



**Actuaries
Institute**

Risk Appetite

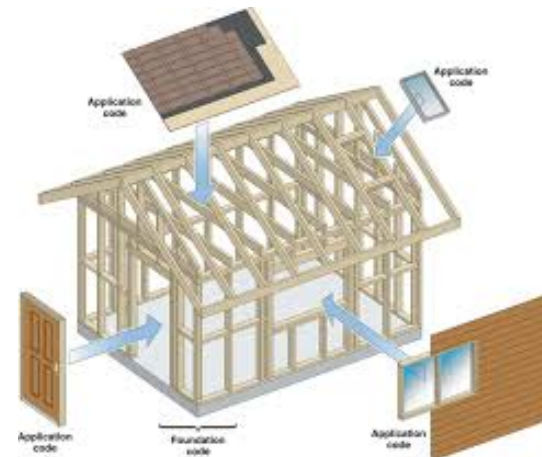
General Insurance
Risk Appetite Working Party

1 May 2014

Schedule

1. Risk Appetite Framework (Andy Cohen)
2. Risk Appetite Statement (Andy White)
3. Risk Limits for Catastrophes (Steve Britt)

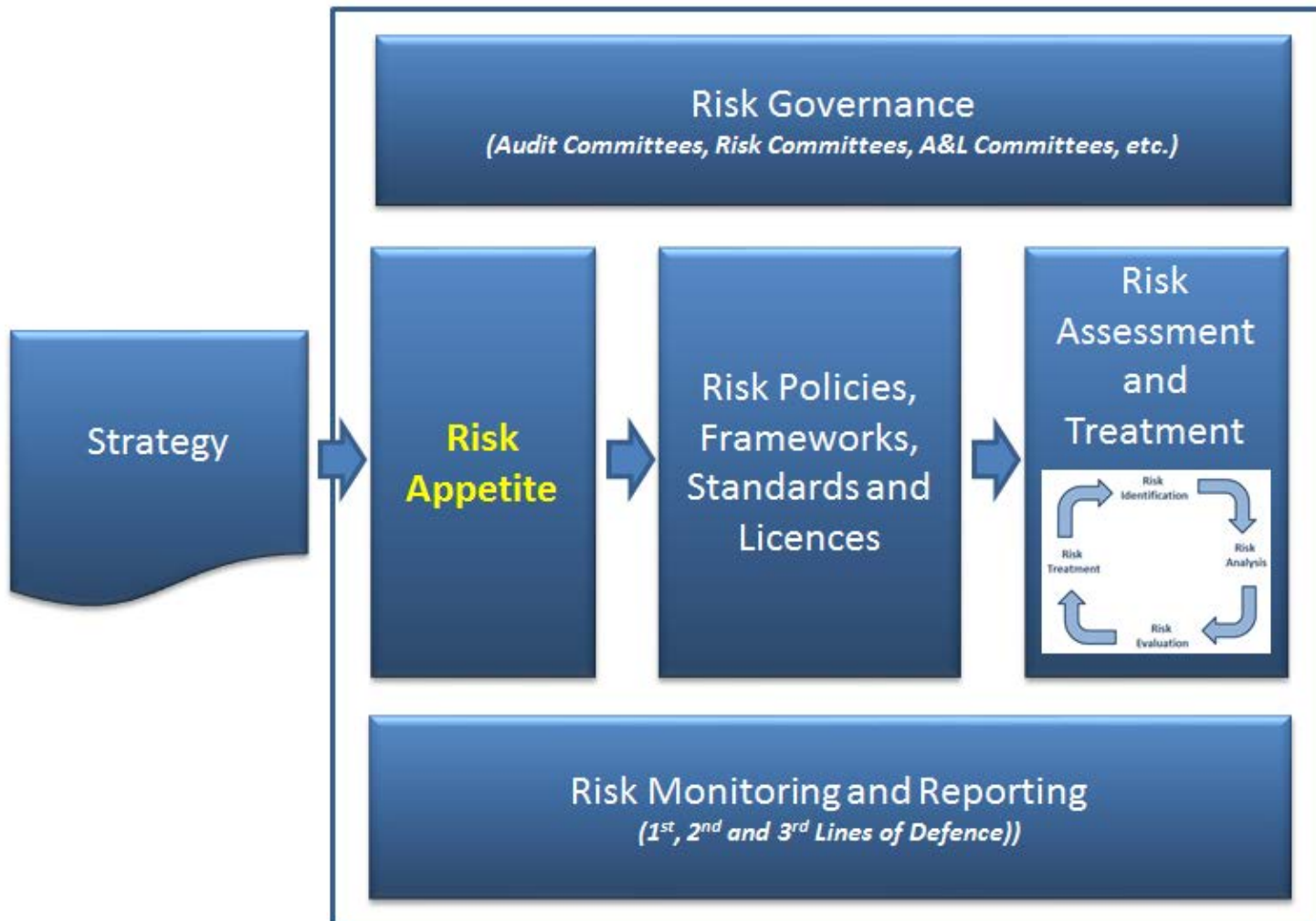
Section 1 – Risk Appetite Framework



Risk Appetite Concepts

- Risk Appetite – the *willingness* to bear risk in pursuit of objectives.
- Risk Appetite Statement – *write* it down
- Risk Tolerance - the specific maximum risk that an organization is willing to take regarding each relevant risk
- Risk Limits – *restrictions* on risk bearing to give effect to the Risk Appetite
- Risk Appetite Framework – how we do the above, and *monitor*

Role of Risk Appetite – it forms part of the ERM Framework



Key risks differ across industries

