

MULTISTATE TARGETED MARKET CONDUCT EXAMINATION

Of

American Association of Insurance Services

PARTICIPATING REGULATOR ADOPTION

On behalf of the Alaska Division of Insurance, I, Bret S. Kolb, hereby adopt, agree, and approve the American Association of Insurance Services multistate market conduct examination report covering the period January 1, 2010 through September 30, 2012.

Dated: December 3, 2013



Bret S. Kolb  
Bret S. Kolb  
Director  
Division of Insurance  
Department of Commerce, Community &  
Economic Development  
State of Alaska

**American Association of Insurance Services**  
**1745 S. Naperville Road**  
**Wheaton, IL 60189**

**Report of Examination**  
**As of December 31, 2012**

**Examination Report Prepared by Independent**  
**Contractors With Regard to the Limited Scope Market Conduct**  
**Examination**

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October 21, 2013

Mr. Andrew Boron  
Director  
Illinois Department of Insurance  
122 S. Michigan Ave., 19th Floor  
Chicago, IL 60603

Mr. Eric A. Cioppa  
Superintendent  
Maine Bureau of Insurance  
76 Northern Avenue  
Gardiner, Maine 04345

Dear Director Boron and Superintendent Cioppa:

Pursuant to your instructions, an examination has been conducted of:

**American Association of Insurance Services  
1745 S. Naperville Road  
Wheaton, IL 60189**

hereinafter referred to as "AAIS" or "Organization" The following report of the findings of this examination is herewith respectfully submitted.

## **Purpose and Scope of Examination**

A multi-state market conduct examination (the "Examination") of the American Association of Insurance Services ("AAIS or the Organization") was called for the period of January 1, 2010 through September 30, 2012 (the "Period"). The Examination is conducted under the oversight of the Advisory Organization Examination Oversight (C) Working Group (the "Working Group") of the National Association of Insurance Commissioners ("NAIC"). Illinois and Maine served as the Lead States for the Examination. Except as noted in the report, this Examination was performed in accordance with the Standards as set forth in the 2012 Market Regulation Handbook (the "Handbook") Chapter 25, and Appendix F to Chapter 25. Risk & Regulatory Consulting, LLC ("RRC or the Examiners") was retained to assist in conducting the Examination.

RRC personnel participated in this Examination in their capacity as Examiners. The Examination Team included Actuarial and Information Technology ("IT") Specialists as well as Market Conduct Examiners. RRC provides no representations regarding questions of legal interpretation or opinion. Determination of findings, if any, constituting potential violations is the sole responsibility of the Lead States. Because of circumstances, which are explained in the Examination Report (the "Report"), the Examination was limited to a review of the Organization's practices, procedures and files, however; specific testing of procedures and controls was not performed; thus the failure to identify unacceptable or non-complying practices does not constitute acceptance of these practices.

## **Organization Profile**

AAIS is both an advisory organization and statistical agent licensed in all 50 states, providing statistical agent services to the property/casualty insurance industry and makes statistical submissions to regulators in accordance with the NAIC Handbook of Information Available to Regulators. AAIS also prepares and files advisory prospective loss costs, policy forms and manuals of rating rules for several lines of property & casualty insurance. The property and casualty lines of business ("LOB") administered by AAIS include but are not limited to: homeowners; dwelling fire and allied lines; inland marine; watercraft; business owners; commercial monolines and farm owners. AAIS does not support personal and commercial auto lines of business.

AAIS is located in Wheaton, Illinois and was originally organized as the Mutual Marine Conference in 1936. In 1947 the Mutual Marine Conference and Mutual Aircraft Conference merged to form the Transportation Insurance Rating Bureau (“TIRB”). In 1975 TIRB changed its name to American Association of Insurance Services and incorporated in 1984. AAIS is a not-for-profit organization and is licensed in all states, the District of Columbia and Puerto Rico. Currently, more than 700 Property and Casualty Insurers of all sizes throughout the United States utilize AAIS. The following is a list of the advisory organization products and services AAIS offers:

- Communications with Insurance Regulators through the AAIS Government Affairs unit
- Data to help insurers make decisions about their pricing
- Statistical and actuarial services
- Insurance policy forms and filings with Departments of Insurance
- Rules needed to write and rate insurance policies

