



Risk Evaluation & Risk Treatment in Enterprise Risk Management: ASOP Nos. 46 and 47





Disclaimer

- Please be advised that the statements and opinions expressed by any presenter are those of the individual presenter and do not represent the statements or opinions of any Academy board or committee, including the Actuarial Standards Board or the Actuarial Board for Counseling and Discipline.





Background

- Enterprise Risk Management (ERM) can be understood as a control cycle. Within a typical cycle, risks are identified, risks are **evaluated**, and risks are **treated** (e.g., risk appetites are chosen, risk limits are set, risks are accepted or avoided, risk mitigation activities are performed, and actions are taken when risk limits are breached.) Risks are monitored and reported as they are taken and as long as they remain an exposure to the organization.
- ERM is becoming a standard practice at many organizations and its use has been steadily spreading.





Background

- Risk evaluation and risk treatment have long been part of actuarial practice, with actuaries taking a central role in the operation of the control cycle for individual risks and for enterprise risks.
- With the new CERA risk management educational designation, ERM may become a significant area of practice for actuaries with no ties to traditional actuarial work.





Why ERM ASOPs?

- ASOPs provide assurance to the industry, regulators, and the public that actuaries are professionally accountable.
- When an actuary performs ERM work, that work is considered actuarial professional services and is subject to the Code of Professional Conduct and ASOPs in general.
- By creating specific standards for ERM work, compliance with the standards is made clearer by specifying how the broad ideas expressed in the standards apply to ERM work.
- Important to introduce guidance ahead of the NAIC's Own Risk and Solvency Assessment (ORSA) reporting requirement to be effective January 1, 2015.





Why ERM ASOPs?

- 2005: Decided practice was not yet ready for standard.
- 2010: Recommended the creation of the ERM ASOPs.
- 2011: Exposed discussion drafts on Risk Evaluation and Risk Treatment.
- 2012: ASB adopted ASOP No. 46 Risk Evaluation in Enterprise Risk Management and ASOP No. 47 Risk Treatment in Enterprise Risk Management with an effective date of May 1, 2013.
- 2014: US ORSA ASOP under development





Guidance Introduced

ASOP	Topic	Prior Practice	Practice Under ERM ASOPs
ASOP Nos. 46 and 47	Scope	Lack of understanding whether ERM is considered actuarial professional services.	<ul style="list-style-type: none"> ▪ ERM work performed by actuaries is defined as actuarial professional services. ▪ Risk evaluation and risk treatment professional services performed for purposes other than ERM are not covered by the ASOPs.
	General Considerations	ERM work performed with or without consideration of risk context.	<ul style="list-style-type: none"> ▪ ERM work performed with appropriate context: <ol style="list-style-type: none"> a. Financial strength, risk profile, and risk environment of the organization. b. The organization's own risk management system. c. Inconsistencies between a. and b. to be reflected in the actuarial work product. d. Intended purpose and use of actuarial work product considered.





Guidance Introduced (cont'd)

ASOP	Topic	Prior Practice	Practice Under ERM ASOPs
ASOP No. 46	Risk Models	Implicitly considered model fitness and appropriateness of assumptions.	<ul style="list-style-type: none"> ▪ Explicit consideration of: <ol style="list-style-type: none"> a. Whether a model is fit for purpose. b. Whether model assumptions are appropriate.
	Fit For Purpose	Not explicitly defined.	<ul style="list-style-type: none"> ▪ May include: <ol style="list-style-type: none"> a. Appropriateness of methodologies. b. Adaptability. c. Practicality. d. Data quality. e. Model limitations.
	Economic Capital	Individually determined using diverse criteria.	<ul style="list-style-type: none"> ▪ Model approach should be appropriate for the risks of the organization. ▪ Multiple methods are acceptable. ▪ Model validation guidance.





