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Technical Note on Product Pricing - Best Practice

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## **Discussion Points**



- Why Technical Note?
- What should be in the Technical Note?
- Preliminary Check Points.
- Structure and Content of Technical Notes Various Aspects

# Why Technical Note ?



- To be a complete document on how the product is priced.
- All relevant actuarial information in one place.
- Consistent and Standardised Process Uniform submission across the Industry
- Comfort to the Regulator, Insurer & AA.
- Reduce queries/issues while approving products if properly prepared.

# What should be in the Technical Note



- Brief description of the benefits to be payable & Conditions under which such benefits are payable.
- Data used to price the product.
- Methodology & assumptions used Justification/ rationale
- Actuarial Judgment/Approximation rationale
- Pricing Criteria Profitability target
- Profit test
- Sensitivity/Scenarios test results
- Premium rate tables
- Any comment/specific observations of the Appointed Actuary

# **Preliminary Checks**



- Is pricing strictly based on the benefits?
- Whether information (updated) provided in Technical note, wherever relevant, is reflected in F&U, Policy document, Customer Information sheet etc.?
- Are Certifications in verbatim with Product filing Guidelines?
- Have premium rates for all benefits/options been provided?
- Compliance with the applicable IRDAI Regulations/Guidelines?
- Duly signed by Appointed Actuary/Panel Actuary/Mentor?

# Benefits Structure & Terms & Conditions



- Contingencies covered under each benefit option/base benefit/Add-on/optional cover
- SI/Amount of Cover Boundary conditions
- Type of cover (CI or Others)/basis of Cover (Indemnity or Fixed benefit or Mixed, Individual/Floater)
- The point at which the insured contingent event will be recognised for coverage/payment- reflected in pricing?
- Other aspects impacting the pricing
   – Specific critical exclusions, waiting period, cooling-off period, Co-pay.
- Avoid operational aspects to be mentioned in the note.

## Data used to price the product



- Own data Similar cover in other products/Add Ons,
- External Sources Reinsurer data, IIB data, Industry Wide, Underwriter Inputs, etc., other countries data where relevant.
- If it is a new type of product and is based on expertise of other entity, for example, reinsurers rate, how these rates are translated into premium rates. Avoid double counting of loading
  for example, to derive risk rates of reinsurers and then apply your own margins/loading
- Provide summarised data.
- How the data has been adjusted for the product & rationale
- Comment on the appropriateness and quality of the data used.
- If there is any data related issue, better to mention in the technical note and how those issues are addressed

# **Pricing - Assumptions**



- Statement of Assumptions used in arriving at the Premium – separately for each component of Risk and Office Premium.
- Consistency between assumptions.
- Data used to set the assumptions, for example, basis for selecting a specific frequency or severity number.
- Instead of just mentioning, for example underwriting/claims department/surveyors input, provide the relevant data alongside.
- Actuarial judgment or approximations, if any, used for setting assumptions and its basis and why such judgment/approximations.

# **Pricing - Methodology**



- Details of the methodology used for each benefit/option.
- Methodology/basis for factoring other aspects of the benefits:
  - NCD, Waiting Period, Cooling off period, specific exclusions, pre-existing conditions.
  - Any specific impact of Reinsurance arrangement
  - Extrapolation/smoothing procedure adopted
- Demonstration to ensure that there is no significant cross subsidies between different exposure/rating factor/bands.
- Methods for pricing wellness benefits/outpatient benefits - ensure these are insurance benefits.
- Details and rationale of any relativities used in deriving the premium rates.

# Pricing – Consistency Checks & other consideration



- Wherever applicable, a comparison of market premium rates of similar products of your own/other insurers to ensure that the proposed rates are fair & reasonable.
- Premiums for each component along with Tax not to exceed benefits.
- Family floater rates should not be higher than individual premiums added together.
- High Sum Insured should be consistent with its real utilisation.
- Provision for premium review flexibility should be reflected in pricing and to be appropriately mentioned in the Technical Note.

