Artificial Intelligence (AI) Risk Evaluation Supplement

Background, Intent, and Instructions

Background:

The rapid expansion of big data and the adoption of artificial intelligence and machine learning are 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* carries a risk that could lead to Adverse Consumer Impacts 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 appropriate risk-based oversight mechanisms are in place and are functioning effectively. Ultimately, insurers that make decisions or perform actions impacting consumers or financial soundness that are made or supported by advanced analytical and computational technologies, including from *AI Systems*, must comply with all applicable insurance laws and regulations.

Intent:

The NAIC's Innovation, Cybersecurity and Technology (H) Committee charged the Big Data and AI Working Group (BDAIWG) to create resources that would assist regulators to identify and assess both financial and consumer risks from the use of *AI Systems*.

The following exhibits are designed to supplement existing market conduct, financial analysis, and/or financial examination review procedures for reviewing *AI Systems*. As this supplements existing NAIC resources, regulators should continue to consider existing NAIC resources as authoritative but may consider drawing from this Supplement to assist in understanding and assessing a company's use of *AI Systems*. Inquiries and information requests performed related to this Supplement will be coordinated consistent with the guidance provided by the *Market Regulation Handbook (MRH), Financial Condition Examiners Handbook (FCEH)*, and the *Financial Analysis Handbook (FAH)*. Consistent with the Handbooks, this Supplement does not independently create substantive legal duties, standards of conduct, admissions, or expanded regulatory authority.

Moreover, consistent with the coordination practices described in the FCEH, MRH, and FAH, information requests made leveraging the Supplement should be coordinated as much as possible.

With the intention of the document as a supplement acknowledged, there may be some important context that is not specified in this document, particularly related to deciding which companies are in scope of inquiry. This is to avoid the perception of conflicting guidance as many important decisions leading to the full use of this Supplement would be governed by the aforementioned Handbooks.

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

This Supplement consists of the following exhibit questionnaires:

- **Exhibit A: Quantify Regulated Entity's Use of *AI Systems***
- **Exhibit B: AIS Program (Two Options: Narrative or Checklist)**
- **Exhibit C: High-Risk AI Models**
- **Exhibit D: Data Used in High-Risk AI Models**

Regulator Instructions:

Information obtained from the responses to the following Exhibits may supplement guidance and resources used during an existing market conduct, certification, financial analysis, and/or financial examination review, to enhance the regulator's understanding of the extent of *AI Systems* utilization and assessment of potential risk to consumers and the insurance company. Effective assessment requires regulators to maintain a fluent understanding of the applicable laws and regulations, including but not limited to those pertaining to unfair trade practices, unfair claims settlement practices, unfair discrimination protections, corporate governance annual disclosures, confidentiality, privacy protections, financial reporting, and rating.

This Supplement is designed with the intention that regulators using this document will most often use Exhibit A. Based on responses received, regulators may thereafter leverage Exhibit B to inquire about a company's governance practices. Finally, for a subset of a company's use of AI, companies may receive Exhibit C and Exhibit D related inquiries where regulators wish to probe further.

Therefore, regulators using this Supplement may wish to first use Exhibit A to determine if further inquiry using Exhibits B-D is necessary. It is possible that while the company responding indicates usage of *AI Systems*, its use of AI is limited or low in inherent risk such that further inquiry as contemplated by subsequent exhibits is not warranted. For instance, if a regulator is using the Supplement to inquire about a company's claims practices and based on responses to Exhibit A, the regulator determines that the company's use of AI is out of scope of a claims-related targeted exam, the regulator may determine it is appropriate to thereafter rely on the MRH to guide the remaining work.

If information requested through this Supplement has already been provided to this department or any other state department of insurance, the company's response should so state, in which case the regulators may accept prior submissions if the prior response is still current and applicable. Where companies have existing documentation that may satisfy regulatory inquiries, regulators may consider accepting company documentation consistent with guidance described in the FCEH, MRH, and FAH. Where substantially the same *AI Systems* and issues have recently been reviewed, other departments may leverage those submissions and regulatory work consistent with guidance described in the FCEH, MRH, and FAH.

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The responses to these exhibits 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.

General Guidance

Machine Learning (ML) Models

Machine learning models are widely used to estimate the relationship between a dependent variable and one or more independent variables. For example, an insurer may want to estimate how a driver's age relates to the probability of being involved in a car accident. There are many ML models that can be used for this purpose.

