the changes

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# Analysis of rationale behind the proposed changes

**Situation:** The company is not meeting internal profit targets



**What could be the potential reasons for not meeting profit targets?**

Current charges  
lower than market

Riskier business and  
hence higher capital

Assumptions  
excessively prudent

Higher expense base

Internal profit target  
too ambitious

Models & model  
points not  
representative of  
business





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# Research to validate market situation

**Research suggests:** Increased charges are well above market norms



**Forecasting Actuary to validate that the research on market level of charges is reasonable**

- ü **Mode of research**
- ü **Source of data**
- ü **Credibility of analysts**
- ü **Reliance on past trends, any assumptions made**
- ü **Soundness of adjustments made to make the assumptions more company specific**



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# Methodology of implementing the proposal

**Proposal:** To increase policyholder charges (possible in various ways)

?

**How are the charges being increased in the proposal?**



- ∅ Higher profit margins in premiums/charges for new products
- ∅ Higher future premiums/charges for existing products
- ∅ Higher future discretionary charges
- ∅ Higher surrender penalties
- ∅ Higher expense charges
- ∅ Higher FMC/ bid offer spread (UL)

# Methodology of implementing the proposal

**Where do these changes flow into the model?**

**Which Product?**

**Which Cash flow?**

**Increased premiums or charges**

Higher profit margins in pricing

Higher expense charges in pricing

Higher charges for cost of benefit

Higher FMC / bid offer spread (unit linked)

**Lower payouts and reserve**

Higher discretionary charges

Charge higher for discontinuance

For UL, overall benefit is lower as result of charges (for unchanged premiums)

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# Impact on model profitability by implementing proposed changes

Ø Calculation of **impact on cash flows** leading up to profits

Ø Any **future management actions** included in model?

Ø Compare profits on new charges to **internal targets**

Ø Use **sensitivities** or derive results in scenarios

Ø **EV basis** – TEV/EEV/MCEV? **IFRS profits** considered?

Ø Assumed a change in **future persistency** in the model?

Ø Any other **second order impact**



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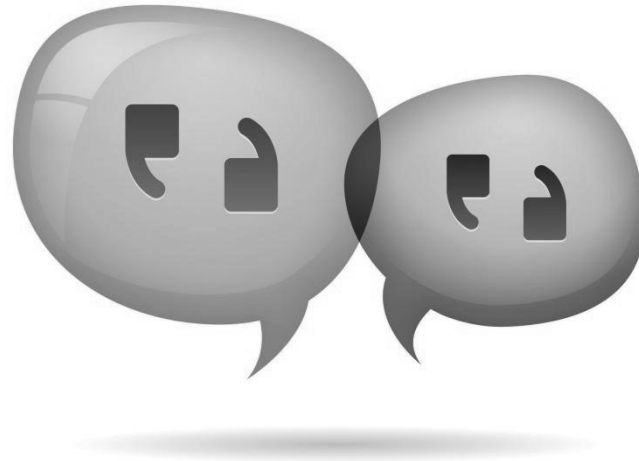
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# Critical assessment of impact

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**The Forecasting Actuary and Actuarial Function Holder / Appointed Actuary need to consider a variety of issues for comprehensively assessing the situation and estimated impact to arrive at a conclusion.**



# Critical assessment of impact

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## Factors to Consider

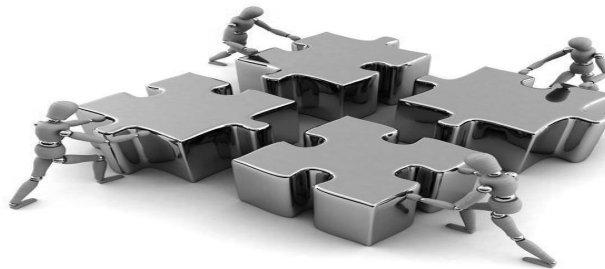
**Policyholders'  
Interests**

**Regulatory**

**Legal and  
Compliance**

**Financial/  
Business  
issues**

**Competitors**





# Critical assessment of impact – Policyholders interests

The following principles of TCF are particularly relevant

## Principle 6: Customers' interests

- *A firm must pay due regard to the interests of its customers and treat them fairly.*

## Principle 7: Communications with clients

- *A firm must pay due regard to the information needs of its clients, and communicate information to them in a way which is clear, fair and not misleading.*

## Principle 9: Customers: relationships of trust

- *A firm must take reasonable care to ensure the suitability of its advice and discretionary decisions for any customer who is entitled to rely upon its judgment.*

While considering increasing charges, the company needs to:

- ü Ensure interests of policyholders' are considered to a sufficient degree
- ü Ensure proper communication to policyholders of the changes
- ü Consider past communication/disclosures/illustrations and resulting policyholder expectations