## **Gross Premium - Margins**



- Transparency on margins applied to Risk Premiums
- Each component of loadings to be clearly defined/ mentioned in the Technical Note along with the justification/rationale behind such loadings.
- For example, if there are multiple distribution channels with varying commission rates, the assumed commission loading should appropriately reflect the assumed business mix in terms of distribution channels.
- Each element of expenses to be stated along with the rationale for expense loadings.
- Avoid double counting of loadings, for example, profit loading and contingency loading – better to define clearly

# Gross Premium – Margins (Contd.)



- Common loading should not differ between products consistency.
- Reinsurance cost loadings, if any, to be explicitly explained and provide logic.
- To provide AAs comments on reasonableness of loadings.
- Any other information/data that is relevant for calculation of gross premium.
- Extrapolate in risk premium stage.
- Smoothing process and ensure that the smoothing does not lead to significant cross subsidies to policyholders.
- A clear mention on compliance with the expense, commission regulations.

## **Discounts/Loadings to Gross Premium**



- Each type of discount/loading should be specific and clear.
- No overlap/interlink with other type of discounts
- Uniform rates for male and female where the inbuilt benefits cover female related situation/illness – discount?
- Should reflect risk/rating characteristics of the segment – not to base on individual policyholder's experience (pooled concept).
- Explicit and based on quantifiable & objective criteria
  to be mentioned clearly in the Technical Note.
- Should not be at the discretion of the insurer and no discrimination amongst identical policyholders/ customers.

### Discounts/Loadings to Gross Premium (Contd.)



- If there is any cap in the overall discount, that should also be stated
- When giving discount for any wellness benefit, pricing must have been based on standard risks, that means, original premium rates should not have any loadings just for giving discount for such fitness activities.
- Details of discounts for passing on to customers any savings in expenses – On-line sales discount.

# **Premium Tables/Rate Chart**



- Premium Tables/Rate chart to be reproduced in the Technical Note with appropriate heading/description.
- Tables/Chart for all variants/options
- Exposure/Rating references should be mentioned Age, SI.
- Avoid unit rate concept as this will generate enormous unwanted cross subsidies.
- Premium Tables/Charts for all Add-Ons also, as applicable for completeness.
- Sample Premium Calculations for selected model points.

# **Cancellation/Termination**



- Terms for cancellation/termination of contract.
- Details of how the cancellation factors were determined along with basis used.
- Should be fair and equitable, does not unnecessarily penalise the policyholders.
- For Long Term products Year wise cancellation factors.

# **Business Projections/Ratios**



- Expected business in terms of premium income, number of policies, expected business mix
- Expected loss ratios, combined ratio & profit Margin
- Renewal expectations to be included in the projection
- Better to include sample cash flow table for few model points which should show all expected cash flows (+/-) and profitability.
- Profit margin should not be unexpectedly be on higher side.
- A mention of any specific model used for pricing and projections.

# Sensitivity & Scenario Test



- Indicate the most critical/sensitive variables/ parameters to the premium rates & profitability aspects.
- For example, risk characteristics/expenses/changes in distribution mix or channel/target market – depend on AA to decide on such parameters
- Summarise the impact of varying such factors and comments of the Appointed Actuary thereon
- Varying a number of factors together and summarise the results – scenario testing

# **Modification of existing products**



- All of the above aspects are equally applicable for modification cases
- Technical note should contain a clear comparison of existing and modified products in a tabular format covering the existing provisions, proposed changes and reasons for changes
- A statement that there are no other changes apart from what is mentioned in the above Table
- Claims experience for at least last 5 years justifying, amongst others, the new assumptions on expected loss ratios and rationale for modifications

# Modification of existing products (Contd.)



- If the pricing is proposed to be modified, but the product has not gained enough experience to justify new pricing, clear justification or analysis need to be provided in the Technical note, for example similar product.
- The data may include (not exhaustive):

Exposure, Premium (Net/Gross/earned), Claims related data (Number, amount – paid, incurred), Loss ratio, expense ratio, combined ratio etc.

- The new premium should not be completely out of line with the existing premium rates, for example 200% increase or 150% decrease.
- May reflect incorrect pricing earlier policyholders reaction?



# Any Questions?

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# Thanks

