Artificial Intelligence Systems Evaluation
Optional Supplemental Exhibits for State Regulators

Background:

The rapid expansion of big data and adoption of Artificial Intelligence and Machine Learning (AI ystems) is significantly transforming insurance practices. These technologies can offer substantial benefits to both insurance companies and consumers by facilitating the development of innovative products, improving customer interface and enhancing service, simplifying and automating processes, and promoting efficiency and accuracy. However, without robust governance and effective controls, the use of AI ~~s~~Systems may lead to ~~a~~Adverse ~~c~~Consumer ~~o~~Outcomes or compromise the financial soundness of an insurance company. Insurers are responsible for managing the risks associated with the development and implementation of AI ~~s~~Systems and must demonstrate to regulators that ~~adequate~~ appropriate risk-based oversight mechanisms are in place and are functioning effectively.

> **Commented [SS1]:** Based on suggestion from Wayne Turner (HealthLaw)
>
> **Commented [MR2]:** Post 12-7 Drafting Group Edit
>
> **Commented [MR3]:** NAIC staff will make capitalization changes.

Intent:

The NAIC's Innovation, Cybersecurity and Technology (H) Committee charged the Big Data and AI Working Group (BDAIWG) to create tool(s) that would enable regulators to identify and assess AI ~~s~~Systems' related risks on an on-going basis with a scope that considers both financial and consumer risks evolving specifically from company's use of AI ~~s~~Systems to the extent such risks can be parsed from the comprehensive structure.

This ~~document and related~~ tools ~~are~~ is designed to supplement existing market conduct, ~~product review, form filing,~~ financial analysis, and financial examination review procedures for reviewing AI Systems. As this tool supplements existing NAIC resources, regulators should continue to consider existing NAIC resources as authoritative but may consider drawing from this tool to assist in understanding and assessing a company's use of AI ~~s~~Systems. Inquiries and information requests performed related to this tool will be coordinated consistent with the guidance provided by the Market Regulation Handbook, Financial Condition Examiners Handbook, and the Financial Analysis Handbook.

These optional exhibits allow regulators to determine the extent of AI ~~s~~Systems usage for a company and whether additional analysis is needed focusing on financial and consumer risk.

Sections of the Tool include:

- **Exhibit A: Quantify Regulated Entity's Use of AI Systems**
- **Exhibit B: AI Systems Governance Risk Assessment Framework (Two Options: Narrative or Checklist)**
- **Exhibit C: High Risk AI Systems ~~High-Risk Model~~ Details**
- **Exhibit D: AI Systems Model Data Details**

Instructions:

Information obtained from the Exhibit submission may supplement guidance and tools used during an existing market conduct, ~~product review, form filing, certification,~~ financial analysis, and financial examination review, to enhance the regulator's understanding of the AI ~~s~~Systems utilization and assessment of risk across an insurance company in performing the analysis and examination reviews. Effective assessment requires regulators to maintain a fluent understanding and application of the applicable laws including those pertaining to unfair trade practices, <u>unfair claims settlement practices, corporate governance annual disclosures,</u> confidentiality, ~~and~~ financial reporting<u>, and rating</u>.

Regulators using the tool may wish to first use Exhibit A and based on the information provided, determine if further inquiry is necessary. It may be possible that company responses indicate that while the company responding is using AI, its use of AI is so limited or low in inherent risk as to not require further inquiry as contemplated by subsequent exhibits.

If information requested through the tool has already been provided to this department or any other state department of insurance, the company's response should so state <u>and the regulators may accept prior submissions if the prior response is still current and applicable</u> ~~and reference when and how the information was provided.~~<u>.</u>

The tool responses will be considered by regulators when identifying the inherent risks of the insurer. They should also affect the planned examination or inquiry approach, as well as the nature, timing and extent of any further procedures performed.

Materiality and Risk Assessment

Exhibit C of this tool relies on company assessments of <u>the</u> risk~~s~~ and materiality <u>of its AI ~~s~~System(s), including the company's assessment of which AI ~~s~~System is "high risk"</u>. As part of evaluating company responses, regulators may request information on how a responding company assesses ~~both~~ <u>the</u> concepts <u>of AI risk and materiality</u> to assist in the regulatory review.

Confidentiality

Regulators using any of the tools should ~~be prepared to~~ cite examination or other authority, as appropriate when requesting information from insurers. <u>Regulators should cite all relevant confidentiality statutes or other specific protections related to documents, materials or other information in the possession or control of regulators that are obtained by or disclosed to the regulators or any other person in the course of a market conduct inquiry and all information reported or provided to the regulator pursuant to cited examination or other authority</u>

Which Exhibit to Use?

Risk Identification or Assessment	A	B	C	D
Identify Reputational Risk ~~and Consumer Complaints~~	~~X~~	**X (Checklist)**		
Review Company Practices Related to Consumer Complaints		**X**		
Assess Company Financial Risk – Number of models implemented recently	**X**	**X (Checklist)**		
Identify Adverse Consumer Outcomes – AI Systems and data use by operational area	**X**	**X**	**X**	**X**
Evaluate Actions Taken Against Company's Use of High-Risk AI Systems (as defined by the company)			**X**	
Evaluate Robustness of AI Controls		**X**	**X**	
Determine the types of data used by operational area				**X**

Exhibit A: Quantify Regulated Entity's Use of AI Systems

Purpose: To obtain information pertaining to the number of AI models that are new or, or updated., etc. that will help facilitate risk assessment. Based on the responses from the company, regulators may ask for additional information related to governance (Exhibits B), high-risk models (Exhibit C), and data types (Exhibit D) where there is risk for aAdverse cConsumer oOutcomes or material adverse financial impact.

Company Instructions: Provide the most current counts and use cases of the following as requested. Note that "AI System" is defined as a machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations, content (such as text, images, videos, or sounds), or other output influencing decisions made in real or virtual environments. AI sSystems are designed to operate with varying levels of autonomy (supportive, augmented, automated). For purposes of responding to information requests related to this Exhibit, those models that augment or automate decision making related to consumers are considered to have direct consumer impact. "Adverse Consumer Outcome" and "Use Case" are as defined below. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

> **Commented [MR5]:** NAIC staff to add definitions for two terms from the surveys.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Company Legal Name or and Group Name: _____

> **Commented [MR6]:** NAIC staff to track change to all Exhibits

NAIC CoCode or and Group Codes: _____

> **Commented [MR7]:** Post 12-7 Edit - CA suggested change. This carries to all subsequent exhibits.

Company Contact Name: _____ Email: _____

Describe the Line of Business for Which This Response Applies: _____

Date Form Completed ("as of") Date: _____

Use of AI System in Operations or Program Area	Number of AI System Model(s) Currently in Use	Number of AI System Model(s) with **Direct**	Number of AI System Model(s) with Material	Number of AI System Model(s) Implemented in Past 12 Months	AI System Use Case(s)

		Consumer Impact	Financial Impact		
Marketing					E.g., UC1: Identify potential consumers interested in product.
Premium Quotes & Discounts					
Underwriting/Eligibility					
Ratemaking/Rate Classification/ Schedule Rating/ Premium Audits					
Claims/Adjudication*					
Customer Service					E.g. Consumer facing AI Systems, AI Systems that support customer service functions, etc.
Utilization Management/Utilization Review/Prior Authorization/Level of Care Determination					
Fraud/Waste & Abuse					
Investment/Capital Management					
Legal/Compliance					
Producer Services					E.g. AI Systems that support producers, AI Systems that provide suggestions for products
Reserves/Valuations					
Catastrophe Triage					
Reinsurance					

Commented [SS8]: Added per suggestion from Lauren Finke

Use of AI System in Operations or Program Area	Number of AI System Model(s) Currently in Use	Number of AI System Model(s) with **Direct** Consumer Impact	Number of AI System Model(s) with Material Financial Impact	Number of AI System Model(s) Implemented in Past 12 Months	AI System Use Case(s)
Other Insurance Practices (~~remove or change to "additional" per the use of "Other" above~~ if applicable)					
Includes Salvage/Subrogation					

Exhibit B: (Narrative) AI Systems Governance Risk Assessment Framework

Purpose: To obtain the Company AI Governance Framework, including the risk identification, mitigation, and management framework and internal controls for AI ~~s~~Systems; and the process for acquiring, using, or relying on third-party AI ~~s~~Systems and data. Market and financial regulators should coordinate to gain access to the relevant section of the policies governing the use of AI Systems.

Company Instructions: Provide responses to the questions regarding governance of AI ~~s~~Systems within your company's operations. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam. The references, to, and questions about, elements of an AI ~~Governacne~~Governance and Risk Assessment Framework in this Exhibit B do not create a requirement that an AI Governance and Risk Assessment Framework is inadequate.

> **Commented [SS9]:** 12/2 edit suggested by APCIA - to be discussed and confirmed by the working group. If agreed, then this would also be added to the Checklist Instructions.

Group ~~or~~and Company Legal Name: _____

> **Commented [MR10]:** These changes were agreed to on 12/7 but are now carried to subsequent Exhibits.

NAIC Group ~~or~~and Company ~~Co~~Codes: _____

Company Contact Name: _____ Email: _____

Date Form Completed ("as of") Date: _____

1. Provide the Governance Framework (framework) pertaining to the use of AI ~~s~~Systems. Click or tap here to enter text.

> **Commented [MR11]:** Post 12/7 Edits - Addresses feedback raised by ACLI, CAI, MO, NAMIC, and others.

    a. What role maintains the framework? Click or tap here to enter text.
    b. Discuss the governance structure, Board reporting and frequency. Click or tap here to enter text.
    c. Discuss the process by which the framework is integrated throughout the organization, assessed and remediated. Click or tap here to enter text.
    d. Discuss the process by which the effectiveness of the framework and individual models are assessed and modified. Click or tap here to enter text.
    e. Discuss the ~~divisional, operational and cross functional~~how responsibility for governance within the organization is assigned and how the organization ensures~~,~~ consistency and alignment. Click or tap here to enter text.
    f. Discuss the integration of the AI ~~s~~Systems in the Own Risk and Solvency Assessment (ORSA) and Enterprise Risk Management (ERM) assessments. Click or tap here to enter text.

g. Suggested additional question: How does the insurance company assess autonomy, reversibility, and reporting impact risk of AI sSystems? Click or tap here to enter text.