Risk Type	General Insurer	Life Insurer	Bank
Reserving	Red	Yellow	Yellow
Underwriting	Red	Red	Green
Catastrophe	Red	Green	Green
Market	Green	Yellow	Yellow
Credit	Green	Yellow	Red
Liquidity	Green	Yellow	Red
Operational	Green	Yellow	Yellow
Economic Cycle	Green	Yellow	Red

Application of the Risk Appetite from the boardroom to the front-line

Risk Appetite

Board

Board's vision
Strategy and business plan
Appetite for risk
Influence on risk taking behaviour

Management

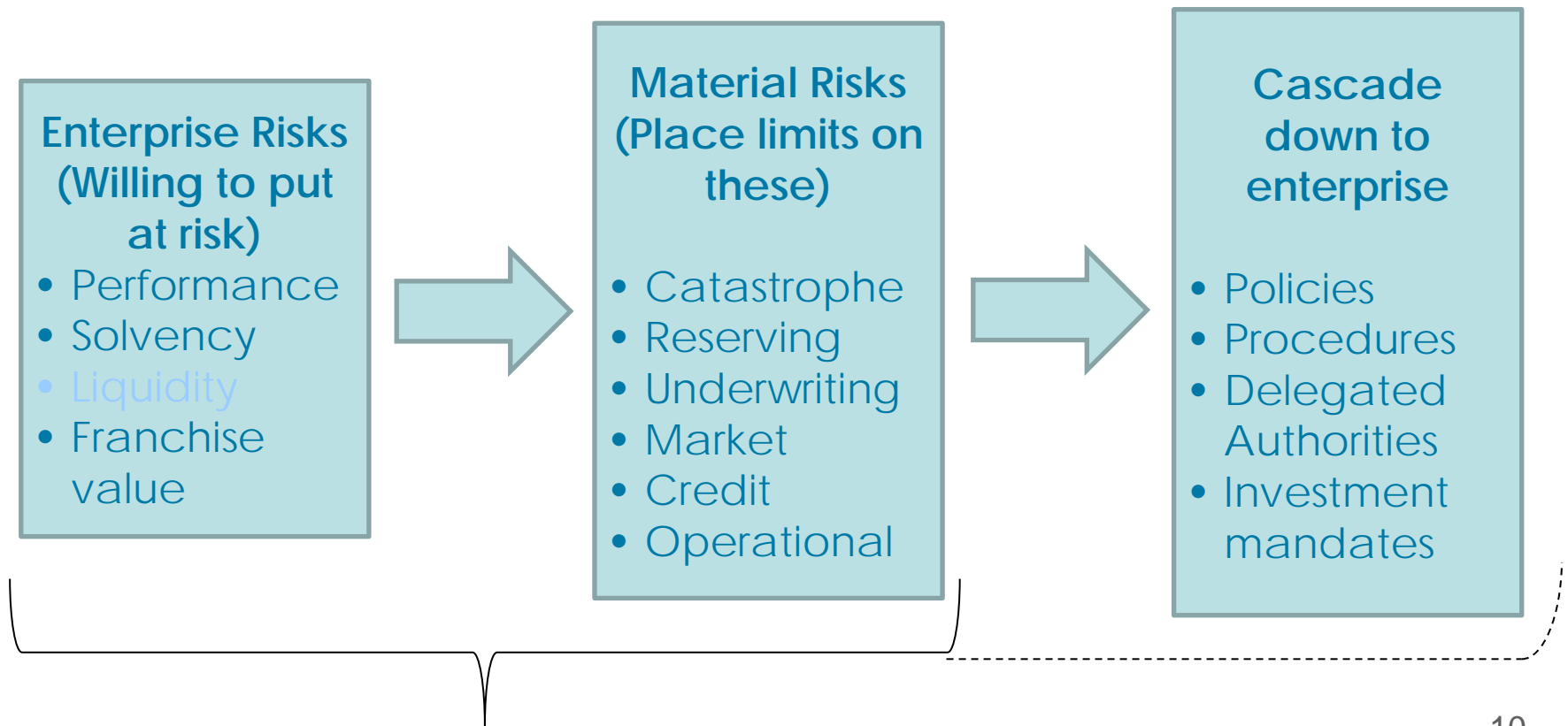
Understanding of expected behaviour
Informing business decisions
Clear management operating limits
Clear delegations of authority

Front-Line

Section 2 – Risk Appetite Statement



A Risk Appetite Statement transforms an insurer's willingness to bear risk into limits on activities that cascade through the enterprise.