## **Executive Summary**

The scope of the Examination focused on reviewing and testing the Organization’s processes and procedures in place during the Period, including but not limited to: the preparation of loss cost filings; rules, forms; operations/management; statistical plans; regulatory licenses or other authorization; data receipt and controls; processing, editing and compilation procedures; error handling and related correspondence with reporting insurers; report submissions to regulators, as well as compliance with Chapter 25 and its Appendix F and selected sections of Chapter 16 of the 2011 the Handbook. The Examiners identified during initial discussions with AAIS that the Organization had undertaken a significant enterprise wide process improvement project since hiring a new Chief Executive Officer (“CEO”) and Chief Operations Officer (“COO”). The Organization’s initial focus has been specific to reengineering the AAIS Information Technology (“IT”) area. Additionally, it was noted that AAIS is also seeking process improvement initiatives in operational areas such as forms management, loss cost analysis and Department of Insurance filings.

The Examiner’s updated the Working Group with regards to the progress of the Examination and the process improvement project AAIS was undertaking. The Working Group concluded that additional work for the Examination should be suspended and the Examiners were advised to issue a preliminary report of findings based upon the work that had been performed. Additionally, the Examiners were directed to include recommendations specific to the findings identified during the Examination.

As a result, this report only contains information regarding the limited IT and actuarial reviews that were performed through interviews with management, on-site walkthroughs, and a review of certain AAIS documentation.

## Examiners Methodology

The Examiners conducted interviews with AAIS representatives and reviewed documentation provided by the Organization and conducted on-site walkthroughs of the Organization's operations, which included a high-level review of the Organization's Actuarial and IT infrastructure and controls, consistent with Chapter 25 and Appendix F of Chapter 25.

Information Data Requests ("IDRs") were submitted throughout the course of the Examination to request data and related information or in some instances, to request a clarification of the Organization's initial response. The Examiners conducted regularly scheduled calls with the Organization and Lead States to discuss progress and the overall status of the Examination. Additionally, status updates to the Working Group were provided during NAIC meetings. Findings identified during the Examination were communicated to AAIS in the form of Concerns. It is noted that the Organization agreed with each Concern submitted by the Examiners.

## Results Of The Examination

### A. REVIEW OF EXAMINATION STANDARDS

**Standard 2: *The advisory organization uses sound actuarial principles for the development of prospective loss costs.***

**Results:** Based on the documentation reviewed, interviews, and walkthroughs; the Examiners concluded that AAIS has implemented some policies and procedures that ensure the development of prospective loss costs in accordance with applicable Actuarial Standards of Practice ("ASOP"). However, the Organization does not fully satisfy the requirements of Standard 2.

**Observation:** The Examiners reviewed AAIS' practices and procedures and compared them to certain Actuarial Standards of Practice as noted below for reference, which address the requirements of Standard 2 related to sound actuarial principles. The specific ASOP reviewed include the following:

- ASOP #12: Risk Classifications
- ASOP #13: Trending Procedures in Property/Casualty Insurance
- ASOP #23: Data Quality
- ASOP #25: Credibility Procedures Applicable to Accident and Health, Group Term Life and Property/Casualty
- ASOP #29: Expense Provisions in Property/Casualty Insurance Ratemaking (for loss based expenses only)
- ASOP #38: Using Models Outside the Actuary's Area of Expertise ("Property and Casualty")
- ASOP #39: Treatment of Catastrophe Losses in Property/Casualty Ratemaking, and
- ASOP #41: Actuarial Communications

Specifically, the Examiners did not identify any of the Organization's loss cost procedures that would result in premiums that are inadequate, excessive or unfairly discriminatory. However, the Examiners concluded that AAIS does not have adequate support for its actuarial function as the current staff consists of only one credentialed actuary who serves as the Chief Actuary. The Chief Actuary supervises the work of four other actuarial resources, but only one of the resources is pursuing their credential as an Associate of the Casualty Actuarial Society ("ACAS").