2. Discuss the uses of AI sSystem that:
   a. Generates a material financial transaction directly or indirectly. Click or tap here to enter text.
   b. Generates a material consumer impact directly or indirectly. Click or tap here to enter text.
   c. Generates or impacts material information reported in financial statements either directly or indirectly. Click or tap here to enter text.
   d. Generates or impacts risk and or control assessment. Click or tap here to enter text.
   e. *Discuss the development, testing, and implementation of material AI sSystems that the Company has implemented. If appropriate, include details regarding where any systems differ from established IT systems and data handling protocols.* Discuss the basis for deviation from established practices. Click or tap here to enter text.

3. Provide the policy for, and discuss the use and oversight of, material AI sSystem vendors, model design and testing:
   a. Discuss the transparency validation and testing procedures performed on internally-developed AI sSystems. Click or tap here to enter text.
   b. Discuss the transparency validation and testing procedures performed on third-party vendor-supplied AI sSystems. Click or tap here to enter text.
   c. Discuss the testing and verification that has occurred including frequency, scope and methodology. Click or tap here to enter text.

4. Provide the policy for, and discuss the use and oversight of, material AI sSystems by professional service providers including actuarial, claim, MGA, audit, and/or other professional services. Click or tap here to enter text.
   a. Discuss the testing and verification that has occurred, frequency, scope, and methodology. Click or tap here to enter text.

   Click or tap here to enter text.Click or tap here to enter text.
5. Discuss additional aspects of the framework RAF design and evaluation pertaining to AI sSystems. Click or tap here to enter text.
   a. Discuss the unit(s) responsible for the RAFframework, assessment approach and frequency, and involvement with the program area to the extent it differs from that discussed above. Click or tap here to enter text.

Commented [MR12]: Post 12-7 Edit: Added reference to materiality based on 12/7 discussion and based on input provided by the CAI and MO.

Commented [SS13]: Post 12/7: Removed "indirectly" per NM discussion but subject to confirmation from the working group.

Commented [SS14]: Post 12/7: edit from CAI

Commented [SS15]: 12-2 comments: APCI noted that this information varies from case to case.

Commented [SS16]: Post 12/7: CAI suggested adding "material" - edit to be confirmed by the working group.

Commented [SS17]: Post 12/7: CAI suggested adding "material" - edit to be confirmed by the working group.

Commented [MR18]: Post 12-7 Edit: Change based on input provided by the ACLI

Commented [SS19]: 12-2 comment from ACLI: clarify what "policy" means

Commented [SS20]: Post 12/7: CAI suggested adding "material" - edit to be confirmed by the working group.

Commented [MR21]: Post 12-7 Edit: Clarification suggested to address input provided by the ACLi, CA, MO, and NAMIC.

Exhibit B: (Checklist) AI Systems Governance and Risk Assessment Framework

Purpose: To obtain the Company's AI Systems Governance Framework, including the risk identification, mitigation, and management framework and internal controls for AI Systems; and the process for acquiring, using, or relying on third-party AI Systems and data.To obtain the Company AI Systems Governance Framework, including the risk identification, mitigation and management framework and internal controls for AI sSystems; and the process for acquiring, using, or relying on third party AI sSystems and data" potential risk of aAdverse cConsumer oOutcomes, development of models, human-in-the-loop supervision, and information about efforts to maintain compliance and the integrity of financial reporting and control integrity. Market and financial regulators should coordinate to gain access to the relevant section of the policies governing the use of AI sSystems.

Company Instructions: Provide responses to the questions regarding how the governance of AI sSystems fits within your company's system of supervision or Enterprise Risk Management program operations. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Group or and Company Legal Name(s): _____

NAIC Group or and Company Code(s): _____

Company Contact Name: _____ Email: _____

Date Form Completed ("as of") Date: _____

Ref	AI Systems Use Questions for Company	Company Response
1	Has the company adopted a written AIS Program? If yes, when was it adopted and what is the frequency of review for updating?	
2	Was the Board of Directors or management involved in the adoption of an AIS Program?	

Commented [MR22]: Post 12/7 Edit - DIFS and NAMIC suggested this be rewritten for clarity. NAIC staff copied in purpose language from the narrative form of this Exhibit to clarify the purpose and align the use of both versions of the Exhibit.

Commented [MR23]: Post 12/7 Edit - Drafting/Pilot Group

Ref	AI Systems Use Questions for Company		Company Response
	2a. What is the role of the Board of Directors or management in the AI Systems Governance Framework?		
Ref	**AI Systems Use Questions for Company**		**Company Response**
3	**Reference the processes and procedures of the Company AI Governance Framework that addresses the following:**		
	How the Insurance Company...	**Page #**	If not specified in governance, provide details below:
	3a. Assesses, mitigates, and evaluates residual AI ~~s~~System risks of unfair trade practices		
	3c. Ensures AI ~~s~~Systems are compliant with applicable state and federal laws and regulations		
	3d. Evaluates the risk of ~~a~~Adverse ~~c~~Consumer ~~o~~Outcomes		
	3e. Considers data privacy and protection of consumer data used in AI ~~s~~Systems		
	3f. ~~Ensures~~ Evaluates whether AI ~~s~~Systems are suitable for their intended use and should continue to be used as designed		
	3h. Considers~~Ensures~~ AI ~~s~~System risks ~~are considered~~ within its Enterprise Risk Management (ERM)		
	3i. ~~Ensures~~ Considers AI ~~s~~System risks ~~are considered~~ within the Own Risk and Solvency Assessment Report(ORSA)~~.~~, as applicable.		
	3j. ~~Ensures~~ Considers AI ~~s~~System risks ~~are considered~~within in the software development lifecycle (SDLC)		
	3k. ~~Ensures~~ Considers AI ~~s~~System risk impact on financial reporting ~~is considered~~		
	3l. Trains employees about AI ~~s~~System use and defines prohibited practices (if any)		
	3m. Quantifies AI ~~s~~System risk levels		
	3n. Provides standards and guidance for procuring and engaging AI ~~s~~System vendors		

Commented [MR24]: Post 12-7 Edit - Suggested by AHIP

Commented [MR25]: Post 12-7 Edit: Drafting group changes to avoid perception of requirements.

Commented [SS26]: 12/2: CAI suggested edit.

3o. ~~Ensures~~ Considers consumer complaints resulting from AI ~~s~~Systems and whether they are identified, tracked, and addressed			
How the Insurance Company...		Page #	If not specified in governance, provide details below:
3p. ~~Ensures~~ Promotes consumer awareness ~~in~~ of the use of AI ~~s~~Systems through disclosures, policies, and procedures for consumer notification, as appropriate			

Exhibit C: High-Risk AI Systems ~~High-Risk Model~~ Details

Purpose: To obtain detailed information on high-risk AI ~~s~~System models, such as models making automated decisions, that could cause ~~Aa~~dverse ~~consumer~~Consumer Outcomes, material financial impact, or material financial reporting impact. AI ~~s~~System risk criteria is set by the insurance company. To assist in identifying models for which this information is requested, regulators may request information on the company's risk assessment and a model inventory if such information has not otherwise already been provided.

Company Instructions: Fill in the details for each of the AI ~~s~~System model(s) requested. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below. The template below refers to both AI Systems and Models depending on the information being requested. There may be some instances were a company feels information should be provided in relation to the AI System and not the Model or vice-versa. This should be discussed with regulators as part of the submission process to avoid misunderstanding.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Group ~~or~~and Company Legal Name(s): _____

NAIC Group ~~or~~and Company Code(s): _____

Company Contact Name: _____ Email: _____

Date Form Completed ("as of") Date: _____

Ref	Model / AI System Information Requests	Company Response
1	AI System model name ~~Model name~~ and version number	
2	Model type used in the AI System	
3	Model Implementation Date	
4	Model development (internal or third party – include vendor name)	
5	Model risk classification (high, medium, low, etc.)	
6	Model risk(s) and limitation(s)	
7	AI type (automate, augment, support)	

Commented [MR27]: Post 12-7 Edits - Materiality revisions suggested by AHIP.

Commented [MR28]: Post 12-7 Edit - This attempts to address input from the CAI. CAI members request clarification on whether various questions in the tool should refer to AI Systems or to models and how the two terms (AI Systems/models) relate to each other, especially in light of how the terms are used in the NAIC's Model AI Bulletin. In other words, which term (model or system) is most precise and appropriate given the goals of the specific inquiry.

Commented [MR29]: Post 12-7 Edits - Changes to this table reflect input from Bell Analytics, CAI, CA, DIFS, and MO.

Ref	Model / AI System Information Requests	Company Response
8	Discuss ~~Testing~~ testing model outputs (e.g. model drift, accuracy, ~~bias, unfair trade practices~~unfair discrimination, performance degradation, etc.) and how the model was validated prior to being deployed as well as how it's performance is monitored on an ongoing basis.	
9	Last date of model testing	
10	Use cases and purpose of model	
11	Discuss how the model affects the financial statements, risk assessment or controls.	
12	~~Discuss how the model is reviewed for compliance with state and federal laws~~ ~~Replace with~~ "Discuss how the model is reviewed for compliance with applicable state and federal laws, including but not limited to the unfair trade practices act and unfair claims settlement laws."	
13	To the extent permitted by law, ~~D~~discuss if the company has had any actions taken against them for use of this model. Actions may include but are not limited to informal agreements, voluntary compliance plans, administrative complaints, ongoing third-party monitoring, cease and desist, remediation, restitution, fines, penalties, investigations, consent orders or other regulatory agency actions.	

Commented [SS30]: 12/2: ACLI requested clarification of this question

Commented [MR31]: Post 12-7 Edit - Based on input provided by AHIP.

Commented [MR32]: Post 12-7 Edit - Based on input provided by AHIP.

Exhibit D: AI Systems ~~Model~~ Data Details

Purpose: To obtain detailed information of the source(s) and type(s) of data used in AI ~~s~~System ~~model~~(s) to identify risk of adverse consumer impact, material financial impact, or material financial reporting impact.