# Critical assessment of impact – Regulatory (1/3)

## Relevant regulations to consider in Indian context

### IRDA

- I. **IRDA (Appointed Actuary) Regulations 2000** – in particular, duties of AA such as complying with section 40-B of the Act in regard to the bases of premium, and also ensuring solvency and overall advice to management
- II. **IRDA (Protection of Policyholders' Interests) Regulations 2002** – mainly around disclosure of changes and communication with policyholders
- III. **IRDA (Distribution of Surplus) Regulations 2002** – if bonuses are reduced
- IV. **IRDA (Treatment of Discontinued Linked Insurance policies) Regulations 2010** – for changes to surrender charges for linked policies
- V. **IRDA Circulars on ULIP products** – if changes are made to charges for UL products



## Critical assessment of impact – Regulatory (2/3)

### Relevant regulations to consider in Indian context

#### Actuarial Practice Standards

- I. **APS 1** – Accounting for increased charges appropriately in valuation of liabilities, and consideration of threat to solvency (if charges not increased)
- II. **APS 2** – Impact on actuarial valuation method/assumptions? Impact on solvency margin/capital required?
- III. **APS 3** – Since the work was originally for preparing the FCR, all investigations/conclusions must be in line with APS3
- IV. **APS 4** - Investigation/ market research and conclusions will have to be peer reviewed, subject to APS4
- V. **APS 5** - Changes related to policy illustrations, subject to APS5
- VI. **APS10** – if EV is used as the main profit measure, and IAI guidelines on MCEV if MCEV is used



# Critical assessment of impact – Regulatory (3/3)

## Relevant regulations to consider in Indian context

### Insurance Act 1938

- I. **Section 13** (Actuarial report and abstract)
- II. **Sections 40A & 40B** (portions related to assumptions in premium bases)
- III. **Section 49** (Restriction on dividends and bonus)
- IV. **Section 64VA** (Sufficiency of assets)
- V. **Section 112** (Declaration of interim bonuses)
- VI. **Section 113** (Acquisition of surrender values by policy)

### Insurance Rules, 1939

- I. Provisions of the Insurance Rules, 1939 (such as **Section 11** - policy prospectus, **Section 17C** – bases of premiums)



# Critical assessment of impact – Legal & Compliance

## Internal policy and compliance issues to consider

- ü Discuss the changes with legal advisers for possible adverse outcomes



- ü Check that **proposed action complies with company policy and equivalent of PPFM** (special considerations for participating business)
- ü Check against **policy literature** for changes made to existing policy portfolio
- ü The changes and future outcome has to be **communicated to the Board**

- ü How and with whom will the changes be communicated/ discussed internally **before sign off**?
- ü Who will **sign off on the final changes**?
- ü Any potential **conflicts of interest**?
- ü Who will be responsible for **executing the changes** finally proposed in the FCR? Who will **monitor the impact**?



# Critical assessment of impact – Financial/ Business issues (1/4)



**Base Case  
Situation**

**Current  
Policyholders**

**Future  
Business**

**Risk  
Profile &  
Solvency**

**Other  
practical  
issues**

## **Forecasting Actuary to discuss key findings summary with AA:**

- Ø Level of profit targets set by company, and main reasons for not meeting these in the base scenario
- Ø Impact of increasing charges on profitability
- Ø Current solvency level relative to minimum level



# Critical assessment of impact – Financial/ Business issues (2/4)



Base Case  
Situation

Current  
Policyholders

Future  
Business

Risk  
Profile &  
Solvency

Other  
practical  
issues

## Impact on Current Policyholders:

- ∅ Potential for lapses due to increased charges, leading to further profitability drop
- ∅ Current policyholders may shift to competitors with lower charges

## Impact on Future Business:

- ∅ Future Sales volumes may drop
- ∅ Product mix may not turn out as intended



# Critical assessment of impact – Financial/ Business issues (3/4)

Base Case  
Situation

Current  
Policyholders

Future  
Business

**Risk  
Profile &  
Solvency**

Other  
practical  
issues

## Potential impact on Company's Risk Profile & Solvency:

- Ø Risk profile of the company may change as it may attract poorer/substandard quality lives after making this change, having a feedback effect on margins
- Ø Potential impact on projected unit expense. Will the loadings in the new premium rates/charges recover the same?
- Ø Potential threats to solvency from impact on lapses/new business sales