In particular, generalized linear models (GLMs) are one such technique. As with other machine learning techniques, GLMs are not without risk of causing unfair discrimination or other Adverse Consumer Impacts and require effective governance over data quality, model development, validation, implementation, ongoing performance monitoring, and compliance with applicable laws and regulations. This supplement asks about a company's use of specific models, when utilized within an *AI System*, in Exhibit A to give regulators flexibility in determining their scope of interest.

Based on existing regulatory oversight provided via rate making, regulators may exclude some or all GLMs and other predictive models such as rule-based systems, deterministic algorithms, and fixed mathematical formulas from the Supplement if appropriate. Ultimately, this Supplement is designed with an intention to help regulators understand how models are used with the model type being one aspect in deciding whether further inquiry is necessary.

AI System vs AI Model

Definitions are provided for both terms in the Definitions and Appendix section of the Supplement. Generally, this Supplement is designed with a focus on *AI Systems*. In relation to each other, this Supplement and each of the terms are defined such that an *AI System* is viewed as the primary unit at which governance and reporting discussions will take place; a model is a component of an *AI System*; and a stand-alone model may be examined separately when it independently creates direct consumer impact or material financial risk.

However, there may be times where inquiries are directed at an *AI System* and are better addressed at the *AI Model* level or vice versa. In those instances, companies may engage with department officials to ensure information provided meets expectations and assists in accomplishing regulatory objectives.

Human in the Loop

A core concept in managing AI related risks is related to the degree of involvement of humans in the process. This is often referred to as "human in the loop" when a human is involved in the decision making process or when humans are accountable for a process but not specifically involved in every decision. This practice is more common when agentic AI is deployed.

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In evaluating the design and operating effectiveness of human oversight related controls, regulators should consider:

- Authority – Whether the reviewer can reverse, modify, or escalate the AI-assisted decision, and the record shows that overrides actually occur and are documented with reasons.
- Qualifications – Whether the reviewer has the experience or qualifications to evaluate the performance of the AI being used in a process.
- Capacity and Evidence – Whether the design of the human review supports effective oversight and can be demonstrated via override rates, escalation rates, etc.

Reviewing Company Documentation

In several instances, the Supplement suggests a mix of both regulatory inquiries and requests for documentation as a means of allowing regulators to corroborate management's assertions. As regulators decide whether inquiry alone is sufficient or if corroboration is needed, regulators should consult with the MRH, FCEH, and FAH, and any other NAIC resources as needed.

While the Supplement is designed to support regulators, it is not designed as a stand-alone resource and therefore does not provide guidance on standards of fieldwork or related practices.

Materiality

This Supplement was designed to allow regulators the flexibility to either specify materiality or rely on the company's *materiality* calculations as companies respond to Supplement related inquiries.

The concept of *materiality* leverages the definition otherwise used to drive financial exam-related decisions and as defined in the FCEH. For purposes of completing responses related to this Supplement, regulators may opt to rely on a company's internal materiality thresholds provided the information supporting a company's *materiality*, including an explanation for why that threshold was considered appropriate.

However, nothing in the guidance provided within this Supplement should be construed to supersede FCEH guidance.

Risk Assessment

This Supplement also, at times, relies on a company's Risk Assessment. The concept of Risk Assessment centers around the discussion of *Inherent Risk* which leverages the definition reflected in the FCEH. For purposes of completing responses to this Supplement, regulators ask that Risk Assessment information provided to regulators include explicit indication of *Inherent Risk* Assessments (i.e., risk before the consideration of controls or mitigation measures).

Consistent with the discussion of *materiality*, nothing in the guidance provided within this Supplement should be construed to supersede FCEH guidance as it relates to discussions of risk assessment.

Confidentiality

The information requested via these Exhibits will be held confidential, consistent with the requesting state's relevant authority.

Regulators using any of these exhibits 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 inquiry and all information reported or provided to the regulator pursuant to cited examination or other authority.

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

Purpose: To obtain information pertaining to the number of *AI Systems* and *AI Models* used by a company to help facilitate risk assessment. Based on the responses from the company, regulators may ask for additional information related to their *AIS Program* (Exhibit B), high-risk models (Exhibit C), and the types of data (Exhibit D).

Company Instructions:

- Provide the most current counts and use cases of the following, as requested.
- Include all lines of business. If the governance differs by company, line of business, or state, work with your regulator to determine if multiple submissions are needed.
- If a company has an existing *AI System* and/or *AI Model* inventory, the company should discuss with the regulator whether that documentation satisfies the regulator's requests. Regulators will look for columns with information on:
    - *AI System* and/or Model Name
    - Description of how the *AI System* and/or Model is used and the broader *AI System* in which it is contained
    - Operation or Program Area(s) the *AI System* and/or Model is Used Within
    - Inherent Risk Level Based Upon the Company's Risk Assessment
- If a company has questions about any of the fields, please submit them in writing to <regulator contact email address>.