Company Instructions: Provide details below for the data used in AI ~~s~~System model(s). If any of the data elements listed are used in the training or test data as part of the development of AI model(s), provide information on whether the data element is sourced internally or whether the data element is sourced from a third party, in which case provide the name of the third-party vendor. Leave blank if a data source is not used in the development of AI ~~s~~System model(s) for the insurance operation. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Group ~~or~~ and Company Legal Name(s): _____

NAIC Group ~~or~~ and Company ~~Co~~Code(s): _____

Company Contact Name: _____ Email: _____

Describe the Line of Business for Which This Response Applies (complete one for each line of business):

_____

Date Form Completed ("as of") Date: _____

Ref	(1) Type of Data Element Used in AI System ~~Model~~(s)	(2) Type of AI System ~~Model~~(s) (E.g., ~~Predictive~~ Machine Learning vs. Generative AI)	(3) Describe How the Company Uses the Data Throughout Their Insurance Operations (include operational practices by line of insurance)	(4) Internal Data Source	(5) Third Party Data Source / Vendor Name
1	Aerial Imagery				
2	Age, Gender, Ethnicity/Race				
3	Consumer or Other Type of Insurance/Risk Score				
4	Crime Statistics				
5	Criminal Convictions (Exclude Auto-Related Convictions)				
6	Driving Behavior				
7	Education Level (Including school aptitude scores, etc.)				
8	Facial or Body Detection / Recognition / Analysis				
9	Geocoding (including address, city, county, state, ZIP code, lat/long, MSA/CSA, etc.)				
10	Geo-Demographics (including ZIP/county-based demographic characteristics)				
11	Household Composition				
12	Image/video Analysis				
13	Income				
14	Job History				
15	Loss Experience				

Commented [MR35]: Post 12/7 - Edit - CAI suggested if we keep predictive model in reference, we should define the term. NAIC staff edit changes the reference to Machine Learning to avoid having to define another term. Please opine on the appropriateness of the change.

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Commented [SS36]: 12/2: Allen (CA) ask whether this is duplicative of "Telematics…" below

Ref	Type of Data Element Used in AI System ~~Model~~(s)	(2) Type of AI System ~~Model~~(s) (E.g., ~~Predictive~~ Machine Learning vs. Generative AI)	(3) Describe How the Company Uses the Data Throughout Their Insurance Operations (include operational practices by line of insurance)	(4) Internal Data Source	(5) Third Party Data Source / Vendor Name
16	Medical, including Biometrics, genetic information, pre-existing conditions, diagnostic data, etc.				
17	Natural Catastrophe Hazard (Fire, Wind, Hail, Earthquake, Severe Convective Storms)				
18	Online social media, including characteristics for targeted advertising				
19	Personal Financial Information				
20	Telematics/Usage-based insurance				
21	Vehicle-Specific Data including VIN characteristics				
22	Voice Analysis				
23	Weather				
24	Other: Non-Traditional Data Elements (Please provide examples)				

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DEFINITIONS AND APPENDIX

Where available, for the purposes of this evaluation terms are defined in accordance with the NAIC Model Bulletin on the Use of AI Systems by Insurers (https://content.naic.org/sites/default/files/2023-12-4%252520Model%252520Bulletin_Adopted_0.pdf):

"Adverse Consumer Outcome" refers to an AI System decision (output) by an insurance company that is subject to insurance regulatory standards enforced by the Department that adversely impacts the consumer in a manner that violates those standards.

"Algorithm" means a clearly specified mathematical process for computation; a set of rules that, if followed, will give a prescribed result.

"AI System" is a machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations, content (such as text, images, videos, or sounds), or other output influencing decisions made in real or virtual environments. AI Systems are designed to operate with varying levels of autonomy.

"Artificial Intelligence (AI)" refers to a branch of computer science that uses data processing systems that perform functions normally associated with human intelligence, such as reasoning, learning, and self-improvement, or the capability of a device to perform functions that are normally associated with human intelligence such as reasoning, learning, and self-improvement. This definition considers machine learning to be a subset of artificial intelligence.

"Augmentation" refers an AI System that suggests an answer and/or advises a human who is making a decision.

"Automation" refers to an AI System that does not involve human intervention.

"Consumer Impact" refers to a decision by an Insurer that is subject to insurance regulatory standards enforced by the Department.

"Degree of Potential Harm to Consumers" refers to the severity of adverse economic impact that a consumer might experience as a result of an Adverse Consumer Outcome.

"Externally Trained Models" refers to T~~t~~ransferred learnings from pre-trained models developed by a third party on external reference datasets.

"Generative Artificial Intelligence (Generative AI)" refers to a class of AI Systems that generate content in the form of data, text, images, sounds, or video, that is similar to, but not a direct copy of, pre-existing data or content.

> **Commented [MR37]:** The definitions for augment, support, and automate were added based on the discussion on 12/7.

"Inherent Risk" ~~R~~refers to an assessment of risk that is undertaken before considering risk-mitigation strategies or internal controls.

"Internally Trained Models" refers to ~~M~~models developed from data internally obtained by the company.

"Machine Learning (ML)" ~~R~~refers to a field within artificial intelligence that focuses on the ability of computers to learn from provided data without being explicitly programmed.

"Material Financial Impact" refers to costs ~~Material financial impact refers to costs~~ or risks that significantly affect, or would reasonably be expected to have significant effect, on the debt and financial obligation limits prescribed by Federal or State laws and regulations.

"Model Drift" refers to the decay of a model's performance over time arising from underlying changes such as the definitions, distributions, and/or statistical properties between the data used to train the model and the data on which it is deployed.

"Neural Network Models" refers to machine learning models that mimuc the complex functions of the human brain. These models consist of interconnected nodes or neurons that process data, learn patterns and enable tasks such as pattern recognition and decision-making, including but not limnited to: ~~Include but not limited to:~~ Single/multi-layer perceptrons/fully connected networks (MLPs/FCs), Deep Learning (DL), Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Long Short-Term Memory Neural Networks (LSTMs), Sequence Models, Large Language Models (LLMs), and Reinforcement Learning Models (RLs). Alternate definition suggested by CAI: "

"Predictive Model" refers to the mining of historic data using algorithms and/or machine learning to identify patterns and predict outcomes that can be used to make or support the making of decisions.

"Residual Risk" ~~r~~Refers to an assessment of risk after considering risk-mitigation strategies or controls.

"Support" refers to an AI System that provides information but does not suggest a decision or action to a human.

"Third Party" for purposes of this ~~bulletin~~ Tool means an organization other than the insurance company that provides services, data, or other resources related to AI.

"Validation Method" refers to ~~Tt~~he source of the reference data used for validation, whether Internal, External, or Both.

"Use Case" refers to~~A~~ a description of a specific function in which a product or service is used.

Operations

Marketing - Examples: market research, target advertising, market/coverage expansion, customer segment target marketing, demand modeling, agent/broker incentive plans, up/cross-selling.

Underwriting - Examples: Policy/coverage acceptance or eligibility, company placement/tiering, schedule rating, decisions based on telematics/UBI, report ordering, retention modeling, inspections, anomaly detection.

Ratemaking/Pricing - Examples: Development of overall/base rates, expense/loss loadings, estimation of trends and loss development, development of manual rating factors, tiering criteria, insurance credit scoring, territory boundary definitions, numeric/categorical level groupings and interactions, individual risk rating, telematics/UBI, price optimization, schedule rating factors.

Claims - Examples: Claim assignment, triage/fast-tracking, individual/bulk claim reserving including loss estimation, imaging/video analysis, fraud detection, litigation, estimation of closure rates, salvage/subrogation, examination/report ordering.

Customer Service - Examples: Agent/broker/internet/customer service interaction (chatbots), online/smart phone apps, loss prevention/risk mitigation advice, payment plans, complaints.

Other: Cyber Security, ~~Fraud Detection,~~ Strategic Operations, Reserving, Investments, Capital Management, Financial Reporting, Reinsurance, Legal, Legal Exposure, Reputation Risk.

Commented [SS41]: Post 12/7: accepted edit from Allen (CA)

Commented [SS42]: 12/2 suggestion from APCIA: "Some of this could be solely used in underwriting such as territory boundary definitions. We should not include those terms in the definition of rating/pricing."

Commented [SS43]: Already listed in Claims

Artificial Intelligence Systems Evaluations version 2.0
Optional Supplemental Exhibits for State Regulators
Members, Interested Regulators, and Interested Parties Suggested Revisions

Themes

- **Clarity of Definitions**
    - Need to define key terms such as bias, materiality, high-risk AI systems, and performance degradation.
    - Replace "bias" with "unfair discrimination" or provide explicit definitions to distinguish statistical bias from regulatory unfairness.
- **Scope and Coordination**
    - Tool is too broad; overlaps with market conduct exams or financial inquiries.
    - Coordinate with D and E committees
    - Limit scope to consumer impacts rather than financial risk
    - Several interested parties commented to exclude GLMs from scope
- **Governance and Oversight**
    - Should ensure that insurers have clear accountability structures and policies for third-party AI
    - Difficulty in health insurance around "sources of truth" (Eric Ellsworth) in automated prior authorization
- **Testing and Model Validation**
    - Importance of model testing protocols but requested clearer prioritization and definitions.
    - Should require end-to-end testing not just model-level checks, to ensure automated processes function correctly.
- **Regulatory Burden and Practicality**
    - Tool could create duplicative requests or excessive burden for insurers.
    - Should streamline exhibits.
    - Limit to material risk.
- **Confidentiality and Data Use**
    - Need to protect confidentiality.
    - Foundation models lack training data provenance, making Exhibit D difficult to complete.
- **Consumer Protection and Outcomes**
    - Focus on adverse consumer outcomes, transparency, and fairness.
    - Regulators should ensure redress mechanisms are accessible.

Background

The rapid expansion of big data and adoption of Artificial Intelligence and Machine Learning (AI systems) is significantly transforming insurance practices. These technologies can offer substantial benefits to both insurance companies and consumers by facilitating the development of innovative products, improving customer interface and enhancing service, simplifying and automating processes, and promoting efficiency and accuracy. However, without robust governance and effective controls, the use of AI systems may lead to adverse consumer outcomes unintended consumer harm or compromise the financial soundness of an insurance company. Insurers are responsible for managing the risks associated with the development and implementation of AI systems and must demonstrate to regulators that adequate oversight mechanisms are in place and are functioning effectively.

Comments:

Brian Bayerle (ACLI) • "AI Systems" is a defined term, and should be capitalized throughout the document. • The NAIC AI Bulletin addresses consumer outcomes, so financial items should be excluded from the tool.
Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI) may lead to adverse consumer outcomes or ~~compromise the~~adverse financial ~~soundness of~~impacts to an insurance company. Insurers are responsible for managing the risks associated with the development and implementation of AI systems and must <u>be able to</u> demonstrate to regulators that ~~adequate~~appropriate • <u>risk-based</u> oversight mechanisms are in place and are functioning effectively.

