The Market Information Systems (D) Task Force met in Austin, TX, Dec. 7, 2019. The following Task Force members participated: Lori K. Wing-Heier, Chair (AK); Chlora Lindley-Myers, Vice Chair, and Cynthia Amann (MO); Keith Schraad represented by Maria Ailor (AZ); Michael Conway represented by Damion Hughes (CO); Stephen C. Taylor represented by Sharon Shipp (DC); Robert H. Muriel represented by CJ Metcalf (IL); James J. Donelon represented by Jeff Zewe (LA); Steve Kelley represented by Paul Hanson (MN); Mike Causey represented by Tracy Biehn (NC); Jon Godfread represented by Johnny Palsgraaf (ND); Bruce R. Range represented by Matt Holman (NE); Jillian Froment represented by Angela Dingus (OH); Andrew Stolfi represented by Brian Fordham (OR); Kent Sullivan represented by Rachel Cloyd and Ignatius Wheeler (TX); Michael S. Pieciak represented by Christina Rouleau (VT); Mike Kreidler represented by John Haworth (WA).

1. **Adopted its Oct. 29 Meeting Minutes**

The Task Force met Oct. 29. During this meeting, the Task Force took the following action: 1) adopted its Summer National Meetings; 2) adopted the report of the Market Information Systems Research and Development (D) Working Group; and 3) adopted its 2020 proposed charges.

Director Lindley-Myers made a motion, seconded by Mr. Haworth, to adopt the Task Force’s Oct. 29 minutes (Attachment One). The motion passed unanimously.


Mr. Haworth said the Market Information Systems Research and Development (D) Working Group met Nov. 19, Nov. 15 and Sept. 19. He said the meetings were held via conference call in regulator-to-regulator session pursuant to paragraph 3 (specific companies, entities or individuals) and paragraph 6 (consultations with NAIC staff members related to NAIC technical guidance) of the NAIC Policy Statement on Open Meetings.

Mr. Haworth said the Working Group reviewed and prioritized the outstanding Uniform System Enhancement Request (USER) forms. He said the Working Group considered the anticipated benefits and the estimated level of effort of each request. He said three requests were selected as high priority, with a goal of having them completed by the end of this year. Those requests are: 1) USER form 10063 to add to the Regulatory Information Retrieval System (RIRS) the ability to search in iSite+ by the Financial Industry Regulatory Authority (FINRA) unique identifier; 2) USER form 10072 to allow companies to file new Market Conduct Annual Statement (MCAS) submissions for prior years; and 3) USER form 10080 to display data retention policies and terminology related to action dates in RIRS.

Mr. Haworth said the Working Group also reviewed the RIRS subject matter expert (SME) group’s recommendation for revisions to RIRS. He said the Working Group will continue its discussions during its next conference call.

Mr. Haworth said the Working Group reviewed the recommendations it made in 2019 to address data quality issues identified in the Market Information Systems (MIS) data analysis metrics results. He said eight of the nine recommendations have been completed. He said that since the Working Group’s report at the Summer National Meeting, the Working Group: 1) agreed on definitions for the RIRS Action and Effective Dates; 2) defined educational materials for the MCAS waiver and extension process; and 3) reached out to the two jurisdictions that had not been participating in the RIRS. He said the remaining recommendation is to define and communicate best practices regarding the use of the Market Action Tracking System (MATS) and RIRS.

Mr. Haworth said the Working Group also considered the detailed analysis results for two USER forms. USER form 10072 is a request to add the ability for companies to submit new prior year MCAS filings, and USER form 10080 is a request to update the RIRS in iSite+ to include the data retention policies and terminology related to action dates. He said the Working Group adopted motions to move both requests to application development.

Finally, Mr. Haworth said the Working Group completed its review of the MIS data analysis results and made recommendations for the metrics, the presentation of the results and methods to improve data quality.
Ms. Dingus made a motion, seconded by Mr. Fordham, to adopt the Working Group’s report. The motion passed unanimously.

3. Adopted the MIS Data Analysis Metrics and Recommendations

Mr. Haworth said the metrics are designed to evaluate three aspects of data quality for each market information system. Those three aspects are completeness, accuracy and timeliness, which are all critical for state insurance regulators to conduct proper analysis.

   a. CDS

Mr. Haworth said there is no automated way to ensure that states have successfully submitted all of their closed complaints to the NAIC; however, it is possible to determine whether the submitted data successfully loaded to the NAIC database. He said the first Complaint Database System (CDS) completeness metric identifies errors that prevented complaint data from loading. He said there were more than 117,000 new errors created last year, which reflects complaint data that did not initially load to the database. He noted that staff in the state insurance departments can, and often do, correct the errors and resubmit the data. He said that as of Nov. 25, about 6,000 of those errors were still outstanding. He said all states have access to the State Data Load Error Viewer in iSite+, where they can monitor the status of their submitted data.

Mr. Haworth said that to make trending results from year to year more meaningful, the Working Group recommends adding a percentage of errors to total complaints.

Mr. Haworth said the results for the CDS timeliness metric continued to improve in 2018, with three more jurisdictions submitting complaints at least monthly. He said many states submit complaints daily.

Mr. Haworth said the Working Group recommends adding a measure of the percentage of months with no files received to the total number of months.

Mr. Haworth said the Working Group also recommends adding a new timeliness metric for the CDS. He said the first timeliness metric only considers the files received by each jurisdiction and not the timeliness of the data within the files. He said the Working Group recommends adding a second timeliness metric that identifies jurisdictions that did not submit a current complaint at least monthly. He said a current complaint would be defined as one that was closed and submitted within 45 days.

Mr. Haworth said the accuracy metrics for complaints are designed to determine if the complaints are appropriately designated as confirmed and whether the complaint is associated with the correct entity and line of business. He said, as directed by the Task Force, NAIC staff generate these results and distribute them to the state Consumer Services Directors quarterly.

Mr. Haworth said the first accuracy metric identifies complaints submitted with a confirmed indicator with a disposition code that may indicate it is not confirmed. He said the results of this metric continue to improve.

Mr. Haworth said the second accuracy metric identifies complaints submitted for a line of business on companies that did not report premiums written for that line of business in their financial annual statement. He said this metric includes both state-level premium and national-level premium results. He noted that for most lines of business, the state-level premium results more accurately identify miscoded complaints. For the life insurance lines of business, however, the national-level premium results are more accurate because people may move from state to state. He said this metric reflects a small decrease in accuracy from last year but still looks good.

   b. MATS

Mr. Haworth said there is no automated method to ensure all market actions are reported in MATS. He said the closest method identified was to compare MATS actions to those reported in the NAIC Insurance Department Resources Report (IDRR). He said the first completeness metric compares the number of closed exams, and the entities associated with those exams, reported in MATS to those reported in the IDRR. He said the second completeness metric compares the number of entities included in all closed market actions, which include exams, focused inquiries and non-exam regulatory interventions. Mr. Haworth noted the IDRR reporting instructions have been updated to clarify what should be reported. However, he said there are still significant discrepancies.
Mr. Haworth said the Working Group recommends investigation to determine the reasons for the differences.

Mr. Haworth said the third completeness metric identifies RIRS records with an origin code of “Market Conduct Exam” that do not have a corresponding record in MATS. He said the results are not trending well. He said there is not a clear understanding of how MATS and RIRS actions should be associated. He also said the Working Group members shared that they were using the RIRS action and effective dates differently.

Mr. Haworth said the Working Group recommends best practices regarding the use of MATS and RIRS be defined and communicated, and that the RIRS action and effective dates be defined and communicated.

Mr. Haworth said the Working Group recommends completing the RIRS/MATS hard card next year.

Mr. Haworth said the Working Group recommends adding the percentage of RIRS actions taken with no MATS entry to the total RIRS actions with a “Market Conduct Exam” origin code.

Mr. Haworth said there are several MATS timeliness metrics. He said all the results are as of July 9, 2019. He said the first MATS timeliness metric identifies open actions that contain inactive values. He said there are no longer any actions that meet this criterion and that the Working Group recommends eliminating this metric.

Mr. Haworth said the remaining MATS timeliness metrics identify actions that contain a particular status for more than a specified period of time. He said the results indicate there is room for improvement. He noted, however, there are valid reasons for an action to remain in a particular status for an extended period of time.

Mr. Haworth said the Working Group recommends defining and providing education and training on MATS best practices, including how to ensure statuses are kept current.