Regulator Instructions:

- Regulators should customize this Exhibit to limit information requested to more targeted inquiries for use in a limited scope exam.
- Depending on the information provided in a company's *AI System* and/or Model inventory, regulators may consider if a separate Exhibit A submission is necessary.
- For column 3, regulators should specify the number of months.

Company Legal Name and Group Name: _____

NAIC CoCode and Group Code: _____

Company Contact Name: _____ Email: _____

Line(s) of Business for Which This Response Applies: _____

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Date Form Completed: _____

(1) **Use of *AI System* in Operations or Program Area**	(2) **Number of *AI Systems* Currently in Use**	(3) **Number of *AI Systems* Implemented in the Past X Months**	(4) **Use Case** *Describe how the systems are used in your business and whether there is a direct consumer impact or a material financial impact*	**Do any of the *AI Systems* utilize any of the following (check all that apply)**			
				(5) ***Generative AI***	**(6)** ***Agentic AI***	**(7)** **Generalized Linear Models (GLMs)**	**(8)** ***Other AI/ML Models***
Marketing							
Premium Quotes & Discounts							
Underwriting/ Eligibility							
Ratemaking/ Rate Classification/ Schedule Rating/ Premium Audits							
Claims/ Adjudication*							
Customer Service							
Utilization Management/ Utilization Review/ Prior							

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(1) **Use of *AI System* in Operations or Program Area**	(2) **Number of *AI Systems* Currently in Use**	(3) **Number of *AI Systems* Implemented in the Past X Months**	(4) **Use Case** *Describe how the systems are used in your business and whether there is a direct consumer impact or a material financial impact*	**Do any of the *AI Systems* utilize any of the following (check all that apply)**			
				(5) ***Generative AI***	**(6)** ***Agentic AI***	**(7)** **Generalized Linear Models (GLMs)**	**(8)** ***Other AI/ML Models***
Authorization/ Level of Care Determination							
Fraud/Waste & Abuse							
Investment/ Capital Management							
Reserves/ Valuations							
Catastrophe Triage							
Reinsurance							
Other Insurance Practices** (if applicable)							

** Includes Salvage/Subrogation, adjuster assignments, etc.*

*** Any additional operation or program area with the potential to result in either Direct Consumer Impact or Material Financial Impact.*

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Exhibit B: (Narrative) AIS Program

Purpose: To obtain the Company's *AIS Program*, including how the company handles governance, risk identification, mitigation, and management framework and internal controls, and third-party *AI Systems* and data 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: Below are both Checklist and Narrative sections of Exhibit B of the NAIC's AI Risk Evaluation Supplement. If the responses to the narrative indicate that an explanation of a policy, procedure or process can be found on a given page of a document, indicate the page number and the document title and include the document referenced in the submission. If other sections of the document are irrelevant, the relevant sections of the document may be submitted in lieu of the entire document.

For company contact information, please identify an appropriate contact, function, or team that can coordinate responses to follow-up regulatory inquiries and connect regulators with relevant subject matter experts, as appropriate.

Please see definitions at the end of this document.

Regulator Instructions: Regulators should customize this supplement to limit information requested to more targeted inquiries for use in a limited scope exam. The Exhibits are designed so that regulators would use either the Narrative or the Checklist Exhibit but not both.

The references to, and questions about, elements of a company's *AIS Program* are not intended to be interpreted as creating new requirements for *AIS Program*.

Group and Company Legal Name: _____

NAIC Group and Company CoCodes: _____

Company Contact Name: _____ Email: _____

Date Form Completed: _____

1. Provide your *AIS Program*. Click or tap here to enter text.
    a. What role maintains the *AIS Program*? Click or tap here to enter text.

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b. Discuss the governance structure, Board reporting and frequency. Click or tap here to enter text.
c. Discuss the process by which the *AIS Program* 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 *AIS Program, AI Systems,* and individual models are assessed and modified. Click or tap here to enter text.
e. Discuss 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 Systems* in the Own Risk and Solvency Assessment (ORSA) and Enterprise Risk Management (ERM) assessments. Click or tap here to enter text.
g. How does the insurance company assess autonomy, reversibility, and reporting impact risk of *AI Systems*? Click or tap here to enter text.
h. Discuss the company's materiality threshold and risk assessment process in evaluating its use of AI. Click or tap here to enter text.

