REPORT

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EIOPA's assessment of the valuation of technical provisions gross and net of reinsurance for the motor third party liability portfolio of Euroins Romania Asigurare-Reasigurare S.A.

European Insurance and
Occupational Pensions Authority

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EXECUTIVE SUMMARY

On the basis of EIOPA's mandate provided for in Regulation (EU) No 1094/2010 (EIOPA Regulation), in particular Article 8(1)(b) thereof, EIOPA has performed a technical assessment of the valuation of technical provisions gross and net of reinsurance for the motor third party liability portfolio of Euroins Romania Asigurare-Reasigurare S.A. (Euroins Romania) at the reference date of 30 September 2022.

EIOPA's assessment was performed over the data reported by Euroins Romania to the ASF. EIOPA had no access to the ASF's permanent control report and adjustments' computation, in order to ensure full objectivity and impartiality.

EIOPA's assessment concludes that:

1. The gross technical provisions recognised by Euroins Romania are insufficient.

EIOPA's estimation of Euroins Romania's gross best estimate of motor third part liability line of business is 81% to 89% higher than the Euroins Romania's own estimation.

In nominal terms, the estimated insufficiency ranges between RON 1.438 million to RON 1.577 million (EUR 309 million to EUR 340 million).

The main differences come from Euroins Romania's computation of the best estimate of the claims provision, where:

- there is a lack of information on the last diagonal of the payments run-off triangles which is not adjusted using a statistical method or expert judgement, leading to a significant underestimation of the best estimate for the claims provision;
- reserving does not reflect the observed payment pattern, namely the slowed down claims payments in last years;
- the claims with annuities and the big claims above EUR 750,000 are underestimated by the inconsistent application of the frequency-severity methodology.

Although with a lower impact, the following inconsistencies with the Solvency II framework were also observed regarding the computation of the premiums provision:

- the ultimate loss ratio is underestimated as a consequence of the underestimation of the best estimate of the claims provision;
- the computation's formula of the ultimate loss ratio is circular, and the insurance undertaking does not consider the changes in the average premiums;
- the written premiums related to bound but not incepted contracts are not considered.

2. The reinsurance recoverable recognised by Euroins Romania are overvalued.

When considering the best estimate as computed by Euroins, EIOPA's estimation of the reinsurance recoverable is 93% lower than Euroins Romania's estimation.

In nominal terms, the ceded BE is overvalued by around RON 1,266 million (EUR 256 million).

Adjustments relate to Euroins Romania's computation of the ceded BE in cases where:

- the reinsurance recoverable computation of the Excess of Loss (XoL) treaty performed by the insurance undertaking is not commensurate with the real risk mitigation effect of the treaty given the methodology in place for the Incurred But Not Reported (IBNR) provision (the average gross-to-net ratio on the historical data is not representative for the entire IBNR provision), and the methodology used by the insurance undertaking leads to inconsistent results;
- the valuation adopted by the insurance undertaking for Quota Share with Loss Portfolio Entry and Quota Share treaties does not reflect the underlying economic nature of the agreement, as although having the legal form of a Quota Share agreement the treaty has a non-proportional underlying economic nature;
- the excess of loss on IBNR treaty includes an ambiguous legal wording regarding the IBNR definition and unclarity about the date of settlement, as well as a significant uncertainty on the amount that could be ceded to the reinsurer in practice given the annual renewal replacing the initial agreement.

3. Overall deficiency

As a result of 1. and 2., **EIOPA's estimation of the deficiency of the net best estimate,** for the motor third part liability line of business of Euroins Romania at the reference date of 30 September 2022, including annuities stemming from non-life, **ranges between EUR 550 million to EUR 581 million.**

Other remarks

EIOPA's findings as regards Euroins Romania's data quality and the non-compliance with the insurance undertaking's own methodology and with the Solvency II requirements can be interpreted as a sign of weaknesses in terms of Euroins Romania's validations and internal control system.