The Examiners also noted that the Chief Actuary reports directly to the COO who is not an actuary, has limited knowledge and experience regarding actuarial operations and is new to the Organization. Additionally, the Examiners learned that during the Period, the Organization did not have a credentialed actuary on staff nor was there a formal actuarial training program in place for the Organization's junior level analysts. Also, the Organization is absent a peer review process based on the fact that AAIS only has one credentialed actuary and there is no other AAIS employee that would be qualified to be a peer reviewer. While the United States actuarial profession does not require actuaries to specifically obtain peer review of their work product, peer review is one technique that can assist actuaries in fulfilling their obligations as prescribed in the ASOPs and the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States ("Qualification Standards"), to produce work of high quality. Annotation 1-1 to Precept 1 of the Code provides, "[a]n Actuary shall perform Actuarial Services with skill and care."



By having a peer review of a work product prior to its release to its intended user(s), a preparing actuary arguably may reduce the likelihood of significant errors or omissions in a final work product released to a user(s), increasing the likelihood that the final work product will have been prepared with skill and care.

Finally, the Examiners noted that AAIS does not have a succession plan in place that would guide the organization during key staff transition.

**Recommendations:** The Organization should consider hiring an additional credentialed actuary or alternatively, retain the services of an actuarial consultant that can support a peer review process for loss cost filings. Additionally, an additional credentialed actuary would provide a foundation for the Organization's succession plan. It is noted that AAIS has confirmed that they are in the process of searching for an additional credentialed actuary and it is suggested that the Organization advise the Lead States when an additional resource is retained. AAIS has also advised the Examiners that in concert with their search for an additional actuary, they will establish a process where an external third party will conduct independent reviews of actuarial processes, data, analysis and documentation on a recurring basis. Here as well, the Examiners recommend that the details of this arrangement be shared with the Lead States. Finally, the Examiners suggest that AAIS create a formalized training program for the actuarial analysts.

**Subsequent Events:** Following completion of the Examination, the Organization advised that they have taken the following steps to address the above findings.

- AAIS hired one Fellow of the Casualty Actuarial Society and are recruiting for an additional FCAS credentialed actuary.
- Two of the Organization's staff analysts are sitting for the sixth exam in October 2013.
- AAIS has retained Pinnacle Actuarial Resources, Inc, an actuarial consulting firm to provide peer review and to assist with our internal audit program.
- The Organization is interviewing additional credentialed actuaries to ensure adequate resources to assist with short--term projects as required.

**Standard 12: *The advisory organization has an up-to-date, valid internal or external audit program.***

**Results:** The Examiners reviewed documentation as provided by AAIS and conducted interviews with AAIS representatives and as a result, the Examiners note that AAIS does not satisfy the requirements of Standard 12.

**Observations:** A procedural review of information including interviews of AAIS key employees regarding the Organization's audit program was conducted. The Examiners learned that the Organization does not have an internal audit function nor do they perform internal audits of its operations, including audits of internal statistical data and information systems. Further in response to the Examiner's Concern regarding Standard 12, the Organization noted that "AAIS agrees with the findings. During the audit period, AAIS did not have appropriate internal or external audit programs."

**Recommendations:** The Examiners recommend that the Organization consider creating a robust audit program that includes both internal and external audits, which will enhance the Organization's control structure. While addressing this matter with AAIS the Examiners learned that the Organization has recently created several governance committees ("Committees") that will provide continual review and improvement of internal operations. According to AAIS, the Committees responsibilities will include determining the need for internal and external audits.

**Subsequent Event:** Following completion of the Examination, the Organization advised that they have taken the following steps to address the above findings. .

- AAIS has started an initiative to establish routine internal and external audits across all departments with the review of two functions, actuarial and information technology.
- Pinnacle Actuarial Resources, Inc. an actuarial consulting firm has been retained to review the Organization's processes in their actuarial area.
- A security consultant has been retained to create a formalized IT security plan with monitoring and to develop policies and procedures regarding security and event response. This consultant will assist with the upgrade of our Active Directory server.