2. Discuss the uses of *AI Systems* that:
    a. Generate a *material financial impact*. Click or tap here to enter text.
    b. Generate a *direct consumer impact*. The company's response should include, but not be limited to, whether there is a human in the loop, whether there are high volume transactions, how the company assures itself that the level of human review is appropriate, and how any exceptions or errors are found and resolved. Click or tap here to enter text.
    c. Generate or impact material information reported in financial statements. Click or tap here to enter text.
    d. Generate or impact risk or control assessment. Click or tap here to enter text.
    e. Discuss the development, testing, and implementation of material *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. Discuss how the company:
    a. Assesses, mitigates, and evaluates inherent risks related to the use of *AI Systems* including compliance with existing insurance law. Click or tap here to enter text.
    b. Considers *AI System* risks within the software development lifecycle (SDLC) or within the broader *AIS Program*. Click or tap here to enter text.
    c. Determines whether validation and testing are performed by someone that is independent from development. Click or tap here to enter text.
    d. Identifies material changes that trigger approval, revalidation, or enhanced monitoring. Click or tap here to enter text.

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4. Provide the policy for, and discuss the use and oversight of, material *AI System* vendors, model design and testing:
    a. Discuss the validation and testing procedures performed on internally-developed *AI Systems*, including whether validation and testing are performed by someone that is independent from development. Click or tap here to enter text.
    b. Discuss the validation 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.
    d. Discuss how the company ensures explainability and transparency into any *AI models* recommending or making decisions. Click or tap here to enter text.

5. Provide the policy for, and discuss the use and oversight of, material *AI Systems* by third-party 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.

6. Discuss additional aspects of the framework design and evaluation pertaining to *AI Systems*. Click or tap here to enter text.
    a. Discuss the unit(s) responsible for the *AIS Program*, assessment approach and frequency, and involvement with the program area to the extent it differs from that discussed previously. Click or tap here to enter text.

7. Discuss the criteria and documentation available for identifying a material change and for triggering approval, revalidation, or enhanced monitoring, including pre-deployment testing. Criteria may include, as applicable, periodic or event-triggered reassessment, changes in operational outcomes, etc. Click or tap here to enter text.

8. How does your company:
    a. Discover unsanctioned AI use. Click or tap here to enter text.
    b. Prevent nonpublic personal information from entering unapproved *AI Models*. Click or tap here to enter text.
    c. Govern enterprise assistants that have AI capabilities and support many low- and medium-risk uses. Click or tap here to enter text.
    d. Decide when a general-purpose tool with AI capabilities becomes a high-risk use because of the workflow in which it is deployed. Click or tap here to enter text.

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Exhibit B: (Checklist) AIS Program

Purpose: To obtain information about the Company's *AIS Program* including information about how the company handles governance, risk management and internal controls, and third-party *AI Systems* and data for *AI Systems*; and the process for acquiring, using, or relying on third-party *AI Systems* and data. The references to, and questions about, elements of a company's *AI Systems* Governance Risk Assessments are not intended to be interpreted as creating new requirements for *AI Systems* Governance Risk Assessments.

Company Instructions: Provide responses to the questions regarding how the governance of *AI Systems* fits within your company's system of supervision or Enterprise Risk Management program. When referencing documents that are responsive to this exhibit, please include the documents referenced in the submission. 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.

For company contact information, please identify an appropriate contact, function, or team that can coordinate responses to follow-up regulatory inquiries and connect regulators with relevant subject matter experts, as appropriate.

Regulator Instructions: Regulators should customize this supplement to limit information requested to more targeted inquiries for use in a limited scope exam. The Exhibits are designed so that regulators would use either the Narrative or the Checklist Exhibit but not both.

Group and Company Legal Name(s): _____

NAIC Group and Company Code(s): _____

Company Contact Name: _____ Email: _____

Date Form Completed: _____

Ref	***AI Systems* Use Questions for Company**	**Company Response**
1	Has the company adopted a written *AIS Program*? If yes, when was it adopted, what does it govern, who approved the program, 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*?	