Mr. Haworth said the Working Group recommends adding filters to the MATS “No Change” Personalized Information Capture System (PICS) event. He said the PICS event would provide subscribers a monthly listing of market actions that have been in a status longer than the specified time threshold. He said, however, there is currently no way to limit this listing to only those actions your state is participating in.

c. MARS

Mr. Haworth said there are two completeness metrics in the Market Analysis Review System (MARS). He said the first completeness metric identifies the number of jurisdictions that did not complete the minimum 10 reviews in 2018. Those results were consistent with the previous year. He said the metric should have reflected the threshold set by the Market Analysis Procedures (D) Working Group, which is set at 15 reviews but was not adjusted for 2018.

Mr. Haworth said to prevent such an oversight in the future, the Working Group recommends modifying this metric to identify jurisdictions that did not complete the minimum number of reviews in the past year per the Market Analysis Procedures (D) Working Group’s minimum guidelines.

Mr. Haworth said the Working Group also recommends adding premium volume and the number of companies writing business for each jurisdiction.

Mr. Haworth said the second MARS completeness metric identifies Level 1 reviews with a disposition that indicates a Level 2 analysis was planned but not completed within nine months. He said there are many scenarios where this could reasonably happen, so the Working Group recommends eliminating this metric for now because the current MARS does not allow the original disposition to be updated. He said a requested feature of the MARS redesign project is to allow this functionality.

Mr. Haworth said the first MARS timeliness metric identifies reviews that were started but not completed and subsequently deleted by the system after 60 days. He said the Working Group also recommends eliminating this metric. He said the Working Group did not find the results of this metric meaningful because MARS sends several notifications prior to deleting reviews. He said the reviews were likely created in error and should be deleted.

Mr. Haworth said the second timeliness metric identifies reviews that did not use the most current financial data. He said there was an improvement in the percentage of these reviews, with more than 96% of the reviews created last year using the most current financial data.
d. **MCAS**

Mr. Haworth said there are three MCAS completeness metrics. He said the first completeness metric reflects the number of non-participating states. He said there was no change. He said the second completeness metric reflects the number of missing filings and is consistent with last year. The second metric is of 2018 data results as of Nov. 5, 2019 and may continue to change as additional filings are received.

Mr. Haworth said the third completeness metric for the MCAS identifies companies that were required to file, requested a waiver, and the jurisdiction did not respond to the request. He said this is a new metric, and the results are trending positively.

Mr. Haworth said the Working Group recommends adding the percentage of waiver requests approved and denied.

Mr. Haworth said the first MCAS timeliness metric reflects the number of filings submitted 45 or more days after the filing deadline. He said those results improved this year. He said the second timeliness metric identifies companies that were required to file, requested an extension, and the jurisdiction did not respond to the request. The results of the second timeliness metric also show improvement.

Mr. Haworth said the Working Group recommends adding the percentage of extension requests approved and denied.

Mr. Hanson asked if it is possible to create a metric to identify companies that use the same reason in their waiver or extension multiple years in a row. Mr. Haworth said NAIC staff are working on a Tableau report to provide that information.

Mr. Haworth said validations are run on MCAS filing data when it is processed at the NAIC. He said the first accuracy metric reviews review the percentage of validation errors on the original filings and the current percentage of errors. He noted errors are generally fixed with subsequent filings. He said the results continue to be very good.

Mr. Haworth said the second MCAS accuracy metric identifies refilings. He said the number of refilings increased this year primarily because of the new lines of business—health and lender-placed insurance.

e. **RIRS**

Mr. Haworth said that last year, there were still two jurisdictions that had not submitted regulatory actions in the past five years. He said that after the Working Group chair reached out to them, both jurisdictions submitted actions in 2019.

Mr. Haworth said the second RIRS completeness metric identifies errors that prevented regulatory actions from successfully loading to the RIRS database. He said there were about 2,500 errors that prevented regulatory actions from loading last year. He said there are much fewer now.

Mr. Haworth said the Working Group recommends adding the percentage of errors to total regulatory actions.

Mr. Haworth said the goal of the RIRS timeliness metric is to have regulatory actions entered and made available to other state insurance regulators as soon as possible after the effective date. He said the RIRS timeliness metric results indicate there continues to be improvement in this area.

Mr. Haworth said the Working Group believes the metrics continue to perform as desired. He said there are caveats associated with most of the metrics, and in some cases, the results do not necessarily reflect data-quality issues. He said the metrics are helpful in identifying potential issues. He said the majority of the NAIC MIS data is of good quality. He noted there were several areas where the results improved from the previous year, but some areas in need of improvement have been identified. He said there appears a need for education and training regarding expectations and best practices to ensure data quality. Mr. Haworth said the detailed results will be distributed to each state’s collaborative action designees, market analysis chiefs and market conduct chief examiners, with instructions to review the results and make appropriate updates where necessary.

Director Wing-Heier thanked the Working Group and NAIC staff for their good work on the MIS data analysis and recommendations. She said a motion to adopt the report will also include adoption of all the Working Group recommendations.

Mr. Hanson made a motion, seconded by Mr. Fordham, to adopt the Working Group’s MIS data analysis and recommendations. The motion passed unanimously.
Draft Pending Adoption

4. Reviewed Outstanding USER Forms

Director Wing-Heier asked Ginny Ewing (NAIC) to give an update on outstanding USER forms.

a. **USER Form 10051**

Ms. Ewing said USER form 10051 is a request to implement the MATS web service in State Based Systems (SBS). She said when MATS was developed, services were created that could be used by state back-office systems to update MATS. She said this request would eliminate the need for states to enter data twice—in the back-office system and in MATS. She said the SBS team has begun initial investigation and plans to complete its review in the first quarter of 2020 and will then have a better idea of the effort to implement this request. She asked for state insurance regulators to volunteer to help with the design.

b. **USER Form 10059**

Ms. Ewing said USER form 10059 is complete. She said this request was made five years ago prior to the release of iSite+. She said the request improved navigation for the majority of report screens.

c. **USER Form 10063**

Ms. Ewing said USER form 10063 is a request to facilitate data sharing with FINRA. She said the request is complete, and state insurance regulators now have the ability to search on FINRA’s unique identifier on the Individual Entity Search in iSite+.

d. **USER Form 10069A and Form 10069B**

Ms. Ewing said USER form 10069A and form 10069B are requests to enhance CDS codes. She said USER 10069A requests adding back previously eliminated reason and disposition codes, and USER form 10069B requests new codes for lender-placed insurance and pet insurance. She said the effort to implement these changes is relatively small, and the majority of the effort is related to testing the state implementations.

e. **USER Form 10072**

Ms. Ewing said USER form 10072 is a request to allow companies to submit new filings for prior years once the MCAS has been closed for the current filing period. She said the request was made prior to the release of the redesigned MCAS system. She noted the new redesigned MCAS will more easily accommodate this change, and it is being incorporated into the quarter one release in February and March.

f. **USER Form 10080**

Ms. Ewing said USER form 10080 is a request to update RIRS to provide data retention policies and terminology related to action dates. She said the request includes seven components, two of which are associated with data definitions and will be assisted by the RIRS SME group and will not be completed by the end of 2019, but the remaining components will be completed by the end of 2019.

g. **USER Form 10081**

Ms. Ewing said USER form 10081 is a request to make all MCAS data available through the Market Analysis Prioritization Tool (MAPT). She said in preliminary analysis, it appears this request could be addressed as part of the State Ahead strategic plan to provide market conduct regulators additional data access.

Ms. Ewing said the second section of the USER report includes the requests being addressed as part of a NAIC State Ahead strategic plan. She said when the strategic plan was drafted, many of the projects defined in the plan came from state insurance regulator requests like the ones the Market Information Systems Research and Development (D) Working Group had in its backlog. She said nine requests are being addressed by four State Ahead projects.

Ms. Ewing said the MARS redesign project will redesign MARS to combine the Level 1 and Level 2 reviews into a single level to provide a more focused review of a company. She said the project is scheduled to begin in April 2020.
Ms. Ewing said the market regulation self-service dashboard project will replace current iSite+ market regulation tools and provide visual representations of MIS data. She said the first phase of this project will deliver a dashboard for complaint and regulatory actions data.

Ms. Ewing said an initial kickoff meeting was held in July for the project to provide market conduct regulators additional data access. She said that based on feedback from the self-service dashboard project, NAIC staff will work with interested regulators to determine what data to provide and the appropriate methods to access it.

Ms. Ewing said the objective of the market conduct data improvements phase II project is to improve the MCAS MAPT by making the data accessible using Tableau dashboards. She said feedback is being gathered on a draft dashboard that has already been created.