EIOPA is committed to support the national supervisory authorities and to contribute to the correct and consistent application of the Solvency II regulation with a view of ensuring proper protection of policyholders and beneficiaries.

This Report shall be read without prejudice to the ASF's competence for the supervision of Euroins Romania.

1. BACKGROUND

Following-up on the 2020-2021 Balance Sheet Review (BSR)'s outcome, ASF informed EIOPA on the state of play of the implementation of the recommendations and adjustments concerning Euroins Romania.

A college meeting of the Euroins group was held on 7 February 2023 with ██████████

In this context, and on the basis of EIOPA's mandate provided for in the Regulation, in particular Article 8(1)(b) thereof, EIOPA decided to perform an own technical assessment regarding Euroins Romania's technical provisions gross and net of reinsurance, with a view to assess the correct and consistent application of the Solvency II framework and ensure proper protection of policyholders and beneficiaries.

EIOPA's decision to perform its own assessment was communicated to the ASF and FSC by letters dated, 9 and 13 February 2023, respectively. The participants of the college of supervisors were informed about EIOPA's assessment on 8 March 2023.

2. METHODOLOGY

2.1. INDEPENDENCE

Based on the EIOPA Regulation, when carrying out its tasks, EIOPA shall act independently and objectively and in the interest of the Union alone.

To prevent any unwarranted influence over EIOPA's assessment, the assessment was performed based on the data reported by Euroins Romania to the ASF, with reference date of 30 September 2022. Further responses and explanations communicated from Euroins Romania to ASF were only considered if entailing changes or providing explanations on the reported dataset.

EIOPA had no access to the ASF's permanent control report and adjustments' computation, ensuring full objectivity and impartiality. During the assessment period, EIOPA only engaged with the ASF as deemed necessary to ask for clarifications regarding the data, and no preliminary findings or conclusions were discussed with ASF or any other party.

2.2. SCOPE AND MATERIALITY

EIOPA's assessment was performed over Euroins Romania's technical provisions gross and net of reinsurance at the reference date of 30 September 2022. The targeted scope of EIOPA's assessment reflects the areas of concern expressed by both ASF and FSC, aimed at providing the NCAs with an independent recalculation at the same date of reference used by ASF as a basis for its proposed actions.

The Best Estimate (BE) subject to EIOPA's assessment covered the Motor Third Party Liability (MTPL) portfolio BE which represents 98.7% of the total BE in the reported Solvency II balance Sheet of the insurance undertaking at the reference date.

The reinsurance recoverable subject to EIOPA's assessment covered 99,8% of the total recoverable on the MTPL Line of Business (LoB), on the basis of the reported Solvency II Balance Sheet of the insurance undertaking at the reference date.

2.3. REFERENCE FRAMEWORK

The reference framework for EIOPA's assessment was the Solvency II regulation, namely:

- Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II Directive);

- Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing the Solvency II Directive (DR);

- Regulatory and Implementing Technical standards for application of the Solvency II Directive;
- EIOPA Guidelines relating to the Solvency II Directive.

2.4. ASSESSMENT PROCESS

EIOPA's experts visited the ASF on 15-17 February 2023 and 14-15 March 2023 to examine and understand the data available and the procedural aspects confirming the origin of the data.

The data made available by Euroins Romania to ASF was uploaded to EIOPA through secured channels.

At EIOPA premises,

- the data was reconciled with the regular supervisory reporting i.e Quantitative Reporting Templates (QRT)s provided by the insurance undertaking[1];
- EIOPA's experts performed a recalculation of the technical provisions gross and net of reinsurance (see chapter 3.).

EIOPA's assessment was subject to a quality assurance process to ensure the quality of the assessment's outcome. Accordingly, the assessment involved at EIOPA:

- 3 experienced actuaries and 3 experts with accounting expertise and/or data handling skills. The analysis was followed with a four-eyes principle check;
- 2 legal experts;
- EIOPA's management reviewed that the conclusions were validly drawn from the results of the analysis.

EIOPA's assessment work was finalised on 28 March 2023 with the approval of the current report by EIOPA's Senior Management.