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	2a. What is the role of the Board of Directors or management in the *AIS Program*?		
	2b. How is accountability assigned within the AIS Program and what training has been provided for those charged with oversight of the AIS Program?		
Ref	***AI Systems* Use Questions for Company**		**Company Response**
3	**Reference the processes and procedures of the Company *AIS Program* that addresses the following:**		
	How the Insurance Company…	**Document Name and Page #**	**If not specified in the *AIS Program*, provide details below:**
	3a. Considers *AI System* risks within its Enterprise Risk Management (ERM)		
	3b. Considers *AI System* risks within the Own Risk and Solvency Assessment Report (ORSA), as applicable.		
	3c. Assesses, mitigates, and evaluates *inherent risks* related to the use of *AI System* including the possibility of the company engaging in unfair trade practices		
	3d. Determined "*materiality*" and what threshold was used for assessing *AI Systems* risk and determined the company's risk assessment processes for its use of *AI Systems*.		
	3e. Quantifies *AI System* risk levels		
	3f. Considers *AI System* risk impact on financial reporting		
	3g. Ensures *AI Systems* are compliant with applicable state and federal laws and regulations, including non-discrimination protections		
	3h. Evaluates the risk of *Adverse Consumer Impact*		

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	3i. Considers data privacy and protection of consumer data used in *AI Systems*		
	3j. Considers whether *AI Systems* are a contributing factor to consumer complaints and how the company accounts for this in its response to consumer complaints		
	3k. Promotes consumer awareness of the use of *AI Systems* through disclosures, policies, and procedures for consumer notification, as appropriate		
	3l. Trains employees about *AI System* use, ensures human oversight is appropriate, and defines prohibited practices (if any)		
	3m. Provides standards and guidance for procuring and engaging *AI System* vendors		
	3n. Governs, monitors, tests and ensures transparency of *AI Systems* developed by vendors.		
	3o. Considers *AI System* risks within the software development lifecycle (SDLC) or within the broader *AIS Program*		
	3p. Evaluates whether *AI Systems* are suitable for their intended use and should continue to be used as designed		
	3q. Determines whether validation and testing are performed by someone that is independent from development.		
	3r. Identifies material changes that trigger approval, revalidation, or enhanced monitoring.		

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Exhibit C: High-Risk AI Models

Purpose: To obtain detailed information on in-production high-risk *AI Models*, such as models making automated decisions that could cause *material financial impact* or direct consumer impact. *AI Model* risk criteria are set by the insurance company. Note that *materiality* should be a consideration in determining the level of risk.

Company Instructions: Fill in the details for each of the *AI Model(s)* requested. 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 *AI Models* depending on the information being requested. There may be some instances where a company feels information should be provided in relation to the *AI System* and not the *AI 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 supplement to limit information requested to more targeted inquiries for use in a limited scope exam. In requesting Exhibit C responses, regulators may wish to request a walkthrough discussion whereby companies provide regulators with an overview of a given *AI Model* or *AI System* which may help regulators understand the use and potential risks of a given use case.

Group and Company Legal Name(s): _____

NAIC Group and Company Code(s): _____

Company Contact Name: _____ Email: _____

Provide who prepared and who reviewed the responses, by function. _____

Date Form Completed: _____

Ref	AI Model Information Requests	Company Response
1	*AI Model* name and version number.	
2	Use cases, output, and purpose(s) of model	
3	Model type used in the *AI System* (*GLM, generative, or other AI/ML algorithm*)	
4	Model Implementation Date	

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5	Model development (internal, or third party, or a mix of both – include vendor name if applicable)	
6	Did the Company purchase the *AI model*, was the *AI model* developed specifically for the Company? Is the Company able to modify the *AI model* as necessary?	
7	Model risk(s) (i.e., describe the potential for *adverse consumer impact*) including for models provided by third parties, how the company obtains sufficient evidence to assess and monitor risk and learns of material changes or incidents.	
8	Model limitations (i.e., limitations on *uses cases* or data inputs outside the domain of the training data, or other guardrails to manage model related risk) and how the company determines if limits are being observed and adhered to.	
9	*Does the AI model* automate, augment, or support decision-making?	
10	Discuss testing and validation of model outputs, including but not limited to, testing for model drift, accuracy, unfair trade practices, unfair discrimination, performance degradation, and other potential Adverse Consumer Impacts. Discussion should cover testing and validation practices both prior to and after deployment.	
11	Last date of model testing or validation. Please include the results and corrective actions as a result of the last model testing, if applicable.	
12	Discuss how the model affects the financial statements, risk assessment or controls.	
13	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.	

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14	To the extent permitted by law, 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.	

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Exhibit D: Data Used in High-Risk AI Models

Purpose: To obtain detailed information of the source(s) and type(s) of data used in high-risk *AI Models* to identify risk of *adverse consumer impact*, unfair trade practices, material financial impact, or material financial reporting impact.