**Standard 13: *The advisory organization has appropriate controls, safeguards and procedures for protecting the integrity of computer information.***

***And***

**Chapter 25, Appendix F (Application Management) of the Market Regulation Handbook:**

**C1 Is there a control that ensures that user needs result in appropriate program change requests and the requests are appropriately developed?**

**C3 Is appropriate program, system, and parallel (when possible) testing performed by the IS staff and QA/User staff to prevent or detect errors in program coding and ensure that the application operates as intended in the production environment and provides accurate data output?**

**C6 Is there a control that ensures that only properly tested, reviewed, and approved changes are transferred into the production environment?**

***And***

**Chapter 25, Appendix F (Operations and Processing Controls) of the Market Regulation Handbook:**

**E10 a) Is there a procedure for independent testing and validation of system changes or corrections?**

**E10 b) Is there a procedure for independent testing and validation of the accuracy and completeness of data used in ratemaking or in statistical reports?**

***Results:*** The Examiners reviewed documentation provided by AAIS supported by interviews with the Organization's employees. As a result it was noted that AAIS does not satisfy the requirements of Standard 13 and Appendix F sections C1, C3, C6, and E10.

***Observations:*** A documentation review, which included a process walkthrough with AAIS key employees, was performed to identify the controls the Organization has in place specific to Standard 13. Through walkthroughs and discussions the Examiners learned that the Actuarial department utilizes SAS programs and Microsoft ("MS") Excel spreadsheets for rate making processes. SAS programs, developed by Actuarial staff, are utilized to extract insurers' data from the flat files where the collected data resides, apply initial calculations and also to prepare the data for use in their Microsoft Excel templates. The MS Excel templates include calculations, using formulas within cells, as well as pivot tables to summarize data. Output from the MS Excel spreadsheet is used to

generate updated rate information for inclusion in the rate manual and state filings. The Examiners determined that a formal change management policy that describes how changes to the Actuarial applications utilized for ratemaking does not exist. Additionally, changes to the SAS programs and MS Excel spreadsheets are not consistently tracked, tested or approved.

**Recommendations:** The Examiners suggest that AAIS consider creating a formalized change management process regarding the actuarial applications utilized by AAIS which would include procedures regarding the arrival, tracking, and testing of changes. While addressing this matter with the Organization the Examiners were told that a formal change management process will be created to track, test and document changes in the current actuarial applications used on a recurring basis including the Excel spreadsheets and SAS programs used on a routine basis by the Organization's actuarial department.

**Subsequent Event:** Following completion of the Examination, the Organization advised that they have taken the following steps to address the above findings, which have not been independently reviewed or tested by the Examiners.

- AAIS' Vice President of Analytics is working with the Organization's actuarial staff to improve data controls. Further the Organization advised that a project is underway to host all data in the data warehouse, to attempt to improve change management and minimize the use of SAS.

## **B. MANAGEMENT AND ORGANIZATIONAL CONTROLS**

As previously noted, the scope of the Examination included a review by the Examiners of certain aspects of Appendix F to Chapter 25, some are addressed in section A above and others are addressed in this section. Although Appendix F does not include specific Standards, the Appendix does identify areas to be included in an examination of an Advisory Organization.

The Examiners conducted a procedural review, including a process walkthrough with AAIS key employees to address certain areas of Appendix F as follows:

## Logical and Physical Security

The purpose of this aspect of the Examination is for the Examiners to review the Organization's physical security systems and specific user access within certain of the Organization's critical IT applications.

### **Chapter 25, Appendix F – Physical and Logical Security of the Market Regulation Handbook:**

**B6 Does user department management periodically validate the access capabilities provided to individuals in the department?**

**B7 Do procedures provide for prompt cancellation of identification codes and passwords when the employment of the assigned individual has been terminated?**

**B8 Does management review and resolve reports of security violations?**

**B9 Do procedures exist which require authorized users of computing resources to be given specific permission to access particular resources, including data files, applications, the operating system and utilities?**

**B10 Is there a control that ensures appropriate restriction of remote access (e.g., through networks or using dial-up facilities)?**

**B14 Are periodic checks carried out to confirm that employees' current application access is commensurate with job responsibilities?**

**B15 Are there procedures that ensure that application access is appropriately changed on a timely basis when employees transfer or terminate?**

**Results:** The Examiners reviewed documentation provided by AAIS supported by interviews with representatives of the Organization. The Examiners note that AAIS does not satisfy the requirements of Appendix F sections B6, B7, B8, B9, B10, B14 and B15.