Director Wing-Heier said that during the Summer National Meeting, some concern was expressed about the number of USER forms that have not progressed in the last few years. She said she asked the Market Information Systems Research and Development (D) Working Group to take a close look at the prioritization list to determine which projects should be reprioritized and which should be removed due to lack of activity. She said that during the Task Force’s conference call in November, it heard from Working Group about how it reprioritized the USER forms by moving three smaller projects to the top of the prioritization list. Additionally, the Working Group recommended not removing any projects from the list so as not to lose track of them as resources become available to address them.

Director Wing-Heier said that she and Director Lindley-Myers agreed that if a project is not being worked on, it should be removed from the prioritization list. She said some of the projects may lose relevance as the NAIC State Ahead strategic plan nears completion. Director Wing-Heier said the Task Force will schedule a conference call in the first week of January to assess each USER form project.

5. Discussed Recommendations for AI in the MIS

Director Wing-Heier said the Task Force adopted a new charge to discuss recommendations for the use of artificial intelligence (AI) in MIS. She said that given the prioritization of the State Ahead projects and resource demand of the other projects, she does not anticipate any action on these recommendations immediately, but said the Task Force’s work will lay the groundwork for moving market analysis into the future.

Director Wing-Heier invited comments on this topic for consideration at the 2020 Spring National Meeting. She also said she would like to have speakers at the next national meeting who can provide additional information regarding what AI is and what is needed to incorporate AI into the MIS. She said the Task Force will also explore the potential uses and benefits and possible risks of AI.

Director Wing-Heier said all comments and requests to give presentations to the Task Force should be sent to Randy Helder (NAIC) by February.

Having no further business, the Market Information Systems (D) Task Force adjourned.
MARKET INFORMATION SYSTEMS RESEARCH AND DEVELOPMENT (D) WORKING GROUP

July 22, 2020 / July 8, 2020

Summary Report

The Market Information Systems Research and Development (D) Working Group met July 22 and July 8 via conference call in regulator-to-regulator sessions pursuant to paragraph 3 (specific companies, entities or individuals) and paragraph 6 (consultations with NAIC staff members) of the NAIC Policy Statement on Open Meetings. During these meetings, the Working Group:

1. Reviewed the outstanding Uniform System Enhancement Request (USER) forms. The following request is under development:
   - **10051:** Market Action Tracking System (MATS) – Implement MATS web service in State Based System (SBS): Provide SBS Examination module integration for automated submission of information to MATS.
     - **Benefit:** Eliminates need for dual data entry in SBS and MATS.
     - **Status:** Requirements have been defined and approved by interested states. The first phase will allow users to open an action on an entity and send updates to MATS. SBS is in the beginning stages of the development.

   The following requests were approved to move forward to development:
   - **10069B:** Complaint Database System (CDS) – Enhance complaint codes for lender placed insurance and pet insurance.
     - **Benefit:** Better tracking of lender place insurance complaints that aligns with new Market Conduct Annual Statement (MCAS) statement; and allow removal of data element companies must report complaints received. More accurate tracking of pet insurance complaints.
     - **Status:** Pending final approvals for implementation. Coordination with state back office system changes is required.

   - **10080:** Regulatory Information Retrieval System (RIRS) – Update RIRS to display data retention policies and terminology related to action dates.
     - **Benefit:** Provides better context and understanding of the data available.
     - **Status:** This request consists of 7 components: three are complete; two are pending RIRS subject matter expert (sme) group input; one the Working Group agreed to not address. The Working Group approved a recommendation to move forward to development for the final component, to include custody date information in the RIRS Participating State Report.

   - **10082:** CDS – Track complaints associated with pandemic and business interruption.
     - **Benefit:** This request will allow jurisdictions to track complaints related to pandemic events such as the COVID-19 pandemic. Additionally, in a catastrophic event business interruption is a critical coverage and may generate many complaints. This request will allow jurisdictions to track business interruption complaints.
     - **Status:** Pending final approvals for implementation. Coordination with state back office system changes is required.

   The following requests are in detailed analysis:
   - **10053:** RIRS – Review RIRS Codes – Review of RIRS codes by the RIRS Code Review Working Group to clarify definitions for consistent usage and provide recommendations for revisions.
     - **Benefit:** Modernizes outdated reporting of regulatory actions and addresses known issues.
     - **Status:** The RIRS sme group is updating the RIRS proposal to address questions and concerns received from Working Group members.

   - **10069A:** CDS – Consider adding previously eliminated reason and disposition codes and add new reason codes.
     - **Benefit:** Better meet federal reporting guidelines and market analysis needs.
     - **Status:** The Working Group is considering detailed analysis results.


W:\National Meetings\2020\Summer\TF\MIS\MISRD Summary - Summer 2020.docx

© 2020 National Association of Insurance Commissioners 1
## Market Information Systems Research and Development (D) Working Group
### Status of Outstanding USER (Uniform System Enhancement Request) Forms
**As of July 23, 2020**

**Application Key:**
- **CDS** – Complaints Database System; **CIS** – Consumer Information Source; **MAMS** – Market Analysis Market Share;
- **MATS** – Market Action Tracking System; **MAPT** – Market Analysis Prioritization Tool; **MARS** – Market Analysis Review System; **MCAS** – Market Conduct Annual Statement;
- **RIRS** – Regulatory Information Retrieval System

<table>
<thead>
<tr>
<th>USER Form #</th>
<th>Application</th>
<th>Requestor</th>
<th>Request Summary</th>
<th>Benefit</th>
<th>Estimated Level of Effort</th>
<th>Phase</th>
<th>Status/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10051</td>
<td>MATS</td>
<td>MISTF State Survey Project Action Plan #9</td>
<td>Implement MATS Web Service in SBS: Provide SBS Examination module integration for automated submission of information to MATS.</td>
<td>Eliminates need for dual data entry in SBS and MATS</td>
<td>X-Large</td>
<td>Application Development</td>
<td>In progress. Requirements have been defined and approved by interested states. The first phase will allow users to open an Action on an Entity and send updates to the MATS system on actions. SBS is in the very beginning stages of the development on this functionality.</td>
</tr>
<tr>
<td>10053</td>
<td>RIRS</td>
<td>MISTF State Survey Project Action Plan #22</td>
<td>Review of RIRS Codes: Review of RIRS codes by the RIRS Code Review Working Group to clarify definitions for consistent usage and provide recommendations for revisions.</td>
<td>Modernizes outdated reporting of regulatory actions / addresses known issues</td>
<td>X-Large</td>
<td>Detailed Analysis</td>
<td>In progress. The RIRS subject matter expert (sme) group is modifying proposals to address questions and concerns.</td>
</tr>
<tr>
<td>10069A</td>
<td>CDS</td>
<td>Frank Pyle DE</td>
<td>Consider adding previously eliminated Reason and Disposition codes; and add new Reason Codes</td>
<td>Better meet federal reporting guidelines and market analysis needs</td>
<td>Medium</td>
<td>2nd Consideration</td>
<td>The Working Group is considering detailed analysis results.</td>
</tr>
<tr>
<td>10069B</td>
<td>CDS</td>
<td>Jo LeDuc WI</td>
<td>Enhance complaint codes for Lender Placed Insurance and Pet Insurance</td>
<td>Better tracking of Lender Placed Insurance complaints that aligns with new MCAS statement; and allow removal of data element companies must report complaints received More accurate tracking of Pet insurance complaints</td>
<td>Medium</td>
<td>Development</td>
<td>Pending final approvals</td>
</tr>
<tr>
<td>10080</td>
<td>RIRS</td>
<td>Rachel Cloyd TX</td>
<td>Update RIRS to display data retention policies and terminology related to action dates</td>
<td>Provides better context and understanding of the data available</td>
<td>Small</td>
<td>Detailed Analysis / Development / Complete</td>
<td>Status: 1 – Pending RIRS sme input 2 – Complete 3 – Complete</td>
</tr>
</tbody>
</table>
# Market Information Systems Research and Development (D) Working Group

## Status of Outstanding USER (Uniform System Enhancement Request) Forms

As of July 23, 2020

### Application Key:
- **CDS** – Complaints Database System;  
- **CIS** – Consumer Information Source;  
- **MAMS** – Market Analysis Market Share;  
- **MATS** – Market Action Tracking System;  
- **MAPT** – Market Analysis Prioritization Tool;  
- **MARS** – Market Analysis Review System;  
- **MCAS** – Market Conduct Annual Statement;  
- **RIRS** – Regulatory Information Retrieval System

