

**Financial Analysis Solvency Tools (E) Working Group**  
**Exposure Draft to Change Life IRIS Ratios No. 10 and 12 for a 30-day Public Comment**  
**Period**  
**Public Comment Period Ends September 25, 2023**

Recommendation to change two IRIS ratios due to Blanks changes beginning with the 2023 annual filings.

- ***Attachment 1*** – Life IRIS Ratio 10 (Change in Product Mix) change recommendation due to blanks change for 2023 and threshold change recommendation.
  - ***Attachment 2*** – Life IRIS Ratio 12 (Change in Reserving) change recommendation due to blanks change for 2023.
  - ***Attachment 3*** – Life IRIS Ratio 10 (Change in Product Mix) Summary of analysis on change in threshold.
-

## LIFE/A&H CHANGE IN OPERATIONS RATIO 10 – CHANGE IN PRODUCT MIX

	CURRENT YEAR AMOUNT (1)	CY % OF TOTAL (2)	PRIOR YEAR AMOUNT (3)	PY % OF TOTAL (4)	COL (2) LESS COL (4)% (5)
Premiums & Annuity Considerations Page 9, Line 20.4					
A. <del>Industrial Life</del> Individual Life, Column 2					
B. <del>Ordinary Life</del> InsGroup Life, Column 3					
C. Ind. Annuities, Column 4					
D. <del>Credit Life</del> Group Annuities, Column 5					
E. <del>Group Life</del> Accident & Health, Column 6					
F. <del>Group Annuities, Column</del> 7Total					
G. <del>Group A&amp;H, Column</del> 8Total of Ratio Column 5 Disregarding Sign					
H. <del>Credit A&amp;H, Column 9</del>					
I. <del>Other A&amp;H, Column 10</del>					
J. Total					
K. <del>Total of Ratio Column 5 Disregarding Sign</del>					

Result = ~~K-G~~/95 \_\_\_\_\_ %

- If ~~J-E~~ for either current or prior year is zero or negative, no result is calculated (NR).
- Ratio is calculated as follows: First determine the percentage of premium from each product line for CY and PY. Next, determine the difference in the percentage of premium between the two years for each product line. Finally, the total of these differences, without regard to sign, is divided by the number of product lines to determine the change in the percentage of premium for the average product line.

The result of this ratio represents the average change in the percentage of total premium from each product line during the year. The product lines are those defined in Exhibit 1 – Part 1 – Premiums and Annuity Considerations page of the annual financial statement.

The usual range includes results less than ~~5-10~~ percent. See the general comments titled “Life/A&H Change in Operations Ratios,” preceding Ratio 9.

*Branded Risk(s): PR/UW*

## LIFE/A&H CHANGE IN OPERATIONS RATIO 12 – CHANGE IN RESERVING

		CURRENT YEAR	PRIOR YEAR
A. Increase in Agg. Reserves – Industrial Life	Page 6.1, Line 19, Column 2		
B. Increase in Agg. Reserves – Ordinary Life Ins.	Page 6.1, Line 19, Column 3, 4, 5, 6, 7, 8, 9, 10, 11, 12		
C. Net Single Premiums – <del>Industrial</del> Individual Life	Page 9, Line 10.4, Column 2		
D. Net Renewal Premiums – <del>Industrial</del> Individual Life	Page 9, Line 19.4, Column 2		
E. Net Single Premiums – Ordinary Life Ins.	Page 9, Line 10.4, Column 3		
F. Net Renewal Premiums – Ordinary Life Ins.	Page 9, Line 19.4, Column 3		
Result = [(CY (A+B) / (C+D+E+F)) – (PY (A+B) / (C+D+E+F))] * 100			%

- If (A+B) and (C+D+E+F) for current or prior year are both zero or negative, (A+B) / (C+D+E+F) = 0 for that year.
- If (A+B) is positive and (C+D+E+F) is zero or negative for current or prior year, (A+B) / (C+D+E+F) = 100% for that year.
- This ratio represents the number of percentage points of difference between the reserving ratio for current and prior years. For each of these years, the reserving ratio is equal to the aggregate increase in reserves for individual life insurance taken as a percentage of renewal and single premiums for individual life insurance.

Positive ratio results indicate an increase in this ratio from the prior year. Negative results indicate a decrease. The usual range of the number of percentage points of difference between the reserving ratios for current and prior years includes all results less than 20 percent but greater than -20 percent. For insurers with no ~~industrial or ordinary~~ individual life business, a ratio value of zero, which is within the range of acceptability for the ratio, will be reported. See the comments titled “Life/A&H Change in Operations Ratios,” preceding Ratio 9.

*Branded Risk(s): RV*

## PROPOSED CHANGE TO LIFE/A&H CHANGE IN OPERATIONS RATIO 10 – CHANGE IN PRODUCT MIX

Due to adopted 2023 annual blanks changes to the Exhibit 1, Premium and Annuity Considerations, staff is proposing a calculation and threshold changes be considered for adoption to IRIS Ratio #10. Exhibit 1, Premium and Annuity Considerations was streamlined for 2023 annual where several lines of business reported in the 2022 year-end and prior Life financial filings were consolidated in 2023. For 2022 and prior, IRIS Ratio #10 utilized 9 lines of business (LOBs) from Exhibit 1 to calculate the Change in Operations (Product Mix) ratio. For year-end 2023, staff is recommending the ratio to utilize the newly adopted 5 LOBs that include “Individual Life” and “Accident & Health” for Ratio 10 calculation purposes.