Intent

The NAIC's Innovation, Cybersecurity and Technology (H) Committee charged the Big Data and AI Working Group (BDAIWG) to create tool(s) that would enable regulators to identify and assess AI systems' related risks on an on-going basis with a scope that considers both financial and consumer risks evolving specifically from company's use of AI systems to the extent such risks can be parsed from the comprehensive structure.

This document (NAIC staff edit) are designed to supplement existing market conduct, product review, form filing, financial analysis, and financial examination review procedures. As this tool supplements existing NAIC resources, regulators should continue to consider existing NAIC resources as authoritative but may consider drawing from this tool to assist in understanding and assessing a company's use of AI systems.

These optional exhibits allow regulators to determine the extent of AI systems usage for a company and whether additional analysis is needed focusing on financial and consumer risk.

Sections of the Tool include:

- **Exhibit A: Quantify Regulated Entity's Use of AI Systems**
- **Exhibit B: AI Systems Governance Risk Assessment Framework (Two Options: Narrative or Checklist)**
- **Exhibit C: AI Systems High-Risk Model Details**
- **Exhibit D: AI Systems Model Data Details**

Comments:

Brian Bayerle (ACLI) • The tool should be focused on "direct" impacts. "Indirect" impacts would very quickly lead to unwieldy reporting as it would bring in AI embedded in common products. • Suggest striking Exhibit D entirely; additional commentary below.
Dave Snyder (APCI) on behalf of member Company 2 • Exhibits A, C, and D should be limited to high-risk AI Systems. The level of detail an insurance company is required to provide through these exhibits is very burdensome for an AI System that is not high risk. There should be a proportionality component to the use of these exhibits. • For example, we may not be able to provide the detail required in Exhibit D for an AI System we license through a third-party vendor or that is used by a third-party claim administrator or other third party service provider.
Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)

- This ~~document and related tools are~~tool is -designed to supplement existing market conduct, ~~product review, form filing,~~ financial analysis, and financial examination review procedures for reviewing AI Systems. As this tool supplements existing NAIC resources, regulators should continue to consider existing

  ~~These~~Non-domestic/non-lead state regulators should scope their use of this tool to adverse consumer impacts only based upon the market presence of the admitted insurer and whether there are indications of potential adverse consumer impacts in their jurisdiction, and they should defer to domestic and lead state regulators and/or group-wide supervisors in the use of this tool to evaluate financial risk from AI Systems.

- The optional exhibits in this tool allow regulators to determine the extent of AI systems usage for a

  - **Exhibit B: AI Systems Governance Risk Assessment Framework (Two Options: Narrative or Checklist) [Recommend limiting Exhibit B to just the Checklist]**
  - **Exhibit C: High-Risk AI Systems ~~High-Risk Model~~ Details**
- - **Exhibit D: AI Systems ~~Model~~ Data Details [Recommend deletion of Exhibit D]**

Instructions

Information obtained from the Exhibit submission may supplement guidance and tools used during an existing market conduct, product review, form filing, financial analysis, and financial examination review, to enhance the regulator's understanding of the AI systems utilization and assessment of risk across an insurance company in performing the analysis and examination reviews. Effective assessment requires regulators to maintain a fluent understanding and application of the applicable laws including those pertaining to unfair trade practices, confidentiality, and financial reporting.

Regulators using the tool may wish to first use Exhibit A and based on the information provided, determine if further inquiry is necessary. It may be possible that company responses indicate that while the company responding is using AI, its use of AI is so limited or low in inherent risk as to not require further inquiry as contemplated by subsequent exhibits.

If information requested through the tool has already been provided to this department or any other state department of insurance, the company's response should so state and reference when and how the information was provided.

The tool responses will be considered by regulators when identifying the inherent risks of the insurer. They should also affect the planned examination or inquiry approach, as well as the nature, timing and extent of any further procedures performed.

Materiality and Risk Assessment

Exhibit C of this tool relies on company assessments of risk and materiality. As part of evaluating company responses, regulators may request information on how a responding company assesses both concepts to assist in the regulatory review.

Confidentiality

Regulators using any part of this tool of the tools (NAIC staff edit) should be prepared to cite examination or other authority, as appropriate when requesting information from insurers.

Which Exhibit to Use?

Risk Identification or Assessment	A	B	C	D
Identify Reputational Risk and Consumer Complaints	X	X (Checklist)		
Assess Company Financial Risk – Number of models implemented recently	X	X (Checklist)		
Identify Adverse Consumer Outcomes – AI Systems and data use by operational area	X	X	X	X
Evaluate Actions Taken Against Company's Use of High-Risk AI Systems (as defined by the company)			X	
Evaluate Robustness of AI Controls		X	X	
Determine the types of data used by operational area				X

Comments:

Brian Bayerle (ACLI)

applicable laws including those pertaining to unfair trade practices, <u>unfair claims settlement practices, corporate governance annual disclosure,</u> confidentiality, <u>property</u> and ~~financial reporting.~~<u>casualty rating.</u>

-
  - o Updated to align with applicable laws cited in the NAIC AI Bulletin.

inquiry as contemplated by subsequent exhibits. <u>Specifically, Exhibit C should only be requested for specific regulatory purposes regarding direct Consumer Impact.</u>

-
  - o Suggest a narrower initial request of companies, with additional Exhibits only to be provided for specific regulatory purposes where additional information is warranted.

~~If~~<u>Regulators are advised to coordinate with the domestic regulator of the company.</u> To the extent that the information requested ~~through the tool~~ has already been provided to this department or any other state department of insurance, ~~the~~ <u>regulators should accept a</u> company's ~~response should so state and reference when and how the information~~<u>prior submission if it</u> was ~~provided.~~<u>done so in the past 12 months absent specific regulator purposes.</u>

-
  - o Suggest stressing coordination between regulators.
  - o Suggest strengthening this language to allow previously submitted requests.

Confidentiality protections as outlined in the NAIC Corporate Model Governance Act (Model #305) and the Market Conduct Surveillance Model Law (Model #693) shall apply to any response received pursuant to requests made through this tool. If a request does not fall within the auspices of either law, applicable confidentiality protections should be applied to any response received pursuant to the request. Regulators using any of the tools should cite examination or other authority, as appropriate when requesting information from insurers. Regulators should cite all relevant confidentiality statutes or other specific protections related to documents, materials or other information in the possession or control of regulators that are obtained by or disclosed to the regulators or any other person in the course of a market conduct, product review, and form filing review and all information reported or provided to the regulator pursuant to cited examination or other authority.

-
  - o Confidentiality protections should be strengthened.
- Remove top row of "Which Exhibit to Use?" table for consistency since consumer complaint tracking removed from Exhibit A.

Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)

- Information obtained from the Exhibit(s) submission
  - existing market conduct~~, product review, form filing~~, pertaining to unfair trade practices, confidentiality, and financial reporting. Non-domestic/non-lead state regulators should scope their use to potential adverse consumer impacts only. Domestic and lead state regulators and/or group-wide supervisors may use this tool to evaluate potential adverse consumer impacts and/or financial risk from AI Systems.

- CAI members strongly suggest adding a materiality threshold to Exhibit A in order to reduce the burdensome nature of the request. Materiality would rely on the company's reasonable assessment of the magnitude of the risks of using the AI System and the frequency of their occurrence.
  - ~~The tool~~ An insurer's responses to this tool will be considered by regulators when identifying the inherent risks of the ~~insurer. They should~~insurer's use of AI Systems. The responses may also ~~affect~~be factored into the planned examination or inquiry approach, as well as the nature, timing and extent of any further
    Materiality and Risk Assessment

    Exhibit C of this tool relies on company assessments of ~~risk~~the risks and materiality of its AI system(s), including the company's assessment of which AI system is "high risk". As part of evaluating company responses, regulators may request information on how a responding company assesses ~~both~~the concepts of AI risk and materiality to assist in the regulatory review.
    Confidentiality

    Regulators using any of the ~~tools~~Exhibits to this tool should ~~be prepared to~~ cite examination or other authority, as appropriate, when requesting information from insurers to ensure that the information received from insurers is granted the highest level of confidentiality available under state law.

Lindsey Stephani (Klarkowski) (NAMIC)

- ~~which may vary from an annual to a quarterly basis as risk assessment warrants.~~ The Exhibits contained in this tool include questions relevant to both financial examinations and market conduct examinations, and regulators should therefore only utilize the Exhibits and sections of the Exhibits that are pertinent and relevant to the exam being conducted. Effective assessment requires regulators to maintain a fluent

- NAMIC suggests adding this language to memorialize the expectation and intent that regulators use only the areas of the exhibits that are relevant and pertinent to the exam being conducted (i.e., financial or market conduct) because the tool includes aspects of both types of exam content. NAMIC suggests adding verbiage to clarify that the intent of providing where and when insurers have already produced this information is to avoid states creating duplicative production, and that states are expected to coordinate with other states to the extent allowed for in the law.

  If information requested through the tool has already been provided to this department or any other state department of insurance, the company's response should so state and reference when and how the information was provided. The expectation is that states will then coordinate with one another (in accordance with confidentiality laws) to avoid duplicative production of information.

- NAMIC suggests adding verbiage to clarify that the intent of providing where and when insurers have already produced this information is to avoid states creating duplicative production, and that states are expected to coordinate with other states to the extent allowed for in the law.

- The following refers to the table on "Which Exhibit to Use?"

  Commented [LK4]: NAMIC suggests clarifying that this table provides information on the topics that each exhibit covers, and that the regulator should use only those exhibits pertinent and relevant to the exam being conducted.

  Commented [LK5]: NAMIC suggests removal of "Identify reputational risk," because we disagree about there being reputational risk to using AI. From a carrier perspective, there is a reputational risk to not using AI because it indicates a carrier is not keeping pace with technology or its competitors.

  Commented [LK6]: Because consumer complaint tracking was removed from Exhibit A, NAMIC suggests this should be also deleted for consistency.

Exhibit A: Quantify Regulated Entity's Use of AI Systems

Purpose: To obtain information pertaining to the number of AI models that are new, updated, etc. that will help facilitate risk assessment. Based on the responses from the company, regulators may ask for additional information related to governance (Exhibits B), high-risk models (Exhibit C), and data types (Exhibit D) where there is risk for adverse consumer outcomes or material adverse financial impact.