<table>
<thead>
<tr>
<th>USER Form #</th>
<th>Application</th>
<th>Requestor</th>
<th>Request Summary</th>
<th>Benefit</th>
<th>Estimated Level of Effort</th>
<th>Phase</th>
<th>Status/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10082</td>
<td>CDS</td>
<td>Randy Helder NAIC</td>
<td>Track complaints associated with Pandemic and Business Interruption.</td>
<td>This request will allow jurisdictions to track complaints related to pandemic events such as the COVID-19 pandemic. Additionally, in a catastrophic event, business interruption is a critical coverage and may generate many complaints. This request will allow jurisdictions to track business interruption complaints.</td>
<td>Medium</td>
<td>Development</td>
<td>Pending final approvals</td>
</tr>
</tbody>
</table>

### Level of Effort – Small: <40 hours; Medium: 40-120 hours; Large: 120 - 400 hours; X-Large: 400+ hours

![USER Form Cycle Diagram](image)

© 2020 National Association of Insurance Commissioners
## Market Information Systems Research and Development (D) Working Group

### Status of Outstanding USER (Uniform System Enhancement Request) Forms

As of July 23, 2020

**Application Key:**
- CDS – Complaints Database System; CIS – Consumer Information Source; MAMS – Market Analysis Market Share;
- MATS – Market Action Tracking System; MAPT – Market Analysis Prioritization Tool; MARS – Market Analysis Review System; MCAS – Market Conduct Annual Statement;
- RIRS – Regulatory Information Retrieval System

### USER forms pending business analysis

<table>
<thead>
<tr>
<th>USER Form #</th>
<th>Application</th>
<th>Requestor</th>
<th>Request Summary</th>
<th>Benefit</th>
<th>Estimated Level of Effort</th>
<th>Phase</th>
<th>Status/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10075</td>
<td>MAPT</td>
<td>Cheryl Hawley AZ</td>
<td>Include current year and previous two years of Overall Score, National Score, and State Score, as well as main component and sub-component scores.</td>
<td>Provides 3 years of Scoring data through one source rather than extracting years separately and merging for analysis of trends</td>
<td>Large</td>
<td>Detailed Analysis</td>
<td>Pending Business Analysis. #3 in backlog</td>
</tr>
<tr>
<td>10077</td>
<td>MAPT</td>
<td>Ibrahim Al-Hajiby MN</td>
<td>Allow the user to select ‘all policy’ types instead of running 18 different reports.</td>
<td>Saves time and increases accuracy by eliminating need to run 18 different reports and merge</td>
<td>X-Large</td>
<td>Detailed Analysis</td>
<td>Pending Business Analysis. #4 in backlog</td>
</tr>
<tr>
<td>10081</td>
<td>MCAS MAPT</td>
<td>Cheryl Hawley AZ</td>
<td>Make all MCAS data available through MAPT allowing states to access more data.</td>
<td>Easy access to all of a state’s data to conduct effective and efficient analysis; saves time and more efficient/effective use of limited resources</td>
<td>Large</td>
<td>Detailed Analysis</td>
<td>Pending Business Analysis. #1 in backlog</td>
</tr>
</tbody>
</table>
Market Information Systems Research and Development (D) Working Group
Status of Outstanding USER (Uniform System Enhancement Request) Forms
As of July 23, 2020

Application Key:
- **CDS** – Complaints Database System;
- **CIS** – Consumer Information Source;
- **MAMS** – Market Analysis Market Share;
- **MATS** – Market Action Tracking System;
- **MAPT** – Market Analysis Prioritization Tool;
- **MARS** – Market Analysis Review System;
- **MCAS** – Market Conduct Annual Statement;
- **RIRS** – Regulatory Information Retrieval System

### USER forms being addressed by State Ahead projects

<table>
<thead>
<tr>
<th>USER Form #</th>
<th>Application(s)</th>
<th>Requestor</th>
<th>Request Summary</th>
<th>State Ahead Project</th>
<th>Projected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>10043</td>
<td>MARS</td>
<td>MAP (D) WG Randy Helder NAIC</td>
<td>Import the average industry loss ratio and expense ratio.</td>
<td>State Ahead – Market Analysis Review System (MARS) Redesign The Market Analysis Review System (MARS) will be redesigned to combine MARS Levels 1 and 2 into a single level designed to provide a more focused review of a company and still allow an analyst access to all the relevant data available to a company in the market information systems databases. The rewrite will also provide more visualization of the data through the use of Tableau.</td>
<td>December 2022</td>
</tr>
<tr>
<td>10047</td>
<td>MAPT, MCAS</td>
<td>Tom Whitener WV</td>
<td>Add option to display data by group code.</td>
<td>State Ahead – Market Regulation Self-Service Dashboard The purpose of this project is to create Tableau dashboards to replace current iSite+ market regulation tools and applications to provide visual representation of the data. This includes reports containing regulatory actions (RIRS data), complaint data (CDS data), MCAS data, financial data, producer data, and antifraud data. Finally, this project will help ensure NAIC staff continues to provide the necessary support to the NAIC members for the ongoing development of MCAS blanks and market analysis. This project will replace the Financial MAPT. The Tableau version of the Financial MAPT will likely include filtering by group code. The Market Conduct Data Improvements (MAPT) Phase II State Ahead project addresses the ability to review MCAS data by group.</td>
<td>December 2021</td>
</tr>
<tr>
<td>10065</td>
<td>CDS, MAPT, MARS, Mats, RIRS, SPL</td>
<td>Jo LeDuc WI</td>
<td>Provide functionality to access and download data from NAIC systems.</td>
<td>State Ahead – Provide Market Conduct Regulators Additional Data Access The purpose of this project is to address the Market Information Systems (D) Task Force charge to “Determine how to effectively provide state users with query access to NAIC Market Information Systems data.” Currently, the only means of accessing much of the market related data requires logging into iSite+, running a report and downloading the results. Furthermore, the data is generally only available on an individual entity basis and in many cases only available at an aggregate level. Providing more flexible access to the underlying market data will facilitate the market regulators’ analysis needs.</td>
<td>December 2020</td>
</tr>
<tr>
<td>10066</td>
<td>MARS</td>
<td>MAP (D) WG Teresa Cooper NAIC</td>
<td>Merge MARS Level 1 and MARS Level 2.</td>
<td>State Ahead – Market Analysis Review System (MARS) Redesign The Market Analysis Review System (MARS) will be redesigned to combine MARS Levels 1 and 2 into a single level designed to provide a more focused review of a company and still allow an analyst access to all the relevant data available to a company in the market information systems databases. The</td>
<td>December 2022</td>
</tr>
</tbody>
</table>
## Market Information Systems Research and Development (D) Working Group
### Status of Outstanding USER (Uniform System Enhancement Request) Forms
As of July 23, 2020

**Application Key:**
- **CDS** – Complaints Database System; **CIS** – Consumer Information Source; **MAMS** – Market Analysis Market Share;
- **MATS** – Market Action Tracking System; **MAPT** – Market Analysis Prioritization Tool; **MARS** – Market Analysis Review System; **MCAS** – Market Conduct Annual Statement; **RIRS** – Regulatory Information Retrieval System

<table>
<thead>
<tr>
<th>USER Form #</th>
<th>Application</th>
<th>Requestor</th>
<th>Request Summary</th>
<th>State Ahead Project</th>
<th>Projected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>10067</td>
<td>MCAS</td>
<td>Teresa Cooper NAIC</td>
<td>Creation of an MCAS Company Ratio Trend Report</td>
<td>State Ahead – Market Conduct Data Improvements (MAPT) Phase II</td>
<td>September 2020</td>
</tr>
<tr>
<td>10067</td>
<td>MCAS</td>
<td>Teresa Cooper NAIC</td>
<td>Modifications for all lines of business for “All Coverages” or “Selected Coverages”</td>
<td>State Ahead – Market Conduct Data Improvements (MAPT) Phase II</td>
<td>September 2020</td>
</tr>
<tr>
<td>10071</td>
<td>All Apps</td>
<td>Jo LeDuc WI</td>
<td>Redesign and enhance I-SITE reports using interactive data visualization and add data analytics.</td>
<td>State Ahead – Market Regulation Self-Service Dashboard The purpose of this project is to create Tableau dashboards to replace current iSite+ market regulation tools and applications to provide visual representation of the data. This includes reports containing regulatory actions (RIRS data), complaint data (CDS data), MCAS data, financial data, producer data, and antifraud data. Finally, this project will help ensure NAIC staff continues to provide the necessary support to the NAIC members for the ongoing development of MCAS blanks and market analysis.</td>
<td>December 2021</td>
</tr>
<tr>
<td>10074</td>
<td>MARS</td>
<td>John Haworth WA</td>
<td>Allow for comments to be added to a Level 1 review after it has been approved.</td>
<td>State Ahead – Market Analysis Review System (MARS) Redesign The Market Analysis Review System (MARS) will be redesigned to combine MARS Levels 1 and 2 into a single level designed to provide a more focused review of a company and still allow an analyst access to all the relevant data available to a company in the market information systems databases. The rewrite will also provide more visualization of the data through the use of Tableau.</td>
<td>December 2022</td>
</tr>
</tbody>
</table>
**Market Information Systems Research and Development (D) Working Group**