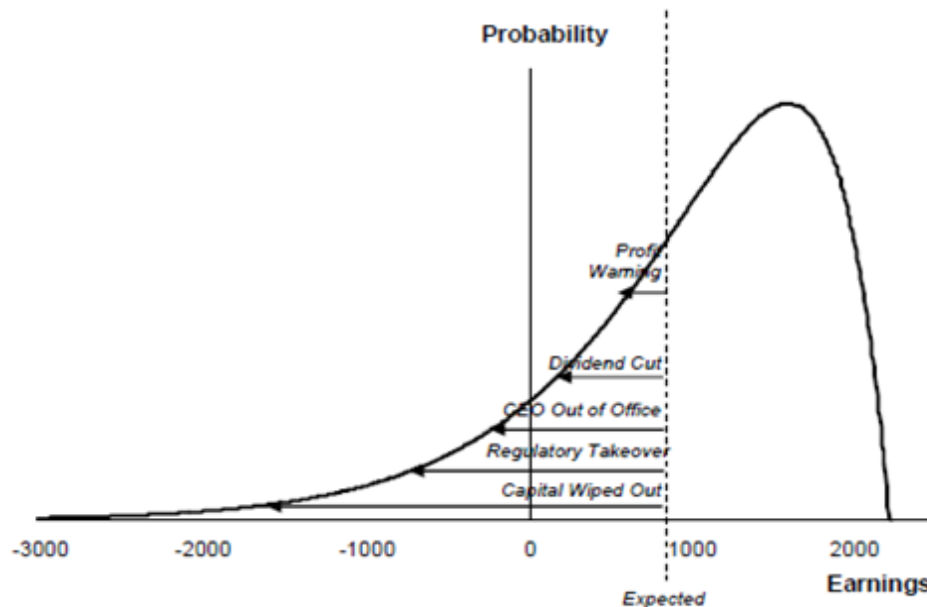


Characteristics of a good Risk Appetite Statement

1. **Holistic** statement setting out entity's willingness to take on risk
2. The **Board** should own the RAS
3. **Forward-looking** – a view of risk that reflects and informs strategy
4. **Consistent** - with the entity's risk framework and strategy and the RAS is internally consistent
5. **“Tight” wording** – allows for effective and proactive monitoring
6. **Cascadable** – relevant to all staff, ties to risk culture
7. **Usable** and embedded in day-to-day business decision-making

Quantitative risk appetite expressions

Illustrative projected earnings distribution



- Different stakeholders have different viewpoints of risk
 - Shareholder/Board: 'Is anticipated earnings volatility acceptable?'
 - Debtholder: 'Is anticipated earnings volatility survivable?'
- This difference arises from different perspectives of a 'bad event'
 - Shareholder/Board: Dividend cut/profit warning more than 1 in 5-10 years
 - Debtholder: Greater than 1 in ~2,000 chance of insolvency
- A comprehensive definition of risk appetite therefore needs to encompass the two viewpoints
 - Maximum acceptable '**Earnings at Risk**' (E@R)
 - Where EaR is the shareholder measure of earnings volatility, defined as what the institution stands to lose at the shareholder time horizon
 - Appropriate Capital buffer to cover economic risks
 - Where **Economic Capital** is the debtholder measure of earnings volatility and is calibrated to the target debt rating

Expressions to articulate risk appetite

Expression	Example
Probabilistic	Probability of failing to pay all policyholders and bondholders in full to be no more than 1-in-300
Outcome	Bad debt write offs not to exceed Y%
Exposure	Should not lose more than 5% of FUM under the following scenarios ...
Behavioural /cultural	Internal fraudulent behaviour will not be accepted and result in mandatory termination
Risk level	Low appetite for market risk
Strategic	No appetite for non-core products
Delegated	S&P rating to be at least ...