Company Instructions: Provide the most current counts and use cases of the following as requested. Note that "AI System" is defined as a machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations, content (such as text, images, videos, or sounds), or other output influencing decisions made in real or virtual environments. AI systems are designed to operate with varying levels of autonomy (supportive, augmented, automated). "Adverse Consumer Outcome" and "Use Case" are as defined below. . Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Company Legal Name or Group Name: _____

NAIC Code or Group Code: _____

Company Contact Name: _____ Email: _____

Describe the Line of Business for Which This Response Applies: _____

Date Form Completed ("as of") Date: _____

Columns:

Use of AI System in Operations or Program Area	Number of AI System Model(s) Currently in Use	Number of AI System Model(s) with Consumer Impact	Number of AI System Model(s) with Material Financial Impact	Number of AI System Model(s) Implemented in Past 12 Months	AI System Use Case(s)

Operations (rows):

Use of AI System in Operations or Program Area
Marketing
Premium Quotes & Discounts
Underwriting
Ratemaking/Rate Classification/ Schedule Rating/ Premium Audits
Claims/Adjudication*
Customer Service
Utilization Management/Utilization Review/Prior Authorization
Fraud/Waste & Abuse
Investment/Capital Management
Legal/Compliance
Producer Services
Reserves/Valuations
Catastrophe Triage
Reinsurance
Other (remove or change to "additional" per the use of "Other" above)
*Includes Salvage/Subrogation

Comments:

Brian Bayerle (ACLI)
- The tool uses the terms "AI Systems", "AI models" and "AI System models", of which only AI systems is defined. Request clarity on the different terms, potentially with additional definitions.
- "Adverse Consumer Outcome" is a defined term, and should be capitalized throughout the document.
- In Company Instructions, it is reasonable to provide approximate counts, particularly in situations where an AI System is used for more than one operation.
- Suggest clarifying that algorithms that do not make autonomous decisions should be out of scope of this tool as they are not AI applications.
- Much of the information requested may already be part of the model inventories suggested by the NAIC AI Bulletin.

Dave Snyder (APCI) on behalf of member Company 1
- We strongly recommend focusing on AI used in regulated insurance practices during the initial pilot phase. This will provide a better balance between the regulatory burden and the identification of potentially adverse consumer or financial impacts.

Dave Snyder (APCI) on behalf of member Company 2
- In the "Purpose": Use of "etc." creates ambiguity about the types of models being subject to this exhibit.
- This exhibit should be limited to High-Risk AI Use Cases – change the first column title. If that is not tenable, then this should be limited to AI Systems with consumer impact or material financial impact.
- The scope section above states that these tools are intended to "supplement existing market conduct, product review, form filing, financial analysis, and financial examination review procedures." Some of these rows are broader than that, including the "other" row and "legal/compliance" row, and should be eliminated.
- The "Other" Row should be deleted. If it's not a category important enough to specify, we should not be required to report on it. Otherwise, this exhibit becomes too broad and unclear what AI Systems are in scope.
- What are "producer services?" This should be clearer and more precise.

Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)
- Purpose: To obtain information pertaining to the number of AI models that are new, updated, etc. that will help facilitate risk assessment. Based on the responses from the company, regulators may ask for additional information related to governance (Exhibits B), high-risk models (Exhibit C), and data types (Exhibit D) ~~where~~when: 1. there is risk for adverse consumer outcomes ~~or~~in their jurisdiction or 2. if they are the lead state/group-wide supervisor and there is a risk for material adverse financial impact from use of AI Systems.

- Materiality: Insurers should only account for AI Systems that are "material". An AI System is material if, in the insurer's reasonable judgment, the System's outputs could have a significant adverse impact on a decision impacting consumers or on the company's financial risk.

- Use of a "materiality" standard would exempt out reporting on the use of widely available tools, such as Microsoft Co-Pilot.

	Number of Material AI System Model(s) Currently in Use	Number of Material AI System Model(s) with Consumer Impact	Number of Material AI System Model(s) with Material Financial Impact	Number of Material AI System Model(s) Implemented in Past 12 Months
Use of Material AI System(s) in Operations or Program Area				

- The CAI has revised the column headings to conform to the defined terms in the tool. CAI members strongly recommend using "Material AI System" as the benchmark unit for the responses, as opposed to the total number of models that may comprise any AI System.

Legal/Compliance with regard to insurer core operations listed above
Producer Services
Reserves/Valuations
Catastrophe Triage
Reinsurance
Other (remove or change to "additional" per the use of "Other" above)

- CAI members believe that use of the term "other" is too broad and should be narrowed to particular categories of insurance operations.

Ken Allen (CA)

- "Underwriting/Eligibility" - If possible, and if a majority agree, whether here or in the definition of "underwriting" that is stated at the end of the document, while the term "acceptance" is used, I'd also like the term "eligibility" incorporated as many insurers have underwriting guidelines that identify which risks are specifically eligible or ineligible.

Kate Stojsih (DIFS)

- Consider Co Code **and** Group Code

Julie Lederer (MO)

- Consider including an alternate, checklist version of Exhibit A where the insurer could indicate whether or not AI Systems are being used in each operations or program area (marketing, underwriting, etc.). This would be a qualitative version of Exhibit A, versus the quantitative version in the current draft. It could look something like this:

Use of AI System in Operations or Program Area	Are AI System Model(s) Currently in Use in this Operations or Program Area?	AI System Use Case(s)
Insurer Core Operations		
Marketing		
Premium Quotes & Discounts		
Underwriting		
Ratemaking/Rate Classification/ Schedule Rating/ Premium Audits		

Lindsey Stephani (Klarkowski) (NAMIC)

~~Number of~~ AI System Model(s) Currently in Use	~~Number of~~ AI System Model(s) with Consumer Impact	~~Number of~~ AI System Model(s) with Material Financial Impact	~~Number of~~ AI System Model(s) Implemented in Past 12 Months

  - As NAMIC raised in our initial comments, the burden of producing this information would be significantly reduced if carriers could simply acknowledge that they use AI in these categories rather than manually counting the number of AI systems used in each category. Further, some models may fit in more than one category; so, requesting a quantification of models may result in overestimation of the number of models company-wide.

- NAMIC suggests removal of "Premium Quotes & Diuscounts" category because there is already a category for ratemaking below. If the Working Group opposes our suggested deletion, we respectfully request detail on how the Working Group views this category as different from ratemaking.
- Due to the specificity and breadth of the categories included in Exhibit A, NAMIC requests deletion of "other" or "additional." (last category)

Exhibit B: (Narrative) AI Systems Governance Risk Assessment Framework

Purpose: To obtain the Company AI Governance Framework, including the risk identification, mitigation, and management framework and internal controls for AI systems; and the process for acquiring, using, or relying on third-party AI systems and data. Market and financial regulators should coordinate to gain access to the relevant section of the policies governing the use of AI Systems.

Company Instructions: Provide responses to the questions regarding governance of AI systems within your company's operations. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Group or Company Legal Name: _____

NAIC Group or Company Code: _____

Company Contact Name: _____ Email:_____

Date Form Completed ("as of") Date: _____

1.   Provide the Governance Framework pertaining to the use of AI systems. Click or tap here to enter text.
a.   What role maintains the framework? Click or tap here to enter text.
b.   Discuss the governance structure, Board reporting and frequency. Click or tap here to enter text.
c.   Discuss the process by which the framework is integrated throughout the organization, assessed and remediated. Click or tap here to enter text.
d.   Discuss the process by which the effectiveness of the framework and individual models are assessed and modified. Click or tap here to enter text.
e.   Discuss the divisional, operational and cross functional responsibility for governance, consistency and alignment. Click or tap here to enter text.
f.   Discuss the integration of the AI systems in the Own Risk and Solvency Assessment (ORSA) and Enterprise Risk Management (ERM) assessments. Click or tap here to enter text.
g.   Suggested additional question: How does the insurance company assess autonomy, reversibility, and reporting impact risk of AI systems?

2.   Discuss the uses of AI system that:
a.   Generates a financial transaction directly or indirectly. Click or tap here to enter text.
b.   Generates consumer impact directly or indirectly. Click or tap here to enter text.
c.   Generates or impacts information reported in financial statements either directly or indirectly. Click or tap here to enter text.

d.   Generates or impacts risk and or control assessment. Click or tap here to enter text.

e.   Discuss the development, testing, and implementation of AI systems that the Company has implemented. If appropriate, include details regarding where any systems differ from established IT systems and data handling protocols. Discuss the basis for deviation from established practices. Click or tap here to enter text.

3.   Provide the policy and discuss the use and oversight of AI system vendors, model design and testing:

a.   Discuss the transparency and testing procedures performed on internally-developed AI systems. Click or tap here to enter text.

b.   Discuss the transparency and testing procedures performed on third-party vendor-supplied AI systems. Click or tap here to enter text.

c.   Discuss the testing and verification that has occurred including frequency, scope and methodology. Click or tap here to enter text.

4.   Provide the policy and discuss the use and oversight of AI systems by professional service providers including actuarial, claim, MGA, audit, and/or other professional services. Click or tap here to enter text.

a.   Discuss the testing and verification that has occurred, frequency, scope, and methodology. Click or tap here to enter text.

Click or tap here to enter text.Click or tap here to enter text.

5.   Discuss additional RAF design and evaluation pertaining to AI systems. Click or tap here to enter text.

a.   Discuss the unit(s) responsible for the RAF, assessment approach and frequency, and involvement with the program area to the extent it differs from that discussed above. Click or tap here to enter text.

Comments:

Brian Bayerle (ACLI)
• Suggest allowing the company flexibility on how to handle this request. Additional questions may be posed by the regulator as appropriate after this submission. • Suggest coordination and acceptance of previously submitted reports. • Regarding 1d - Assessment of individual models goes beyond the scope of this question. • Regarding 1e - Suggest striking ORSA as it is a financial item. • Regarding 1e - Request clarification on this question. Does this refer to the AIS Program, or specific AI Systems. The NAIC AI Bulletin notes the AIS Program could be independent of the ERM. • Regarding 1f - Request clarification of this question. • Regarding 2b - "Transparency Procedure" is a new term of art and require definition or clarification if retained.

- Regarding 3a - "Risk Management and Internal Controls" is the terminology used in the NAIC AI Bulletin, and suggest this question align with that concept. "RAF" is not defined and would require definition if retained.

Dave Snyder (APCI) on behalf of member Company 1

- Including "indirect" impacts will lead to inconsistent interpretation by companies, which leads to inconsistent data. This will make it difficult for regulators to draw conclusions or make comparisons between companies.
- These information requested in question 2.e is extremely detailed and varies from case to case. Providing this level of detail for each AI system would result in a significant regulatory burden. We strongly recommend deleting 2.e.