**Status of Outstanding USER (Uniform System Enhancement Request) Forms**

As of July 23, 2020

**Application Key:**
- CDS – Complaints Database System; CIS – Consumer Information Source; MAMS – Market Analysis Market Share;

<table>
<thead>
<tr>
<th>USER Form #</th>
<th>Application</th>
<th>Requestor</th>
<th>Request Summary</th>
<th>State Ahead Project</th>
<th>Projected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>10078</td>
<td>MARS</td>
<td>Tom Whitener WV</td>
<td>Add links for reviewer.</td>
<td>State Ahead – Market Analysis Review System (MARS) Redesign</td>
<td>December 2022</td>
</tr>
</tbody>
</table>

The Market Analysis Review System (MARS) will be redesigned to combine MARS Levels 1 and 2 into a single level designed to provide a more focused review of a company and still allow an analyst access to all the relevant data available to a company in the market information systems databases. The rewrite will also provide more visualization of the data through the use of Tableau.

**USER forms being addressed as Production Support**

<table>
<thead>
<tr>
<th>USER Form #</th>
<th>Application</th>
<th>Requestor</th>
<th>Request Summary</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>10061</td>
<td>MARS</td>
<td>John Haworth WA</td>
<td>Ensure company financial statement data file matches company financial statement PDF.</td>
<td>Preliminary analysis was completed 12/4/2014 – recommendation to move forward to detailed analysis. Detailed analysis was completed 12/7/2015 with the following findings: The software developed by financial data capture software vendors and used by companies creates an original PDF when the original data file is submitted to the NAIC. The NAIC has validations in place to ensure the original PDF is received with the original data file. The financial data capture software also reminds the company to send an amended PDF when an amended data file is created. It is important to note that the PDF is the file of record and companies should be making every attempt for the data file to match the PDF. After researching the example given by requester, it was discovered the difference was in the Directors and Officers data. This data was incorrectly formatted in the data file and the NAIC’s data load program was unable to process it. This issue only affected less than 50 companies. NAIC staff recommended and were directed to amend the Electronic Filing Directive, a document that is available to companies and financial data capture software vendors, to better clarify and instruct companies on how to correctly file the Directors and Officers data. These instructions were updated for the 2015 annual financial statement filing data. This request considered closed in Dec. 2015. This request was reopened with a status of Detailed Analysis in Feb. 2016 as a result of another example where the data file and PDF file did not match. On July 17, 2019, the Working Group agreed that this request should be addressed outside the USER form process as production support.</td>
</tr>
</tbody>
</table>
Complaint Database System (CDS)
Add Codes for LPI and Pet Insurance
Detail Analysis for Request 10069B

Request:

<table>
<thead>
<tr>
<th>ID</th>
<th>Date Received</th>
<th>Requestor</th>
<th>Request</th>
<th>NAIC Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10069B</td>
<td>7/12/2017</td>
<td>Jo LeDuc WI</td>
<td>New CDS Type of Coverage Codes for lender placed insurance and pet insurance.</td>
<td>Proceed to Development</td>
</tr>
</tbody>
</table>

1) New Lender Placed MCAS Statement is slated to collect data for Lender-Placed insurance for the following eight coverage types:

- Single-Interest Lender-Placed Auto
- Dual-Interest Lender-Placed Auto
- Single-Interest Lender-Placed Homeowners Hazard
- Dual-Interest Lender-Placed Homeowners Hazard
- Single-Interest Lender-Placed Homeowners Flood
- Dual-Interest Lender-Placed Homeowners Flood
- Single-Interest Lender-Placed Homeowners Wind-Only
- Dual-Interest Lender-Placed Homeowners Wind-Only

Recommend the following second level coverage codes be added to allow for complaints to be tracked in a fashion that aligns to the new MCAS statement:

**Auto (Second Level Coverages):**
- Lender Placed
- Single Interest
- Dual-Interest

**Homeowners (Second Level Coverages):**
- Lender Placed
- Dual-Interest
- Hazard

2) Recommend adding the following new first level coverage code help states track pet insurance complaints:

**Miscellaneous (First Level Coverage)**
- Pet Insurance
Benefits:
Allow for better tracking of complaints specific to lender placed insurance on both auto and homeowners that will align better with the new MCAS statement, which will also allow for the removal of the data element whereby companies must report the insurance department complaints received during the reporting period.

Also allow for more accurate tracking of Pet Insurance complaints.

Preliminary Findings:
- Requested codes can be added to CDS metadata for capture and presentation.

Preliminary Considerations:
- The project size for this request is expected to be medium.
- Outstanding open USER Forms requesting updates to CDS codes (10069A and 10082) could be worked concurrently with this request.

Preliminary NAIC Staff Recommendation:
NAIC staff recommends moving forward to detailed analysis.

Detailed Analysis Findings:
1) Lender Placed Insurance - Adding the following second level coverage codes will allow for complaints to be tracked in a fashion that aligns to the new MCAS statement:

Auto (Second Level Coverages):
- Lender Placed
- Single Interest
- Dual-Interest

Homeowners (Second Level Coverages):
- Lender Placed
- Dual-Interest
- Hazard
Auto Coding Explanation
Lender-placed auto insurance complaints would be coded under the appropriate 1st level auto coverage. In addition, the second level coverage code of Lender Placed would be selected. If more detailed information about the contract type is known, the appropriate addition second level coverage code would also be selected.

Auto complaint coding examples:
1. Complaints involving lender placed coverage for a private passenger automobile where it is not known whether it is a single or dual interest contract would be coded as:
   - First Level Coverage Auto
   - Second Level Coverage Lender Placed
2. Complaints involving single-interest lender placed coverage for a private passenger automobile would be coded as:
   - First Level Coverage Auto
   - Second Level Coverage Lender Placed
   - Single Interest
3. Complaints involving dual-interest lender placed coverage for a private passenger automobile would be coded as:
   - First Level Coverage Auto
   - Second Level Coverage Lender Placed
   - Dual Interest

Homeowners Coding Explanation
The following second level coverages for homeowners already exist, so they do not need to be added at this time:
- Flood
- Single-Interest
- Windstorm

Like lender-placed auto insurance complaints, homeowners complaints would be coded under the appropriate 1st level homeowners coverage. In addition, the second level coverage code of Lender Placed would be selected. If more detailed information about the contract is known, the appropriate addition second level coverage code(s) would also be selected.

Homeowners complaint coding examples:
1. Complaints involving lender placed coverage for a homeowners where additional information about the contract is not known would be coded as:
   - First Level Coverage Homeowners
   - Second Level Coverage Lender Placed
2. Complaints involving lender placed single-interest flood coverage for a homeowners would be coded as:
   - First Level Coverage Homeowners
   - Second Level Coverage Lender Placed
• Single Interest
• Flood

3. Complaints involving lender placed hazard coverage for a homeowners but the type of contract (dual vs. single interest) is not known would be coded as:
   • First Level Coverage Homeowners
   • Second Level Coverage Lender Placed
   • Hazard

2) Pet Insurance - Adding a Miscellaneous code for Pet Insurance will help states track pet insurance complaints.

Detailed Analysis Considerations:
1. Recommended Codes
   The recommended codes are clearly defined, not duplicative of existing codes, and would add value for regulators.

2. State Implementation
   States’ back office systems will need to include the requested codes to allow for their submission to the NAIC with each closed complaint. States will need to work with their back-office systems vendor to ensure inclusion of these codes.

3. Reports
   Once added to the NAIC metadata, current CDS reports in iSite+ and in CIS (Consumer Insurance Search) will automatically display the new codes.

4. Other CDS USER Forms
   USER Forms 10069A and 10082 both request additions to complaint codes. USER Form 10069A needs more information regarding (1) the definitions of requested codes and (2) reasons why they should be added back when they were approved for removal by the D Committee in 2008. USER Form 10082 is being submitted with an NAIC staff recommendation to proceed to Development. Should these USER forms be included in the timeline for this USER form?

Scope:
The scope of this project includes the Complaints Database System, coordination with state back office systems to include the new codes.