**Observations:** Based on discussions with AAIS regarding the Organization's logical security controls, the Examiners noted the following:

- AAIS utilizes Microsoft Active Directory and AS400 to manage user control access to the Organization's network resources and applications. However, a periodic review of user access that would ensure user access remains appropriate; is neither formally performed nor

documented. The Examiners further note that a documented procedure for user access administration (i.e. add/remove user ID) does not exist.

- The AAIS network allows for remote access and is enabled for approved users. While remote access is allowed by AAIS, a formal set of policies and procedures that specify the rules and restrictions required to be followed by users accessing the Organization's network from a remote location do not exist.

The AAIS internal network is connected to the internet via a router provided by the local Internet Service Provider, and a WatchGuard firewall is in place to protect the AAIS internal network. Additionally, as noted above, Microsoft Active Directory and AS400 are utilized to manage user access to the AAIS network resources and applications. However, there is no system in place that will create reports or alerts of security violations. Therefore, such incidents are not reviewed and formally tracked for the network or application layer.

**Recommendations:** The Examiners suggest that the Organization create the following procedures: adding, changing, or deleting user access to the Organization's applications; periodic formally documented reviews to ensure that user access is current and appropriate; and formal procedures that specify the rules and restrictions for users accessing the AAIS network from a remote location. The Examiners also suggest that AAIS create reports that indicate security violations, and these reports should be reviewed as they are produced in order to detect potential security violations.

**Subsequent Event:** Following completion of the Examination, the Organization advised that they have taken the following steps to address the above findings, which have not been independently reviewed or tested by the Examiners.

- The Organization's AS400 has been completely decommissioned and is no longer part of the user access system.
- AAIS has contracted with AllCovered and a security consultant to upgrade the Active Directory.
- AAIS developed two policies in 2012 to assist in addressing remote access and telecommuting issues.
- AAIS reports that their physical network was completely upgraded in February 2013. A Cisco ASA 5510 Security Plus Firewall was installed that is monitored by AllCovered.

- The security consultant retained by the Organization is currently reviewing monitoring and developing ongoing policies and procedures regarding security monitoring and response.
- The Organizations Human Resource procedures are now in place regarding adding, changing and deleting user access. Records are stored with the Manager, Human Resources. This process will be reviewed and updated by the security consultant as required.

AAIS advised that they are willing to share internal audit reports with the NAIC Advisory Organization Examination Oversight (C) Working Group as they are developed.

**Observations:** As previously discussed the Organization has undertaken a significant enterprise wide process improvement project and in consideration of those efforts, additional work for this Examination was suspended, including any testing of AAIS' procedures and controls consistent with the Handbook, Chapter 25, and Appendix F to Chapter 25.

**Recommendations:** The Examiners recommend that a follow-up examination of AAIS be conducted within the next 12 months, following confirmation with the Organization regarding the progress they have made in remediating the issues identified during the Examination. The follow-up examination would provide an independent focus on assessing the results of the Organization's process improvement efforts and testing and AAIS' compliance with the requirements of the Handbook, Chapter 25 and Chapter 25, Appendix F. The issues identified during the Examination, and specifically those involving establishing appropriate IT controls, which aid in protecting the integrity of the data collection and rating process and ensuring there are appropriate user access safeguards, are significant in that they have a direct impact on the Organization's core business processes. While it is acknowledged that AAIS is taking positive steps to address the identified findings, a follow-up examination will be important to confirm the progress the Organization has-made regarding AAIS' ability to manage and provide accurate information. This is in the best interests of their subscribers and those dependent on the information AAIS provides as an advisory organization.

## **Examination Report Submission**

The courtesy and cooperation of the officers and employees of the Organization during the examination are acknowledged.

All phases of the examination were conducted by Risk & Regulatory Consulting, LLC.

**Respectfully submitted,**

**Barry L. Wells, CCLA, MCM  
Risk and Regulatory Consulting, LLC  
Examiner in Charge**