Because the ratio used a divisor of 9 (# of LOBs) in 2022 year-end and prior, staff analyzed the impact of using 2022 year-end and prior data to test the impact of the 2023 blanks changes and calculation. This resulted in using a divisor of 5 instead of 9 for the change in product mix and usual ratio results of < 10%. Below is a table depicting the actual number of “Unusual Values” identified for 2022 year-end for Ratio #10. Table 1 gives scenarios where staff utilized the 2022 financial data and applied the newly adopted 2023 LOBs and calculation using a divisor of 5. The “Unusual Values” are shown in the table with the varying thresholds respective % to the total number of Life/A&H filers. Here are a few key points about the table and analysis performed:

- The current Ratio 10 threshold for a usual value is < 5% in 2022 and prior with results shown in yellow.
- Adjusting the ratio calculation to divide by 5 due to the less granular Exhibit 1, Premiums and Other Considerations data and keeping the usual threshold at <5% increased the number of “Unusual” values (outside of range) to 85 (11% of total Life/A&H filers). This is an increase of 32 companies that would get flagged with an “Unusual Value.”
- The table also shows the impact as we move the threshold up to a high of 10% where 19 companies get flagged, which accounts for nearly 3% of the total Life/A&H filers compared to 59 or 8% for the 2022 actual results shown in the yellow.

**Table 1**

IRIS Life/A&H Change In Operations Ratio 10- Change in Product Mix Impact of Threshold Change and Updated Calculation for 2023					
Year	Usual Threshold	# of Unusual	% of Total L/A&H Filers	Difference	Difference as a % of Total L/A&H Filers
<b>YE 2022 Actual</b>	<b>&lt; 5%</b>	<b>59</b>	<b>7.8%</b>	<b>-</b>	<b>-</b>
Proposed *	< 5%	85	11.3%	26	3.4%
Proposed *	< 6%	60	7.9%	1	0.1%
Proposed *	< 6.5%	52	6.9%	(7)	-0.9%
Proposed *	< 7%	42	5.6%	(17)	-2.3%
Proposed *	< 7.5%	41	5.4%	(18)	-2.4%
Proposed *	< 8%	40	5.3%	(19)	-2.5%
Proposed *	< 9%	27	3.6%	(32)	-4.2%
Proposed *	< 10%	19	2.5%	(40)	-5.3%

\* YE 2022 data applied to 2023 LOB changes & updated calculation using a divisor of 5 instead of 9.

Proposal: NAIC staff proposes a threshold at < 10% and modifying the ratio calculation to use the divisor of 5 due to the 2023 blank changes for Exhibit 1, Premiums and Other Considerations adopted recently by the Blanks Working Group. The recommended threshold change is better aligned with a risk-focused

approach where an analyst may have more concern to inquire with the company being reviewed as opposed to an immaterial “Unusual Value” that is just over the 5% threshold in place currently. The increased threshold will also allow for some efficiencies in that analyst may be able to help prioritize their time to avoid investigating an “Unusual Value” that is likely an immaterial concern.

Staff did conduct a 3-year look back to compare how 2021 and 2020 results would look under the various thresholds. Table 2 shows the 3-year results for a < 10% threshold (in green) and at < 8% shown in Table 3 below (in green).

Table 2

Actual Unusual Ratio Indicator 2020-2022			Proposed Unusual Ratio Indicator 2020-2022, With Threshold of 5.0			Proposed Unusual Ratios 2020-2022 (Threshold of 10)		
UNUSUAL RATIO IND ACTUAL 2022	UNUSUAL RATIO IND ACTUAL 2021	UNUSUAL RATIO IND ACTUAL 2020	PROPOSED UNUSUAL RATIO IND 2022 (5.0)	PROPOSED UNUSUAL RATIO IND 2021 (5.0)	PROPOSED UNUSUAL RATIO IND 2020 (5.0)	Proposed unusual Ratios 2022 (alt Threshold)	Proposed unusual Ratios 2021 (alt Threshold)	Proposed unusual Ratios 2020 (alt Threshold)
59	67	71	85	99	88	19	23	21

Table 3

Actual Unusual Ratio Indicator 2020-2022			Proposed Unusual Ratio Indicator 2020-2022, With Threshold of 5.0			Proposed Unusual Ratios 2020-2022 (Threshold of 8)		
UNUSUAL RATIO IND ACTUAL 2022	UNUSUAL RATIO IND ACTUAL 2021	UNUSUAL RATIO IND ACTUAL 2020	PROPOSED UNUSUAL RATIO IND 2022 (5.0)	PROPOSED UNUSUAL RATIO IND 2021 (5.0)	PROPOSED UNUSUAL RATIO IND 2020 (5.0)	Proposed unusual Ratios 2022 (alt Threshold)	Proposed unusual Ratios 2021 (alt Threshold)	Proposed unusual Ratios 2020 (alt Threshold)
59	67	71	85	99	88	40	52	54

## IRIS RATIO #12 – CHANGE IN OPERATIONS- CHANGE IN RESERVING

IRIS Ratio #12 has been updated to reflect the new condensed lines of business for Exhibit 1, Premiums and Other Considerations. The industrial and ordinary life lines of business were removed and are now aggregated together within the Individual Life line of business. This is shown in the track changes version of the IRIS Manual text. There would be no material impact to results or the “Unusual Value”.