Project Size:
Level of Effort for this request is Medium.
NAIC Staff Recommendation:
NAIC staff recommends moving forward to development as noted:
- Add second level coverage codes for Lender Placed, Single Interest and Dual-Interest to Auto.
- Add second level coverage codes for Lender Placed, Dual-Interest and Hazard to Homeowners.
- Add Miscellaneous type of coverage for Pet Insurance.
- Address USER form 10082 concurrently with this request.

An updated Complaints form, which reflects these recommendations, is attached.
Complaints Database System (CDS)
Add Pandemic Code and Business Interruption Code
Detailed Analysis for Request 10082

<table>
<thead>
<tr>
<th>ID</th>
<th>Date Received</th>
<th>Requestor</th>
<th>Request</th>
<th>NAIC Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10082</td>
<td>6/23/2020</td>
<td>Randy Helder NAIC Staff</td>
<td>Add Pandemic and Business Interruption codes for complaint tracking and reporting</td>
<td>Proceed to Development</td>
</tr>
</tbody>
</table>

Request Description:
This Request is to add a second level coverage code of Business Interruption to Fire, Allied and CMP or as Miscellaneous coverage.

Track how many complaints state regulators submit to the NAIC due to a “Pandemic.” The “Pandemic” is not a reason but is perhaps a root cause and should be tracked.

Benefits:
This request will allow jurisdictions to track complaints related to pandemic events such as the COVID-19 pandemic. Additionally, in a catastrophic event, business interruption is a critical coverage and may generate many complaints. This request will allow jurisdictions to track business interruption complaints. NAIC will be able to capture and present this information to users of CDS.

Preliminary Analysis
(Completed on 7/2/2020 by Brian Whittall)

Preliminary Findings:
- Requested codes can be added to CDS metadata for capture and presentation.
- Subject Codes are currently captured but not presented. NAIC reports will need to be updated to display Subject codes.

Preliminary Considerations:
- The project size for this request is expected to be medium.
- Outstanding open USER Forms requesting updates to CDS codes (10069A and 10069B) could be worked concurrently with this request.

Preliminary NAIC Staff Recommendation:
NAIC staff recommends moving forward to detailed analysis.
Detailed Analysis Findings:

1. The Complaint Handling and Reporting Standards (D) Working Group, which was formed at NAIC’s 2006 Spring National Meeting, was charged to create uniformity in complaint handling and reporting. (The Group has since dissolved.) In December 2008, the Market Regulation and Consumer Affairs (D) Committee adopted a timeline for implementation of the Working Group’s proposed complaint coding scheme. This scheme included the addition of a subject code to properly track complaint themes and to prevent using reason codes for this purpose. An excerpt from the “CDS Definitions and Basics” document, which was adopted by the D Committee on June 16, 2009, provides additional historic information:

   “Prior to the revision, there were 118 Reason codes in the CDS database. The group recommended dropping 43 of these codes as duplicative, unneeded (based on NAIC utilization data), or inappropriate as they did not constitute a “reason” for a complaint but rather identified a subject area of a complaint.

   The “reason” for a complaint is the action, or inaction, an insurance entity took which caused the consumer to seek redress. The subject area of the complaint may be a specific condition which led to the “reason.” For example, the proliferation of mold-related complaints led to the inclusion of “mold” as a reason code. However, consumers do not file complaints because of mold per se; rather, they file complaints based on their policy coverage (or lack thereof) for mold remediation, the handling of their mold claims, etc. The action the company took in regard to the consumer’s claim, i.e. denial, delay, unsatisfactory settlement offer, etc. is the “reason” while the “subject” is mold.

   Creation of this new “subject” field will permit regulators to track issues of interest such as mold without improperly using a “reason” code to do so.”

2. Although regulators may include a subject code with the submission of closed complaints to the NAIC, and the subject code is captured in the NAIC’s State Producer Licensing Database, that code is not currently displayed in any CDS reports in iSite+ or in CIS (the Consumer Insurance Search) web site.

3. Since subject code was introduced, the following codes have been available for regulators to select when they close a complaint and submit it to the NAIC. There are currently 8 subject codes. However, all subject codes allow users to include free-form text (subject description) to better describe the code being used. This free-form text is primarily used with the OTH (other) code. The counts of subject codes and descriptions are listed below:

<table>
<thead>
<tr>
<th>SUBJECT ID</th>
<th>SUBJECT NAME</th>
<th>SUBJECT DESCRIPTION (Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HUR</td>
<td>Hurricane (11072)</td>
</tr>
<tr>
<td>2</td>
<td>INT</td>
<td>Internet Related (1186)</td>
</tr>
<tr>
<td>3</td>
<td>LEA</td>
<td>Lead (8)</td>
</tr>
<tr>
<td>4</td>
<td>MOL</td>
<td>Mold (180)</td>
</tr>
<tr>
<td>5</td>
<td>OBS</td>
<td>Obesity (66)</td>
</tr>
</tbody>
</table>
4. Users of CDS should be aware of restrictions currently in place when determining whether to add a first level coverage in the Miscellaneous category or a second level coverage of Business Interruption in the Fire, Allied Lines & Commercial Multi-Peril (CMP). The restrictions are as follows:

- Type of Coverage is divided into seven mutually exclusive categories: (1) Auto; (2) Fire, Allied Lines & Commercial Multi-Peril (CMP); (3) Homeowners; (4) Life & Annuity; (5) Accident & Health; (6) Liability; and (7) Miscellaneous.
- Each complaint may have only one major category.
- All the major categories, except the “Miscellaneous” category, have subcategories of First Level Coverage (of which only one can be selected) and Second Level Coverage, of which up to three can be selected.

5. With the addition of subject and coverage codes, the requested codes must be added to the CDS metadata (decode tables) in order to capture and present this data. States' back office systems will also need to include the requested codes to allow for their submission to the NAIC with each closed complaint. States will need to work with their back-office system vendor to ensure inclusion of these codes.

6. Current CDS reports in iSite+ and in CIS will automatically display a new Business Interruption code, whether it is a second level coverage code in the Fire, Allied Lines & Commercial Multi-Peril (CMP) coverage type or it is a new coverage in the Miscellaneous coverage type.

7. A new CDS Tableau dashboard is in development and tentatively scheduled for release in 3rd Quarter 2020. This dashboard already includes all types of coverage, first level coverage codes, and second level coverage codes. Therefore, a Business Interruption code would be displayed, based on this request. The dashboard could be modified to include subject code in a future iteration.

Detailed Analysis Considerations:

1. Reports
   As noted, the subject code is not displayed anywhere in CDS, although that data is captured from states with the submission of closed complaints. If the subject code can be presented for display in the new CDS Tableau dashboard, NAIC staff, working with regulators will need to determine which CDS reports in iSite+ and in CIS should also display the subject code. There are currently 5 reports in iSite+ for consideration: Closed Complaints Count by Code, Closed Complaints Count by State, Closed Complaint Trend Report, Closed Complaint Index, and the Closed Complaint Record Detail File. All these reports are company specific. There are currently 3 reports in CIS: Complaint Code, Complaint State, Complaint Trend. The reports will automatically display a Business Interruption code once it is added to the CDS metadata because coverage codes are already included in these reports.

   NAIC staff, working with regulators, will also need to determine if a new CDS Summary Report should be developed so that users of CDS can analyze complaint data at more than a company-specific level. The new CDS Tableau dashboard could also be a consideration for this type of analysis, mitigating the need for a new Summary Report in iSite+.
2. Other CDS USER Forms
USER Forms 10069A and 10069B both request additions to complaint codes. USER Form 10069A needs more information regarding (1) the definitions of requested codes and (2) reasons why they should be added back when they were approved for removal by the D Committee in 2008. USER Form 10069B has the necessary information to consider adding the requested codes to CDS.

3. Business Interruption Code
The request to add this code could be completed in 2 different ways:
- Add Business Interruption as a second level coverage code to the Fire, Allied and CMP type of coverage.
- Add it as a Miscellaneous type of coverage.

Adding a Miscellaneous code requires less development work and testing than adding a second level coverage code. However, if the Working Group approves USER Form 10069B for development, then adding second level coverage codes for that request negates the benefit of only adding a first level coverage code.

4. State Implementation
States’ back-office systems will also need to include the requested codes to allow for their submission to the NAIC with each closed complaint. States will need to work with their back-office systems vendors to ensure inclusion of these codes.

Scope:
The scope of this project includes the Complaints Database System, coordination with state back office systems to include the new codes, and determining what CDS reports/dashboards to update and when.

Project Size:
Level of effort for this request is Medium.

NAIC Staff Recommendation:
NAIC staff recommends moving forward to development as noted:
- Add subject code for Pandemic.
- Add Miscellaneous type of coverage for Business Interruption.
- Address USER form 10069B concurrently with this request.
- Defer addressing USER form 10069A until required information is available and further analysis is completed.
- Update the CDS dashboard to display Subject code.
- Submit a new USER form to determine where and how to display Subject code in iSite+ and CIS reports, as well as consideration for development of a new CDS Summary report.