Dave Snyder (APCI) on behalf of member Company 2

- Our major concern with these exhibits is that they may create de-facto legal requirements where they do not otherwise exist. For example, an insurer is not legally required to include AI Risk in its ORSA but including this question implies that it is.
- Question 2 - We should delete "indirectly" from these because this is too broad, especially given the definition of AI systems.
- Question 2c - We do not know what this means.
- Question 4 - This should be removed because it implies that testing is legally required.
- Question 4 - We should remove "the policy." An insurance company may not have a direct policy document on how they handle this. For example, an insurer may handle this through contractual provisions.
- Question 4 - Again, creates de facto legal standard.

Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)

Exhibit B: (Narrative) AI Systems Governance Risk Assessment Framework (RAF)

Purpose: To obtain the Company AI Governance Framework , including the risk identification, mitigation, and management framework and internal controls for AI systems; and the process for acquiring, using, or relying on third-party AI systems and data. ~~Market and financial regulators should coordinate to gain access to~~ Non-domestic/non-lead state regulators should scope their use to potential adverse consumer impacts only. Domestic and lead state regulators and/or group-wide supervisors may use this tool to evaluate potential adverse consumer impacts and/or financial risk from AI Systems. Market and financial regulators should coordinate when requesting this information, so that insurers need provide only one set of

- answers to the regulators' questions regarding the relevant section of the policies governing the use of AI Systems.

- CAI members strongly recommend that the narrative form of Exhibit B be eliminated. Having two forms that can be used by states at their discretion will require insurers to be prepared to address overlapping (but not identical) questions on the same topic, leading to potential confusion and a burden on resources.

a. What role maintains the ~~framework~~Governance Framework? Click or tap here to enter text.
b. Discuss the governance structure, Board reporting and frequency. [of what?]. Click or tap here to enter text.
c. Discuss the process by which the ~~framework~~Governance Framework is integrated throughout the organization, assessed and remediated. Click or tap here to enter text.
d. Discuss the process by which the effectiveness of the ~~framework~~Governance Framework and individual models are assessed and modified. Click or tap here to enter text.
e. Discuss the divisional, operational and cross functional responsibility for governance, and how consistency and alignment are maintained. Click or tap here to enter text.

•

• CAI members request clarity on how the use of the terms "Governance Risk Assessment Framework" and "Governance Framework pertaining to AI Systems" relate to the existing framework of the NAIC Model AI Bulletin that calls for a written AIS Program that includes a "governance framework" and the documentation of the insurer's risk management and internal controls for AI Systems.

f. Discuss the integration of the AI systems in the Own Risk and Solvency Assessment (ORSA) and Enterprise Risk Management (ERM)
• assessments., as applicable. Click or tap here to enter text.

• CAI members recommend defining the meaning of "autonomy, reversibility and reporting impact risk of AI systems."

2. Discuss the uses of each AI system that:
    a. Generates a material financial transaction directly or indirectly. Click or tap here to enter text.
    b. Generates a material consumer impact directly or indirectly. Click or tap here to enter text.
    c. Generates or impacts material information reported in financial statements either directly or indirectly. Click or tap here to enter text.
•

• e. *Discuss the development, testing, and implementation of material AI systems*

3. Provide the policy for, and discuss the use and oversight of, ~~material~~ AI system vendors, model design and testing:
    a. Discuss the transparency and testing procedures performed on internally-developed AI systems. Click or tap here to enter text.
    b. Discuss the transparency and testing procedures performed on third-party vendor-supplied AI systems. Click or tap here to enter text.
    c. Discuss the testing and verification that has occurred including frequency, scope and methodology. for testing and verification. Click
• or tap here to enter text.

4. Provide the policy for, and discuss the use and oversight of, material AI systems by professional service providers including actuarial, claim, MGA, audit, and/or other professional services. Click or tap here to enter text.

   a. Discuss the testing and verification that has occurred, including the frequency, scope, and methodology for testing and verification.

Ken Allen (CA)

- Question 5 – The initial instance of "Risk Assessment Framework (RAF)" was struck above, so providing the initial acronym instance here.

Julie Lederer (MO)

- What type of answer is expected for item 1.e ("Discuss the divisional, operational and cross functional responsibility for governance, consistency and alignment."). This item is broad.
- What does "reversibility" mean in item 1.g?
- The broadness of item 2 might make it hard for the insurer to complete this item. For example, item 2.c asks for the uses of AI systems that generate or impact information reported in financial statements. Anything that affects the insurer could affect information reported in the financial statements.
- Does "RAF" in item 5 stand for "Risk Assessment Framework"? I recommend defining the acronym.
- What type of information is the insurer expected to provide for item 5? Is this asking how the insurer's use of AI is integrated into its broader ERM framework? What does "involvement with the program area" mean here?

Lindsey Stephani (Klarkowski) (NAMIC)

- e. Discuss the divisional, operational and cross functional responsibility for governance, consistency and alignment. (
    - NAMIC requests an edit for clarity on 1.e., as it is currently unclear what information is being requested.
- NAMIC requests narrowing the scope of 2.b., or narrowly tailoring the request to what the Working Group is most concerned about with respect to consumer impact. Asking for AI system uses that have direct or "indirect" impact on consumers could arguably include all AI systems a company is using. Adding a materiality threshold may help narrow the scope.

Exhibit B: (Checklist) AI Systems Governance and Risk Assessment Framework

Purpose: To obtain the Company AI Systems Governance Framework, including the risk identification, mitigation and management framework and internal controls for AI systems; and the process for acquiring, using, or relying on third party AI systems and data" potential risk of adverse consumer outcomes, development of models, human-in-the-loop supervision, and information about efforts to maintain compliance and the integrity of financial reporting and control integrity. Market and financial regulators should coordinate to gain access to the relevant section of the policies governing the use of AI systems.

Company Instructions: Provide responses to the questions regarding governance of AI systems within your company's operations. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Group or Company Legal Name: _____

NAIC Group or Company Code: _____

Company Contact Name: _____ Email: _____

Date Form Completed ("as of") Date: _____

Ref	AI Systems Use Questions for Company		Company Response
1	Has the company adopted a written AIS Program? If yes, when was it adopted and what is the frequency of review for updating?		
2	Was the Board of Directors or management involved in the adoption of an AIS Program?		
	2a. What is the role of the Board of Directors or management in the AI Systems Governance Framework?		
3	**Reference the processes and procedures of the Company AI Governance Framework that addresses the following:**		
	How the Insurance Company...	Page #	If not specified in governance, provide details below:
	3a. Assesses, mitigates, and evaluates residual AI system risks of unfair trade practices		
	3c. Ensures AI systems are compliant with state and federal laws and regulations		
	Evaluates risk of adverse consumer outcomes		
	3e. Considers data privacy and protection of consumer data used in AI systems		
	3f. Ensures AI systems are suitable for their intended use and should continue to be used as designed		
	3h. Ensures AI system risks are considered within Enterprise Risk Management (ERM)		
	3i. Ensures AI system risks are considered within the Own Risk and Solvency Assessment (ORSA)		
	3j. Ensures AI system risks are considered in software development lifecycle (SDLC)		
	3k. Ensures AI system risk impact on financial reporting is considered		
	3l. Trains employees about AI system use and defines prohibited practices (if any)		
	3m. Quantifies AI system risk levels		
	3n. Provides standards and guidance for procuring and engaging AI system vendors		
	3o. Ensures consumer complaints resulting from AI systems are identified, tracked, and addressed		
	3p. Ensures consumer awareness in use of AI systems through disclosures, policies, and procedures for consumer notification		

Comments:

Dave Snyder (APCI) on behalf of member Company 2

- limited scope exam. The references to, and questions about, elements of an AI Governance and Risk Assessment Framework Exhibit B do not create a requirement that an AI Governance and Risk Assessment Framework include such elements. The abs any particular element does not necessarily mean the AI Governance and Risk Assessment Framework is inadequate.
  - This is a suggestion to mitigate the risk that a regulator considers the absence of an element listed in this Exhibit as a flaw or violation of law.
- Question 3c - Using the word "ensure" throughout implies that each row is required in an AI governance system.
- Questions 3l & 3n - Another de facto legal standard.

Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)

- **Exhibit B: (Checklist) AI Systems Governance and Risk Assessment Framework (RAF)**

  Purpose: To obtain the ~~Company~~Company's AI Systems Governance Framework, including the risk identification, mitigation and management framework and internal controls for AI systems; and the process for acquiring, using, or relying on third party AI systems and data", including the potential risk of adverse consumer outcomes, development of models, human-in-the-loop supervision, and information about efforts to maintain compliance and the integrity of financial reporting and control integrity. ~~Market and financial regulators should coordinate to gain access to~~Non-domestic/non-lead state regulators should scope their use to potential adverse consumer impacts only. Domestic and lead state regulators and/or group-wide supervisors may use this tool to evaluate potential adverse consumer impacts and/or financial risk from AI Systems. Market and financial regulators should coordinate when requesting this information, so that insurers need provide only one set of answers to the regulators' questions regarding the relevant section of the policies governing the use of AI systems.

- See comment above on improving the consistency of the tool's concepts and terminology with that of the NAIC's Model AI Bulletin. For instance, do "AI Systems Governance Framework" and "AI Systems Governance and Risk Assessment Framework" as used in the tool have the same meaning as the "AIS Program" in the NAIC Model AI Bulletin? If so, CAI members strongly suggest using the Model Bulletin terminology. If not, please explain the difference in the terms' meaning.

- 3d. Evaluates the risk of adverse consumer outcomes

- 3i. Ensures AI system risks are considered within the Own Risk and Solvency Assessment (ORSA)), as applicable.

- 3p. Ensures consumer awareness in the use of AI systems

Kate Stojsih (DIFS)

- Consider rewording the Purpose for clarity. Additionally, there appears to be an extraneous quotation mark.

Julie Lederer (MO)

- Item 3 seems to presuppose that the NAIC has provided written guidance on what should be in an AI governance framework.

Lindsey Stephani (Klarkowski) (NAMIC)

- Purpose: To obtain the Company AI Systems Governance Framework, including the risk identification, mitigation classification, and mitigation of and management framework and internal controls for AI systems; and the process for acquiring, using, or relying on third party AI systems and data" potential risk of adverse consumer outcomes, development of models, human-in-the-loop supervision, and information about efforts to maintain compliance and the integrity of financial reporting and control integrity. Market and financial regulators should coordinate to gain access to the

    - This was removed from the narrative version and should therefore be removed from the checklist for consistency.