Company Instructions: Provide details below for the data used in *AI Model(s)*. If any of the data elements listed are used in the training or test data as part of the development of an *AI Model*, 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 model* 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 supplement to limit information requested to more targeted inquiries for use in a limited scope exam. Regulators may also wish to customize this supplement for the line of business as some data types may or may not be pertinent based on the responding company's lines of business. Depending on responses received, a regulator may wish to ask for a data dictionary to gain a more complete understanding of a data used for a given model.

Group and Company Legal Name(s): _____

NAIC Group and Company CoCode(s): _____

Company Contact Name: _____ Email: _____

List the *AI System* or *AI models* which rely on the data described in response to this submission:

_____

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

_____

Date Form Completed: _____

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Ref	(1) Type of Data Element Used in AI Model	(2) Describe how the AI Model uses this data including how the output is used within operations; or input data is used for training and testing	(3) Internal Data Source	(4) 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			
16	Medical, including Biometrics, genetic information, pre-existing conditions, diagnostic data, etc.			
17	Natural Catastrophe Hazard (Fire, Wind, Hail, Earthquake, Severe Convective Storms)			

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Ref	(1) Type of Data Element Used in AI Model	(2) Describe how the AI Model uses this data including how the output is used within operations; or input data is used for training and testing	(3) Internal Data Source	(4) Third Party Data Source / Vendor Name
18	Online social media, including characteristics for targeted advertising			
19	Personal Financial Information			
20	Reasonable Accommodations or Policy Modifications (granted or requested)			
21	Telematics/Usage-based insurance			
22	Vehicle-Specific Data including VIN characteristics			
23	Voice Analysis			
24	Weather			
25	Other: Non-Traditional Data Elements (Regulator to specify)			

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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 Impact" refers to an *AI System* decision (output) by an insurance company that is subject to insurance law, regulations, and other applicable standards enforced by the Department that adversely impacts the consumer.

"Agentic AI" refers to *AI Systems* that can pursue objectives across multiple steps without requiring human input at each stage, which could involve perceiving the environment, deciding what to do next, taking actions (often through tools or APIs), observing/analyzing the results, and/or adjusting the action accordingly. The difference is in agency – the system does not just respond to a single prompt or instruction, but actively executes a process.

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

"AI Model" refers to an integral component of an *AI System* that learns from data to perform tasks via computational, statistical and/or machine learning techniques. It combines algorithms, training data and learned parameters to produce outputs from a given set of inputs, such as making predictions or decisions on data it has never seen before.

"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.

"**AIS Program**" refers to the controls and processes that an insurer adopts and implements to ensure the responsible use of *AI Systems*. An *AIS program* may be comprised of general guidelines, governance framework, risk management and internal controls, and third-party oversight.

"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.

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“Augmentation” refers to the use of an *AI System* that suggests an answer and/or advises a human who is making a decision.

“Automation” refers to the use of an *AI System* that does not involve human intervention.

“Direct Consumer Impact” refers to an *AI System* that *augments* or *automates* human decision-making whose output has the potential to create final consumer outcomes including but not limited to underwriting including tier and coverage eligibility determinations, premium determinations, ratemaking, prior authorizations, and claims denial and settlement-related decisions. This has less applicability to *AI Systems* used for internal analytics, model monitoring, and back-office tooling with no consumer-visible output or other internal operational or administrative functions that do not determine or materially affect an outcome for a specific consumer.

“Externally Trained Models” refers to 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.

“Generalized Linear Model (GLM)” refers to a statistical modeling technique that extends linear regression by relating predictive variables to an outcome variable using an assumed additive or multiplicative relationship through a link function and an appropriate probability distribution.

“Inherent Risk” refers to the risk of economic loss or inaccurate financial reporting before considering internal controls.

“Internally Trained Models” refers to 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**” should be determined based on either the company’s materiality threshold which should be disclosed when responding to Supplement related inquiries or based on the threshold to be provided by regulators.

“**Materiality**” refers to the dollar amount above which the examiner’s perspective of an insurer’s financial position will be influenced.

“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.

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“Neural Network Model” refers to a machine learning model that mimics the complex functions of the human brain. These types of 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 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.

“Support” refers to the use of an *AI System* that provides information but does not suggest a decision or action to a human.

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

“Validation Method” refers to the source of the reference data used for validation, whether Internal, External, or Both.

“Use Case” refers to a description of a specific function in which a product or service is used.

Operations

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.

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

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

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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.

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

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