An updated Complaints form, which reflects these recommendations, is attached.
The Center for Economic Justice

CEJ is a non-profit consumer advocacy organization dedicated to representing the interests of low-income and minority consumers as a class on economic justice issues. Most of our work is before administrative agencies on insurance, financial services and utility issues.

On the Web:  www.cej-online.org
Why CEJ Works on Insurance Issues

Insurance Products Are Financial Security Tools Essential for Individual and Community Economic Development:

CEJ works to ensure fair access and fair treatment for insurance consumers, particularly for low- and moderate-income consumers.

Insurance is the Primary Institution to Promote Loss Prevention and Mitigation, Resiliency and Sustainability:

CEJ works to ensure insurance institutions maximize their role in efforts to reduce loss of life and property from catastrophic events and to promote resiliency and sustainability of individuals, businesses and communities in the face of catastrophic events.
Outline

1. What is Artificial Intelligence?
2. How Do Insurers Use AI?
3. What Are the Requirements for Effective AI?
4. What Are the Opportunities for AI in Insurance Market Regulation?
   a. Form Review
   b. Market Analysis
Big Data vs. Artificial Intelligence vs. Machine Learning


Machine Learning: A subset of AI -- ability of machines to receive a set of data and learn for themselves, changing algorithms as they learn more about the information they are processing.

Widespread Machine Learning is new, powered by greater computational power and more data and more speed. Greater computational power means ability to analyze data in a timely fashion. More data provides raw material for machines to learn – e.g., facial recognition. More speed – internet – means the ability to collect data and deploy algorithmic results in real time.

Human –designed algorithms vs. machine-developed algorithms.
It Starts With Data: Massive Databases

- Granular Exposure and Claims Data
- Telematics – Auto, Home, Wearable Devices
- Social Media
- Shopping Habits/Purchase History
- Hobbies and Interests
- Demographics/Household Data/Census Data
- Government Records/Property Records
- Web/Mobile Phone Tracking/GPS/Data Harvesting
- Vehicle Registration and Service Records
- Facial Analytics
- Mainstream Credit Files: Loans, Credit Cards
- Alternative Credit Data: Telecom, Utility, Rent Payment
- Built Environment – High Def Aerial Photographs of Every Structure
- Built/Natural Environment – Geospatial Coding of Built Structures and Environmental Features

Sources of Data include consumers (via telematics or wearable devices), government, social media platforms, web sites, mobile devices, e-mail/text, data brokers, online data aggregators, aircraft/satellite photos and many others.
Big Data Analytics / AI Example 1: Predicting Opioid Abuse

*Wall Street Journal*, December 13, 2018: “**Cigna's Algorithms Aim to Predict Opioid Abuse:** Machine learning and predictive analytics is helping the health insurance company identify customers likely to overdose”

Cigna Corp. is using artificial intelligence to predict whether patients might abuse and or overdose on prescription opioids as part of the company's commitment to reducing the substance's use among its consumers, said Mark Boxer, executive vice president and global chief information officer.

Cigna's proprietary algorithms are aided by the use of machine learning, a subfield of artificial intelligence that refers to the science of getting computers to act intelligently without being explicitly programmed.

A combination of 16 datasets are used to inform the algorithms, including data about patients' behavioral health claims, chronic disease history and interactions with pharmacies. The algorithms were built with the help of in-house staff. Over the past few years, Cigna has hired more than 1,000 data scientists, software engineers and analytics experts, Dr. Boxer said.
Big Data Analytics / AI Example 2: Willis Towers Watson RADAR

“Willis Towers Watson Radar is a platform of software products for Property & Casualty (P&C) and Life insurer and intermediary pricing teams, including actuaries and underwriters. These products provide powerful management information to support portfolio monitoring and rate setting. Further products are available that perform price optimization and optionally integrate with rating systems to deliver real-time processing capability”
“What Radar can do for you”¹

“Provide flexible management information

**Enable informed pricing strategy development underpinned by robust analysis of alternatives**

**Model the impact of potential pricing decisions on volume, profitability and other performance metrics**

Highlight weaknesses and cross-subsidies in current pricing structures

**Reduce the risk of pricing anti-selection**

**Allow sophisticated competitor monitoring and analysis**

**Enable sophisticated demand-based price modeling founded on real world, practical business constraints**

**Support real-time decision making**

Align the pricing and marketing functions through common value metrics and behavioral models

Deliver data and graphic-rich management information that is fully customizable”

Radar Pricing Software 4.5 Tests Fairness

The new release emphasizes pricing transparency, giving insurers tools to measure fairness in their pricing models and fulfill their commitment to giving customers clear and fair information.

“Increasing regulatory pressure to demonstrate transparency in pricing means insurers must work out the best way to define, monitor and exhibit fairness.

“This latest release of Radar gives insurers the tools they need to measure fairness in their pricing models and deliver on their commitment to give customers clear and fair information so they can make the right decision.”

Radar 4.5 includes an evaluation library component to help insurers assess their pricing choices against several measures of fairness, such as fairness through unawareness, the quota system and conditional group parity, and determine whether or not their prices adhere to or violate any of those particular metrics within their portfolio, Willis Towers Watson reports. Other updated features of Radar include further enhancements to the elastic net machine learning method that the solution uses.
Big Data Analytics / AI Example 3: Facial Analytics

From “The Why and What of Accelerated Underwriting”

Accelerated underwriting with new data sources . . . can cause movement of between risk classes of existing insured/applicant pool.

Multiple new data sources to address the full UW space: Wearable technology, Credit profiles, Criminal histories, Smarter App & Candor Analytics

Acceleration without Automation may leave companies falling short of the ultimate potential to change the paradigm.

Most of the new, emerging commonly suggested alternative data sources can be used to predict/stratify mortality:

Criminal History, Credit Mortality Risk Score, Facial Analytics

---

Footnote:

2 https://www.acli.com/-/media/ACLI/Files/Events/MED2018/Mon021918TheWhyandWhatofAcceleratedUnderwritingMaryBahnaNolanonlineversion.ashx?la=en
**Facial Analytics** is one emerging technology that may be used to verify smoker status, BMI, other diseases and reduce the sentinel effect.

Technological advances allow the combining of facial analytics with constantly evolving bio-demographic data to provide insurers with more insight, speed and accuracy than ever before.

While insurance companies have traditionally used chronological age for estimating lifespan, this technology provides a new, scientifically proven method of forecasting mortality based on estimates of the rate at which someone is aging. As no two people age at the same rate, by taking each user’s individual traits into account, facial recognition provides more realistic and reliable results.
AlNow, “Discriminating Systems: Gender, Race and Power in AI”\(^3\)

*The use of AI systems for the classification, detection, and prediction of race and gender is in urgent need of re-evaluation.*

The histories of ‘race science’ are a grim reminder that race and gender classification based on appearance is scientifically flawed and easily abused. Systems that use physical appearance as a proxy for character or interior states are deeply suspect, including AI tools that claim to detect sexuality from headshots, predict ‘criminality’ based on facial features, or assess worker competence via ‘micro-expressions.’ Such systems are replicating patterns of racial and gender bias in ways that can deepen and justify historical inequality. The commercial deployment of these tools is cause for deep concern.

\(^3\) https://ainowinstitute.org/discriminatingsystems.pdf
“Facing Up to Bias in Facial Recognition,” *American Banker*

Last week the American Civil Liberties Union demanded that Amazon stop selling its Rekognition program to government agencies and police departments. The ACLU said the technology is flawed and that it is worried law enforcement agencies will use the system to track protesters and immigrants.

Recent studies have shown facial recognition systems tend to have higher error rates for women and minorities than white men.

Antony Haynes, associate dean for strategic initiatives and information systems at Albany Law School, pointed out that all artificial intelligence systems have the potential for bias.

“One assumption we make as human beings is that putting something in software makes it somehow objective or neutral or unbiased,” he said. “That couldn’t be further from the truth because a human being has to write the software, provide the training data, and tell the system when it succeeds or fails.”

---

Big Data Example Analytics / AI 4: Granular Aerial Photography

Geospatial Intelligence Center⁵

“Our Metro-Maps collection is based on versatile, high-resolution aerial systems and offer deep insight into top US metropolitan areas through 7.5cm GSD vertical and 360° oblique views. Mobile mapping sensors provide street-level intelligence through 360° imagery along with elevation data produced through high-density point clouds. Collections are repeated on an annual basis and more frequently for high growth locations.”