Exhibit C: AI Systems High-Risk Model Details

Purpose: To obtain detailed information on high-risk AI system models, such as models making automated decisions, that could cause adverse consumer, financial, or financial reporting impact. AI system risk criteria is set by the insurance company. To assist in identifying models for which this information is requested, regulators may request information on the company's risk assessment and a model inventory if such information has not otherwise already been provided.

Company Instructions: Fill in the details for each of the AI system model(s) requested. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Group or Company Legal Name: _____

NAIC Group or Company Code: _____

Company Contact Name: _____ Email: _____

Date Form Completed ("as of") Date: _____

Model name	
Model type	
Model Implementation Date	
Model development (internal or third party – include vendor name)	
Model risk classification	
Model risk(s) and limitation(s)	
AI type (automate, augment, support)	
Testing model outputs (drift, accuracy, bias, unfair trade practices, performance degradation, etc.)	
Last date of model testing	
Use cases and purpose of model	
Discuss how the model affects the financial statements, risk assessment or controls.	
Discuss how the model is reviewed for compliance with state and federal laws Replace with "Discuss how the model is reviewed for compliance with the unfair trade practices act and unfair claims settlement laws."	
Discuss if the company has had any actions taken against them for use of this model. Actions may include but are not limited to informal agreements, voluntary compliance plans, administrative complaints, ongoing monitoring, cease and desist, remediation, restitution, fines, penalties, investigations, consent orders or other regulatory agency actions.	

Comments:

Brian Bayerle (ACLI) • Request clarification on what "AI type (automate, augment, support)" means and how they differ. • Request clarification on this question "Discuss how the model affects risk assessment or controls."
Elaine Gibbs (Bell Analytics) Testing model outputs (e.g., model drift, accuracy, unfair discriminationbias, unfair trade practices, performance degradation, etc.) •
Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)

Exhibit C: High-Risk AI Systems ~~High-Risk Model~~ Details

Purpose: To obtain detailed information on high-risk AI ~~system models~~Systems, such as ~~models~~AI Systems making automated decisions~~,~~ that could cause adverse consumer, financial, or financial reporting impact. AI ~~system~~System risk criteria is set by the insurance company. To assist in identifying ~~models~~AI Systems for which this information is requested, regulators may request information on the company's risk assessment and a model inventory if such information has not otherwise already been provided.

Company Instructions: Fill in the details for each of the AI ~~system model~~System(s) requested. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam. Non-domestic/non-lead state regulators should scope their use to potential adverse consumer impacts only. Domestic and lead state regulators and/or group-wide supervisors may use this tool to evaluate potential adverse consumer impacts and/or financial risk from AI Systems.

-

~~Model~~AI System name
Model type used in the AI System
Model Implementation Date
Model development (internal or third party – include vendor name)
Model risk classification (high, medium, low)

-

Discuss how the model ~~affects~~impacts the ~~financial statements,~~ risk assessment or controls of financial statements.
~~Discuss how the model is reviewed for compliance with state and federal laws Replace with~~ "Discuss how the model is

-

> Testing model outputs (drift, accuracy, bias, unfair trade practices, performance degradation, etc.)

-
- CAI member recommend referring to the NIST AI Risk Management Framework and the NAIC Model AI Bulletin here.

> Use cases and purpose of model
>
> Discuss how the model ~~affects~~impacts the ~~financial statements,~~ risk assessment or controls of financial statements.
>
> ~~Discuss how the model is reviewed for compliance with state and federal laws~~
>
> ~~Replace with "~~Discuss how the model is reviewed for compliance with the unfair trade practices act and unfair claims settlement laws~~."~~.

-
- CAI members request clarification on whether various questions in the tool should refer to AI Systems or to models and how the two terms (AI Systems/models) relate to each other, especially in light of how the terms are used in the NAIC's Model AI Bulletin. In other words, which term (model or system) is most precise and appropriate given the goals of the specific inquiry.

Ken Allen (CA)
- "Model Name" - Would this field incorporate Model Version Number, or should there be a separate box for Model Version?
- "Driving Behavior" - Is this duplicative of "Telematics/Usage Based Insurance" below?

Kate Stojish (DIFS)
- Consider including a header row above the question section, similar to other exhibits. For example, Exhibit B (Checklist) includes a header row with "Ref," "AI Systems Use Questions for Company," and "Company Response."

Julie Lederer (MO)
- What type of information is the insurer expected to put in the "Testing model outputs" box? The parenthetical includes a variety of terms, but it's not clear what regulators are looking for here. Is this asking for information on how the model was validated?

Lindsey Stephani (Klarkowski) (NAMIC)

- ~~Testing model outputs (drift, accuracy, bias, unfair trade practices, performance degradation, etc.)~~
    - o The testing content was removed from Exhibit B and should also be removed from Exhibit C for consistency.

Exhibit D: AI Systems Model Data Details

Purpose: To obtain detailed information of the source(s) and type(s) of data used in AI system model(s)s (NAIC staff edit) to identify risk of adverse consumer impact, financial, or financial reporting impact.

Company Instructions: Provide details below for the data used in AI system model(s)s (NAIC staff edit). If any of the data elements listed are used in the training or test data as part of the development of AI systemsmodel(s) (NAIC staff edit), provide information on whether the data element is sourced internally or whether the data element is sourced from a third party, in which case provide the name of the third-party vendor. Leave blank if a data source is not used in the development of AI system model(s) for the insurance operation. Include all companies and lines of business. If the governance differs by entity, line of business, or state, work with your domestic regulator to determine if multiple submissions are needed. See definitions below.

Regulator Instructions: Regulators should customize this tool to limit information requested to more targeted inquiries for use in a limited scope exam.

Group or Company Legal Name: _____

NAIC Group or Company Code: _____

Company Contact Name: _____ Email: _____

Line of Business (complete one for each line of business): _____

Date Form Completed ("as of") Date: _____

Columns:

(1) Type of Data Element Used in AI System(s)	(2) Type of AI System(s) (E.g., Predictive vs. Generative AI)	(3) Describe How the Company Uses the Data Throughout Their Insurance Operations (include operational practices by line of insurance)	(4) Internal Data Source	(5) Third Party Data Source / Vendor Name

Rows:

Type of Data Element Used in AI System Model(s)
Aerial Imagery
Age, Gender, Ethnicity/Race
Consumer or Other Type of Insurance/Risk Score
Crime Statistics
Criminal Convictions (Exclude Auto-Related Convictions)
Driving Behavior
Education Level (Including school aptitude scores, etc.)
Facial or Body Detection / Recognition / Analysis
Geocoding (including address, city, county, state, ZIP code, lat/long, MSA/CSA, etc.)
Geo-Demographics (including ZIP/county-based demographic characteristics)
Household Composition
Image/video Analysis
Income
Job History
Loss Experience
Medical, including Biometrics, genetic information, pre-existing conditions, diagnostic data, etc.
Natural Catastrophe Hazard (Fire, Wind, Hail, Earthquake, Severe Convective Storms)
Online social media, including characteristics for targeted advertising
Personal Financial Information
Telematics/Usage-based insurance
Vehicle-Specific Data including VIN characteristics
Voice Analysis
Weather
Other: Non-Traditional Data Elements (Please provide examples)

Comments:

Brian Bayerle (ACLI)

47

- Recommend striking Exhibit D in its entirety. Questions on data should be handled with a separate exercise. Much of these questions relate to privacy, and are better suited to be addressed by the Privacy Protections (H) Working Group. If retained, limit only to high-risk models. Further, as it would be extremely burdensome for companies to complete, this should be simplified.

Dave Snyder (APCI) on behalf of member Company 2
- The Purpose here seems broader than the Purpose defined in Exhibit A, which also discussed Exhibit D. In Exhibit A, it says Exhibit D is intended to review data elements "where there is risk for adverse consumer outcomes or material adverse financial impact," which is narrower and preferable. Or, this should be limited to High-Risk AI Systems as well. For example, we may not know this information for a third-party model that is not high risk. We wouldn't get into that level of detail with the vendor.
- Column (3) – Is this still limited to use in AI Systems? If not, it should be.

Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)

Exhibit D: AI Systems ~~Model~~ Data Details

Purpose: To obtain detailed information of the source(s) and type(s) of data used in AI ~~system model~~System(s) to identify risk of adverse consumer impact, financial, or financial reporting impact.

Company Instructions: Provide details below for the data used in AI ~~system model~~System(s). If any of the data elements listed are used in the training or test data as part of the development of AI ~~model~~System(s), provide information on whether the data element is sourced internally or whether the data element is sourced from a third party, in which case provide the name of the third-party vendor. Leave blank if a data source is not used in the development of AI ~~system model~~System(s) for the insurance operation. Include all companies and lines of business. If the governance

-
- CAI members request further explanation of why this data is being requested and how this information will be used in a regulatory examination. How will the data be analyzed and what will it be enforced against? The types of data elements listed are open-ended and overexpansive as currently drafted.

(1) Type of Data Element Used in AI System ~~Model~~(s)	(2) Type of AI System ~~Model~~(s) (E.g., Predictive vs. Generative AI)	(3) Describe How the Company Uses the Data Throughout Their Insurance Operations (include operational practices by line of insurance)	(4) Internal Data Source	(5) Third Party Data Source / Vendor Name

-

Julie Lederer (MO)

- What is meant by a "predictive" AI model (versus a generative AI model) in column 2? There are predictive models that aren't AI models. Should a definition of "predictive AI model" be added to the definitions section?

Lindsey Stephani (Klarkowski) (NAMIC)

- NAMIC requests removal of Exhibit D, because it is overly broad in scope, and its focus is largely on data and third party data, which the NAIC has not yet come to consensus on how third party vendors might be regulated. Therefore, we view the inclusion of this Exhibit as premature. Further, because this Tool is going through a pilot, we suggest that the need for an exhibit like this may be revisited down the line.

-

  (3)
  Describe How the Company Uses the Data Throughout Their Insurance Operations (include operational practices by line of insurance)

-
    - Notwithstanding our comments more generally relative to Exhibit D, NAMIC suggests that this column be removed, as it is beyond the scope of AI systems, and asks about data used throughout insurance operations.
- NAMIC requests edit for clarification - "Risk Score" is listed as a "type of data element used in AIS models," but risk scores are often outputs from predictive models.
- "Medical" is rather broad, and we therefore ask for narrowing of this particular category.