Guidance Introduced (cont'd)

ASOP	Topic	Prior Practice	Practice Under ERM ASOPs
ASOP No. 46	Stress Testing	Potentially applied without consideration of implications.	<ul style="list-style-type: none"> ▪ Explicit consideration of: <ol style="list-style-type: none"> a. Interdependencies. b. Implication of management or external stakeholder reactions.
	Emerging Risks	Not always seen as actuarial role.	<ul style="list-style-type: none"> ▪ Explicit consideration of: <ol style="list-style-type: none"> a. Impact over time. b. Implications of management or external stakeholder reactions.
	Other Risk Evaluations	Not always seen as actuarial role.	<ul style="list-style-type: none"> ▪ Broadens guidance to apply to risk evaluations performed within risk treatment programs.





Guidance Introduced (cont'd)

ASOP	Topic	Prior Practice	Practice Under ERM ASOPs
ASOP No. 47	Using Models	Implicitly considered model fitness and appropriateness of assumptions.	<ul style="list-style-type: none"> ▪ May be appropriate to refer to ASOP No. 46
	Risk Appetite, Tolerance and Limits (Organizational Risk Parameters)	Not consistently construed and utilized by an organization.	<ul style="list-style-type: none"> ▪ May consider: <ol style="list-style-type: none"> a. Relationship between risk parameters. b. Benefits associated with risk-taking activity. c. Opportunities to mitigate limit breaches. d. Impact of regulatory or accounting constraints.
	Risk Mitigation	Not always seen as actuarial role.	<ul style="list-style-type: none"> ▪ Explicit consideration of: <ol style="list-style-type: none"> a. Qualitative aspects of the organization. b. Costs and potential effectiveness of, and constraints upon, risk mitigation activates.





Guidance Introduced (cont'd)

ASOP	Topic	Prior Practice	Practice Under ERM ASOPs
ASOP No. 46	Actuarial Communication	Inconsistent documentation, communication and disclosure.	<ul style="list-style-type: none"> ▪ Continue to apply ASOP 41 ▪ Document and communicate: <ul style="list-style-type: none"> a. Results and intended use of the ECM, stress/scenario tests. ▪ Disclose: <ul style="list-style-type: none"> a. Known limitations of ECM, stress/scenario tests and resulting impact of any limitations. b. ECM, stress/scenario test time frame and basis of measuring loss, ECM risk metric. c. Methodologies and sources of information for evaluating emerging risk. d. Significant assumptions. e. Risks evaluated and relative significance. f. Any material changes in system, process, methodology or assumptions. g. Whether and how models were validated.





Guidance Introduced (cont'd)

ASOP	Topic	Prior Practice	Practice Under ERM ASOPs
ASOP No. 47	Actuarial Communication	Inconsistent documentation, communication and disclosure.	<ul style="list-style-type: none"> ▪ Continue to apply ASOP 41 ▪ Disclose: <ol style="list-style-type: none"> a. As related to risk treatment activities, significant inconsistencies between the organization's a) financial strength, risk profile, and risk environment and b) the organization's risk management system. b. Known limitations of models used in risk treatment, and the resulting impact of limitations. c. Key considerations important to risk treatment conclusions. d. Significant assumptions. e. Any material changes in system, process, methodology or assumptions.





Applying the ERM ASOPs

Actuaries serve in many different ERM roles:

- As a member of an organization's ERM team
 - CRO: generally responsible for the actuarial work product.
 - Support staff: may rely upon more senior ERM experts to have the appropriate context.
- As a consultant to an organization: also need to have appropriate context.
- As a regulator or rating agency analyst.
- As an actuarial peer reviewer.





Applying the ERM ASOPs

Applying the ASOPs in teams of actuaries and non-actuaries:

- When a non-actuary is the:
 - CRO: support staff may need to ensure context is understood and documentation and disclosures are complete, or non-compliance is disclosed.
 - Support staff: CRO may require additional documentation and disclosures.





The Future for Actuaries in ERM

Are we playing Survivor? Will actuaries be the last profession standing on ERM Island?

- Leading by example – Standards of Practice
- Moving beyond the quantification of risk
 - Designing or implementing processes for managing “soft risks”
 - Establishing the contexts for the adoption of processes for different risk styles
 - Clarifying the forest from the trees on behalf of regulators and the public