Keener Insight Into Property Conditions

The GIC offers the most comprehensive, diverse and detailed imagery collection along with tools and analytics for keener insight into property condition. Combined with historical data of a surrounding area, predictive analysis can be made for deeper understanding of underwriting risk. The result is streamlined underwriting, allowing you to better serve your customers while reducing operating costs.

⁵ http://geointel.org/annual-imagery-program/
Rapid & Effective Disaster Response

GIC high-resolution aerial imagery is rapidly accessible to first responders, humanitarian organizations, and federal and state agencies, providing them with actionable insight into the situation on the ground.

Funded by the GIC consortium of insurers, this support is provided to help responders assist those in need and save lives during and after disaster.

The GIC is a National Insurance Crime Bureau (NICB) initiative in partnership with Vexcel Imaging that is focused on building a national database of high resolution imagery to be used by its member companies that write almost 80 percent of all property/casualty insurance and over 94 percent of all auto insurance in the country, as well as public sector and non-governmental organizations. The Geospatial Intelligence Center has previously mapped the areas hardest hit by hurricanes and disasters and those views are also available through the web map portal.
Big Data Analytics / AI Example 5: Criminal History

“TransUnion recently evaluated the predictive power of court record violation data (including criminal and traffic violations)

“Also, as court records are created when the initial citation is issued, they provide insight into violations beyond those that ultimately end up on the MVR—such as violation dismissals, violation downgrades, and pre-adjudicated or open tickets.”

What is the likelihood that TU Criminal History Scores have a disparate impact against African-Americans? Consider policing records in Ferguson, Missouri.
US DOJ Investigation of the Ferguson Police Department

Ferguson’s approach to law enforcement both reflects and reinforces racial bias, including stereotyping. The harms of Ferguson’s police and court practices are borne disproportionately by African Americans, and there is evidence that this is due in part to intentional discrimination on the basis of race.

Ferguson’s law enforcement practices overwhelmingly impact African Americans. Data collected by the Ferguson Police Department from 2012 to 2014 shows that African Americans account for 85% of vehicle stops, 90% of citations, and 93% of arrests made by FPD officers, despite comprising only 67% of Ferguson’s population.
US DOJ Investigation of the Ferguson Police Department (2)

FPD appears to bring certain offenses almost exclusively against African Americans. For example, from 2011 to 2013, African Americans accounted for 95% of Manner of Walking in Roadway charges, and 94% of all Failure to Comply charges.

*Our investigation indicates that this disproportionate burden on African Americans cannot be explained by any difference in the rate at which people of different races violate the law. Rather, our investigation has revealed that these disparities occur, at least in part, because of unlawful bias against and stereotypes about African Americans.*
Big Data Analytics / AI Example 6: Carpe Data

Using proprietary algorithms and proven AI, Carpe Data harnesses the power of emerging and alternative data for insurance carriers around the world.

Claims Activity performs the search and analysis of highly impactful social and web data. It monitors and finds the “needle in the haystack” to provide reliable actionable claimant activity.

Leveraging social data sources is a must for the modern insurer:

- It influences claims investigation and handling
- Its efficient use impacts the ultimate claim cost
Carpe Data Claims Activity – How It Works

Pictured in Valentine’s Day swing dance at local restaurant site

Noted on neighborhood blog as winning the Easter Egg Roll contest

Posted about enjoying a big family picnic

Finishing time in the Turkey Trot 5K

Next Generation Indexes

A suite of indexes targeting dimensions of risk that can be tuned by segment and location.

Cleans and normalizes data that can be sparse, noisy, biased, unstructured, or redundant.
Analytics / AI Big Data Example 7: ISO ClaimSearch Tools

Fast-track meritorious claims while improving fraud detection

ISO ClaimSearch® is more than the world’s largest database of property/casualty claims—it’s also a robust claims intelligence platform. Its claims-matching technology is an essential first step in fraud detection, and the results can help facilitate fast-tracking. The platform also provides seamless access to integrated claims fraud-detection and investigative analysis tools.
Claims Director

Improve claims triage with our fraud analytics scoring system

ClaimDirector uses industry-based rules to analyze claims and identify fraud indicators. It then calculates a score to help adjusters decide whether to process a claim or triage it for investigation. SIU teams can use the solution to uncover potential fraud and explore suspect factors. The solution uses advanced algorithms to determine the likelihood of claims fraud:

- Compares claims to 1.3 billion records in ISO ClaimSearch® plus NICB data
- Evaluates claims by type, line of business, loss date, and loss type
- Provides scores for both claim and entity
- Revises scores in real time as claims are updated
- Customizes claims triage based on company preferences
**Liability Navigator**

Achieve consistent settlements, accurate liability assessments, and better subrogation recovery

Insurers are charged with resolving claims as quickly and fairly as possible—while minimizing leakage and paying only what is owed. Applying accurate liability and value determinations is critical to achieving the right balance. But currently, claims handlers often are unable to identify cases in which a claimant is partially at fault. So insurers miss opportunities to improve the bottom line.

With Liability Navigator®, customers report improvements—from 8 percent to more than 20 percent—in the application of comparative liability.
What’s Needed to Create AI Applications for Insurance Market Regulation?

**Timely, Reliable, Granular, Consistent and Sufficient Data**

- Timely – the learning data reflect conditions and parameters for period in which the outcomes will be relied upon.

- Reliable – the learning data don’t reflect bias in selection or outcomes.

- Granular – data records contain sufficient individual characteristics to discover relationships.

- Consistent – data records are sufficiently comparable for analysis.

- Sufficient – the volume of data is sufficient to produce reliable predictions.

Non-biased learning data – identify bias in historic data and bias in modeler assumptions.
What’s Needed to Create AI Applications for Insurance Market Regulation?

Identification of Desired Outcomes

Initial Rules to Produce Desired Outcomes

Testing and Decision to Utilize Machine
AI for Insurance Market Regulation: Policy Form Review

Task: Automate policy review to:

- Determine what statutory and regulatory provisions apply to the policy form
- Ensure the policy form is submitted pursuant to the appropriate line of business and regulatory review
- Ensure required provisions are included
- Ensure prohibited provisions are excluded
- Ensure forms are not deceptive or misleading
- Ensure policy language is coherent and meets reading level grade comprehension
- Extract coverage provisions for posting to consumer information tools
- Review approved / in-use forms in the event of changes in statutory requirements or interpretation
Learning Data for AI:
Timely, Reliable, Granular, Consistent and Sufficient?

Timely – possibly – are historic outcomes consistent with current requirements and conditions?

Reliable – possibly – how determine prior form approvals were accurate?

Granular – yes – text recognition of each word

Sufficient – yes – thousands of filings

Consistent – possibly – how determine differences across analysts?
Alternative approach

Build a review engine from scratch – don’t rely upon historic approvals as evidence of desired outcomes.

Then apply new review engine to historical data to examine differences in outcomes.

Analogous to building catastrophe models based on scientific assumptions regarding outcomes resulting from specific events.

Still require timely, reliable, sufficient, consistent and granular data.

Still require identification of desired outcomes.

Still require testing and decision to utilize machine learning.
AI for Market Regulation: Market Surveillance and Analysis

Task: Identify potential violations or consumer harms in real time – or at least within weeks of the actual or potential harm.

Comparison: Can financial regulators identify potential company or industry financial weakness in real time or at least within weeks of events causing such weakness?

To a significant extent, Yes – financial regulators have granular data on each company’s investments – every bond, equity, and other investment. If there are significant economic dislocations, financial regulators can model the effect in real time on individual companies and the industry.
AI for Market Regulation: Market Surveillance and Analysis

Timely, Reliable, Granular, Consistent and Sufficient Data Available?

Timely – No
Granular – No
Reliable – Possibly
Consistent – Possibly
Sufficient -- No

It all starts with data – AI for insurance market analysis requires more granular and timely data.

More granular is crucial to better deploy analytics. AI tools to discover known and unknown anomalies require transaction level data to find relationships.

More timely is crucial to deploy analytics in real time or in a meaningful time frame.
AI for Market Regulation: Market Surveillance and Analysis

Scenario 1 – Try to build AI tools for existing systems, each of which was designed to address / meet a single or specific purpose.

Scenario 2 – Start with the outcomes and functionality you want and determine the data necessary to power the AI tools for that functionality.

Scenario 1 will always be limited because of inconsistent data – e.g., data from one system that is either not comparable to or not combinable with data from another system.

Difference between a data warehouse of individual premium and loss transactions versus a series of data calls examining specific issues. Key is sufficient volume and granularity to discover relationships.