# Critical assessment of impact – Financial/ Business issues (4/4)

Base Case  
Situation

Current  
Policyholders

Future  
Business

Risk  
Profile &  
Solvency

Other  
practical  
issues

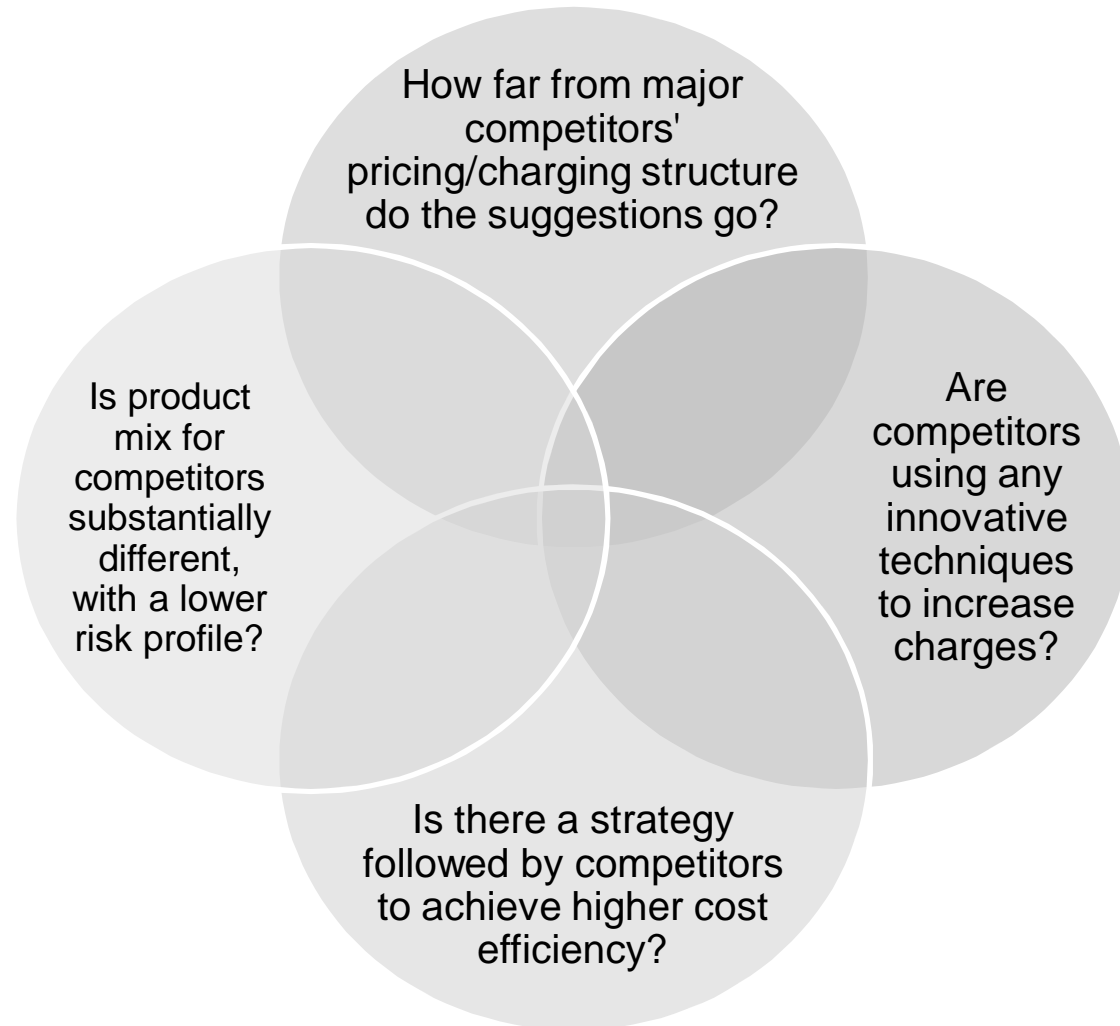
## Potential impact on Company's Risk Profile & Solvency:

Ø Any major systems cost/ issues for implementing changes?

Ø Training required explaining changes for employees / agents?



# Critical assessment of impact – Competitors



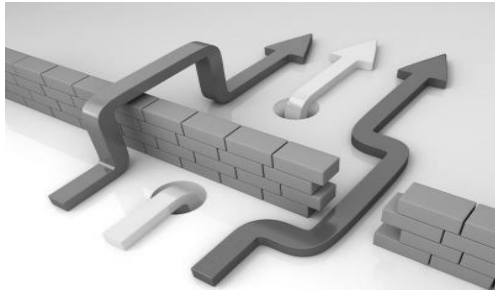
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# Alternative Strategies



To **increase profitability**, the company can also consider **other strategies** as an alternative to increasing policyholder charges

1

Reduction of expenses

2

Focusing sales strategy on higher margin products

3

Selling less risky business (with lower capital requirement)

4

Introducing cross subsidies

5

Revised investment strategy (higher returns, subject to risk)