Section 3 – Risk Limits for Catastrophes

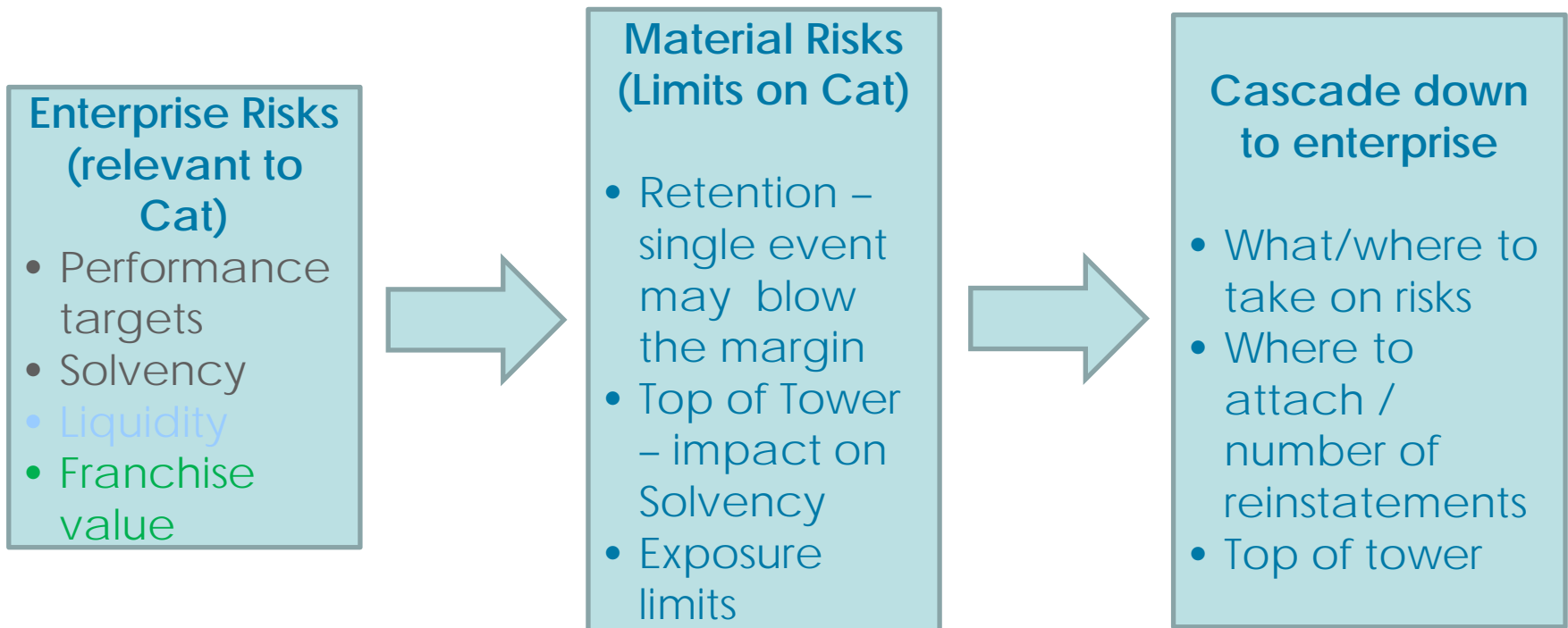


Limits should bite!!!

Risk limits should be...

- **testable** (in advance);
- **quantitative** , where feasible (and zero is a perfectly good number);
- sufficiently **binding** to potentially restrict the business (but not strangle the business);
- **unambiguous**;
- expressed in **the language of the business**; and
- **monitored** regularly.

An example: Applying limits to catastrophe risk



An example for cat risk

Characteristic

Testable

Forward-looking

Quantitative

Binding

Business Language

Given the concern for earnings stability and solvency,

InsCo's RI cover should be consistent with a probability of:

- Exhausting the vertical limit of its cover of less than 0.4% (buy greater than regulatory minimum)
- regulatory impairment/insolvency of 0.5%/0.1%
- a probability of making a \$20 million loss in the next financial year of less than 5%
- Limit concentration of exposures below \$50 million

- Provides objective support to the Board's decisions on the cat RI purchase
- Can be monitored and is regularly testable and reportable back to the Board
- Promotes behaviour around monitoring accumulations

Section 4 – Next Steps & Q&A



CPS 220 – Section 30

An APRA-regulated institution's risk appetite statement must, at a minimum, convey:

- (a) the degree of risk that the institution is prepared to accept in pursuit of its strategic objectives and business plan, giving consideration to the interests of depositors and/or policyholders (risk appetite);
- (b) for each material risk, the maximum level of risk that the institution is willing to operate within, expressed as a risk limit and based on its risk appetite, risk profile and capital strength (risk tolerance);
- (c) the process for ensuring that risk tolerances are set at an appropriate level, based on an estimate of the impact in the event that a risk tolerance is breached, and the likelihood that each material risk is realised;
- (d) the process for monitoring compliance with each risk tolerance and for taking appropriate action in the event that it is breached; and
- (e) the timing and process for review of the risk appetite and risk tolerances.