DEFINITIONS AND APPENDIX

Where available, for the purposes of this evaluation terms are defined in accordance with the NAIC Model Bulletin on the Use of AI Systems by Insurers (https://content.naic.org/sites/default/files/2023-12-4%252520Model%252520Bulletin_Adopted_0.pdf):

"Adverse Consumer Outcome" refers to an AI System decision (output) by an insurance company that is subject to insurance regulatory standards enforced by the Department that adversely impacts the consumer in a manner that violates those standards.

"Algorithm" means a clearly specified mathematical process for computation; a set of rules that, if followed, will give a prescribed result.

"AI System" is a machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations, content (such as text, images, videos, or sounds), or other output influencing decisions made in real or virtual environments. AI Systems are designed to operate with varying levels of autonomy.

"Artificial Intelligence (AI)" refers to a branch of computer science that uses data processing systems that perform functions normally associated with human intelligence, such as reasoning, learning, and self-improvement, or the capability of a device to perform functions that are normally associated with human intelligence such as reasoning, learning, and self-improvement. This definition considers machine learning to be a subset of artificial intelligence.

"Consumer Impact" refers to a decision by an Insurer that is subject to insurance regulatory standards enforced by the Department.

"Degree of Potential Harm to Consumers" refers to the severity of adverse economic impact that a consumer might experience as a result of an Adverse Consumer Outcome.

"Externally Trained Models" Transferred learnings from pre-trained models developed by a third party on external reference datasets.

"Generative Artificial Intelligence (Generative AI)" refers to a class of AI Systems that generate content in the form of data, text, images, sounds, or video, that is similar to, but not a direct copy of, pre-existing data or content.

"Inherent Risk" Refers to an assessment of risk before considering risk-mitigation strategies or internal controls.

"Internally Trained Models" Models developed from data internally obtained by the company.

"Machine Learning (ML)" Refers to a field within artificial intelligence that focuses on the ability of computers to learn from provided data without being explicitly programmed.

"Material Financial Impact" Material financial impact refers to costs or risks that significantly affect, or would reasonably be expected to have significant effect, on the debt and financial obligation limits prescribed by Federal or State laws and regulations.

"Model Drift" refers to the decay of a model's performance over time arising from underlying changes such as the definitions, distributions, and/or statistical properties between the data used to train the model and the data on which it is deployed.

"Neural Network Models" Include but not limited to: Single/multi-layer perceptrons/fully connected networks (MLPs/FCs), Deep Learning (DL), Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Long Short-Term Memory Neural Networks (LSTMs), Sequence Models, Large Language Models (LLMs), and Reinforcement Learning Models (RLs).

"Predictive Model" refers to the mining of historic data using algorithms and/or machine learning to identify patterns and predict outcomes that can be used to make or support the making of decisions.

"Residual Risk" Refers to an assessment of risk after considering risk-mitigation strategies or controls.

"Third Party" for purposes of this bulletin means an organization other than the insurance company that provides services, data, or other resources related to AI.

"Validation Method" The source of the reference data used for validation, whether Internal, External, or Both.

"Use Case" A description of a specific function in which a product or service is used.

Comments:

Brian Bayerle (ACLI)

- Suggest edit the definition of "Consumer Imapct" to align with direct consumer outcomes.
- Suggest restoring this definition from the prior draft for clarification:
  - "Generalized Linear Models (GLMs)" Includes Ordinary Least Squares (OLS), Elastic Net/LASSO/Ridge Regression, Logistic Regression, and Generalized Additive Models (GAMs). GLMs are not considered to be machine learning models for this evaluation.
- Request clarification of the term "perceptron".

Dave Snyder (APCI) on behalf of member Company 2
- "AI System" - This definition should exclude simple rules-based if/then processes. We sometimes call those rules engines. Those processes are not AI but could be inadvertently included within the broad scope of this language.
- "Generative AI" - I don't believe this term appears elsewhere in the exhibits.

Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI)
- **"AI System"** is a machine-based system that is not rules-based and that can,

- CAI members strongly urge the narrowing of the definition of "AI System" to exclude rules-based systems that have been used by insurers for decades. We do not believe such rules-based systems should be in scope for this tool.

- **"Externally Trained Models"** ~~Transferred learnings from~~refers to models that were pre-trained ~~models developed~~ by a third party ~~on~~using external reference datasets.

"Inherent Risk" ~~Refers~~refers to an assessment of risk that is undertaken before considering risk-mitigation strategies or internal controls.

"Internally Trained Models" ~~Models developed from~~refers to company models that are trained on data internally obtained by the company.

"Machine Learning (ML)" ~~Refers~~refers to a field within artificial intelligence that focuses on the ability of computers to learn from provided data without being explicitly programmed.

"Material Financial Impact" ~~Material financial impact~~ refers to ~~costs~~costs or risks that significantly affect, or would reasonably be expected to have significant effect, on the debt and financial obligation limits prescribed by Federal or State laws and regulations.

"Model Drift" refers to the decay of a model's performance over time arising from underlying changes in data properties, such as the definitions, distributions, and/or statistical properties, that leads to a gap between the data used to train the model and the data on which it is deployed.

"Neural Network Models" ~~Include but not limited to: Single/multi-layer perceptrons~~ refers to machine learning models that mimic the complex functions of the human brain. These models consist of interconnected nodes or neurons that process data, learn patterns and enable tasks such as pattern recognition and decision-making. They include but are not limited to: single/multi-layer perceptions/fully connected networks (MLPs/FCs), Deep Learning (DL), Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Long Short-Term Memory Neural Networks (LSTMs), Sequence Models, Large Language Models (LLMs), and Reinforcement Learning Models (RLs).

"Predictive Model" refers to the mining of historic data using algorithms and/or machine learning to identify patterns and predict outcomes that can be used to make or support the making of decisions.

"Residual Risk" ~~Refers~~ refers to an assessment of risk after considering risk-mitigation strategies or controls.

"Third Party" for purposes of this ~~bulletin~~tool means an organization other than the insurance company that provides services, data, or other resources related to AI.

"Validation Method" ~~The~~refers to the source of the reference data used for validation, whether Internal, External, or Both.

"Use Case" ~~A~~refers to a description of a specific function in which a product or service is used.

-

Ken Allen (CA)
- Underwriting - Examples: Policy/coverage acceptance or eligibility, company placement/tiering, schedule rating, decisions based on telematics/UBI, report ordering, retention modeling, inspections, anomaly detection.
  - If possible, and if a majority agree, whether here or in the definition of "underwriting" that is stated at the end of the document, while the term "acceptance" is used, I'd also like the term "eligibility" incorporated as many insurers have underwriting guidelines that identify which risks are specifically eligible or ineligible

Julie Lederer (MO)

- The revised definition of "consumer impact" seems too broad because it could encompass many things that do not entail a consumer impact. For example, the decision to pay a dividend to the parent is a "decision by an insurer that is subject to insurance regulatory standards enforced by the Department," but this decision has minimal consumer impact. The original definition seemed better.

Lindsey Stephani (Klarkowski) (NAMIC)

- NAMIC suggests language in the definitions section to specifically remove both predictive models and GLMs from the scope of "AI Systems".
"Adverse Consumer Outcome" refers to an AI System decision (output) by an insurance company that is subject to insurance
- regulatory standards enforced by the Department that adversely impacts the consumer in a manner that violates those standards.
  - o NAMIC requests an edit for clarity -The last part of this definition means an adverse consumer outcome is a regulatory violation. We do not believe that is the intention of the Working Group, and instead think that "Adverse Consumer Outcome" is meant to capture things like a nonrenewal which may adversely impact the consumer but is not necessarily a regulatory violation.
- NAMIC suggests that the definition of "AI System" is too vague, and we encourage the Working Group to include examples of what is, and what is not, in scope for purposes of the Tool. Given that predictive models in of themselves are not AI models, and that GLMs were previously noted as not in scope, NAMIC believes they should be noted as "not considered AI Systems."
- NAMIC requests an edit of **"Consumer Impact"** for clarity - As written, the definition is broad and currently captures decisions that do not impact consumers specifically.

  ~~**"Generalized Linear Models (GLMs)"** Including Ordinary Least Squares (OLS), Elastic Net/LASSO/Ridge Regression, Logistic Regression, and Generalized Additive Models (GAMs) are not considered to be machine learning models for this evaluation.~~
-
  - o NAMIC requests inclusion of the **GLM definition**, given our suggested changes to the AI Systems definition. GLMs and predictive models should be explicitly out of scope for this Tool.

Operations

Marketing - Examples: market research, target advertising, market/coverage expansion, customer segment target marketing, demand modeling, agent/broker incentive plans, up/cross-selling.

Underwriting - Examples: Policy/coverage acceptance, company placement/tiering, schedule rating, decisions based on telematics/UBI, report ordering, retention modeling, inspections, anomaly detection.

Ratemaking/Pricing - Examples: Development of overall/base rates, expense/loss loadings, estimation of trends and loss development, development of manual rating factors, tiering criteria, insurance credit scoring, territory boundary definitions, numeric/categorical level groupings and interactions, individual risk rating, telematics/UBI, price optimization, schedule rating factors.

Claims - Examples: Claim assignment, triage/fast-tracking, individual/bulk claim reserving including loss estimation, imaging/video analysis, fraud detection, litigation, estimation of closure rates, salvage/subrogation, examination/report ordering.

Customer Service - Examples: Agent/broker/internet/customer service interaction (chatbots), online/smart phone apps, loss prevention/risk mitigation advice, payment plans, complaints.

Other: Cyber Security, Fraud Detection, Strategic Operations, Reserving, Investments, Capital Management, Financial Reporting, Reinsurance, Legal, Legal Exposure, Reputation Risk.

Comments:

Dave Snyder (APCI) on behalf of member Company 2 • "Ratemaking/Pricing" - Some of this could be solely used in underwriting such as territory boundary definitions. We should not include those terms in the definition of rating/pricing. • "Other: Fraud Detection" - Fraud detection is in "other" and "claims handling"
Wilson-Bilik, Mary Jane (Committee of Annuity Insurers—CAI) • **Other:** Cyber Security, Fraud Detection, Strategic Operations, Reserving, Investments, Capital Management, Financial Reporting, ~~Reinsurance, Legal,~~ Legal Exposure, Reputation Risk.