6

Increasing risk mitigation to lower capital requirement

7

Revisit target market and review underwriting procedures

8

Change sales channel mix

9

Utilise expertise of reinsurers

10

Improve capital efficiency and returns in various departments

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# Conclusion - Recommendation Options

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**1**

## **Full increase**

**Raise charges to  
proposed level**

**2**

## **Partial increase**

**Increase charges  
to a lower level  
than originally  
anticipated**

**3**

## **No increase**

**Keep charges  
unchanged, with  
alternative  
strategy to meet  
targets**



# Conclusion – Immediate Considerations

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## ü Comprehensive Assessment

Consider all discussion items for each option

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## ü Risks arising

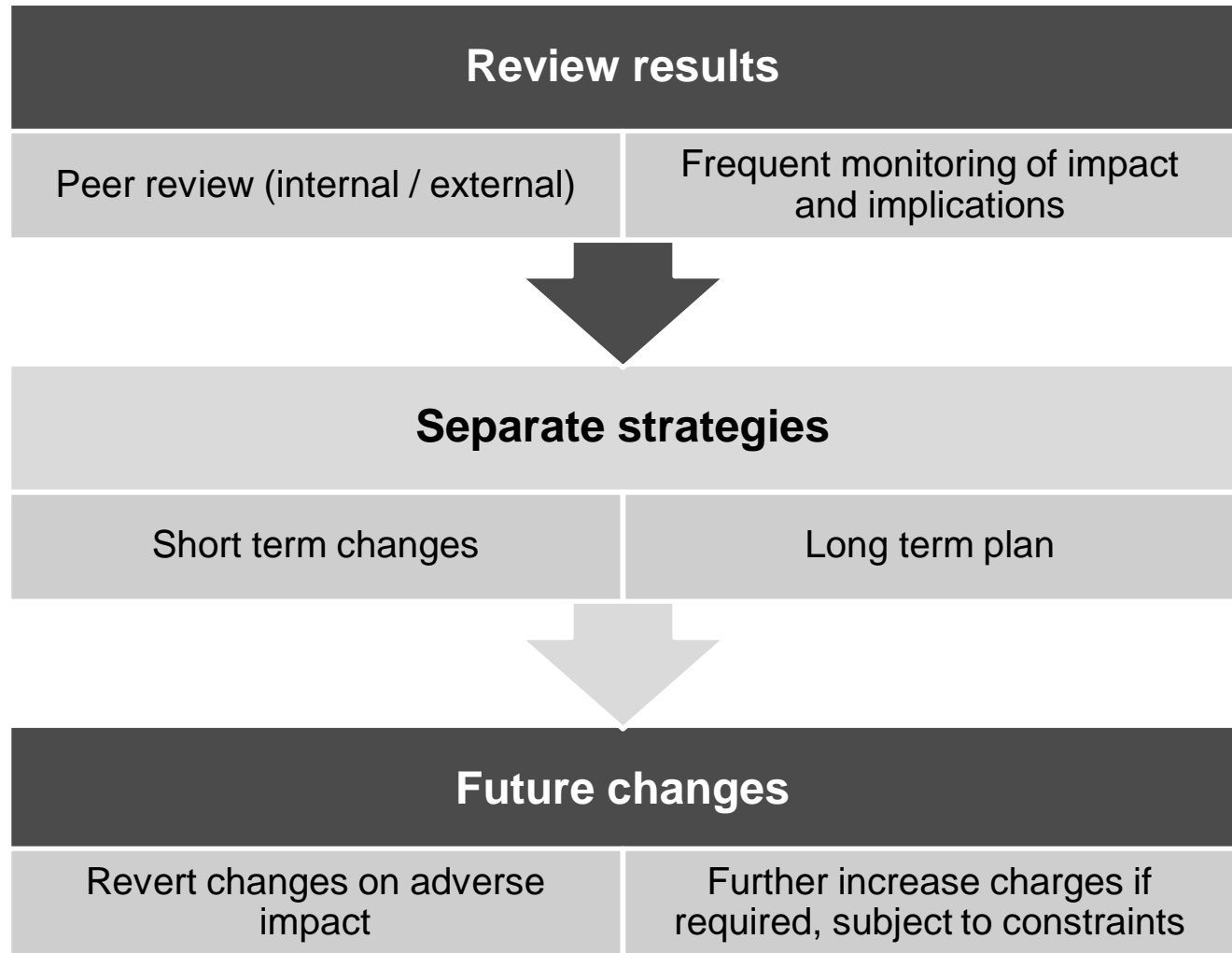
Introduce risk mitigation measures for changes made

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## ü Shortfall

If full implementation is not made, the shortfall must be covered through alternative strategies

# Conclusion - Further steps



**Thank You**



**Questions?**