2.5. LIMITATIONS

EIOPA's assessment was performed over the data reported by Euroins Romania to ASF in the supervisory regular reporting (QRTs) and of the ASF's off-site supervisory review of the financial and solvency position of the insurance undertaking at the reference date of 30 September 2022 (see chapter 4).

EIOPA's assessment entails the following main limitations:

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[1] EIOPA own database compiles the QRTs from all insurance undertakings subject to the Solvency II reporting requirements in the EU

- Going concern

EIOPA's assessment builds on the assumption that the Solvency II balance sheet is prepared on a going concern basis and that Euroins Romania fulfils the Solvency II requirements.

- Scope and Materiality

EIOPA's assessment targeted the technical provisions gross and net of reinsurance in the MTPL LoB. As such, there is a risk that some misstatements on other Solvency II items and areas are not detected by the assessment.

- Fraud risk

EIOPA's assessment was performed on the basis of the data reported by Euroins Romania to ASF. EIOPA's data analysis did not include the identification and evaluation of any potential internal or external fraud.

3. EIOPA'S ASSESSMENT

EIOPA's assessment was performed in two steps, entailing a first assessment of the Euroins Romania's Best Estimate (BE) gross of reinsurance and subsequently an assessment of the part ceded to reinsurers (ceded BE)[2].

EIOPA's assessment was performed over the computation of the BE and ceded BE of the MTPL LoB.

To perform its assessment, EIOPA made use of:

- The Euroins Romania's QRTs at 30 September 2022, available at EIOPA;
- The Euroins Romania's methodology for the calculation of the BE for Solvency II purposes, as reported to ASF;
- The Euroins Romania's calculation files for both BE claims provisions and BE premium provisions gross and net of reinsurance for Solvency II purposes, as reported to ASF;
- The reinsurance treaties in place at the reference date, as reported to ASF;
- Clarifications provided by Euroins Romania to ASF.

A detailed list of the data used is included in Annex 1.

3.1. EUROINS ROMANIA SOLVENCY II BALANCE SHEET

Based on the QRTs reported by Euroins Romania available in EIOPA database, a simplified Solvency II Balance Sheet at 30 of September 2022 is presented in the next table.

Table 1: Simplified Solvency II Balance Sheet at 30 September 2022 - in Millions EUR

Assets		Liabilities	
Deferred tax assets	35	Non-Life BE	366
Investments	83	Life BE	20
Reinsurance recoverable	275	Risk margin	6
Non-Life	262	Deferred tax liabilities	29
Life and similar	13	Reinsurance payables	15
Reinsurance receivables	21	Payables (not insurance)	6
Cash and cash equivalents	80	Subordinated liabilities	9
Other assets	47	Other Liabilities	12
Total assets	**541**	**Total Liabilities**	**464**
Excess of assets over liabilities		**77**	

Source: Euroins Romania's QRTs, S.02.01 at 30 September 2022

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[2] Due to rounding, numbers presented throughout this report may not add up precisely to the total provided and percentages may not precisely reflect the absolute figures.

The amount of reinsurance recoverable is significant, roughly 50% of the total assets and representing 70% of the technical provisions, indicating a high reinsurance leverage.

The split of the non-life BE and of the ceded BE (i.e. non-life reinsurance recoverable) by LoB is detailed in the next table.

Table 2: Non-life Best Estimate (gross and net of reinsurance) by LoB - in Millions EUR

	BE Premiums	BE Claims	Total non-life BE	Ceded BE Premiums	Ceded BE Claims	Total Ceded BE
Motor TPL	140	221	362	108	153	261
Motor MTPL / Total	98.1%	99.0%	98.7%	99.7%	99.8%	99.8%
Other motor	1.7	1.2	2.9	-	-	-
MAT	0.01	0.002	0.01	0.005	0.001	0.006
Fire and other	0.4	0.5	0.8	0.2	0.2	0.4
General liability	0.04	0.03	0.03	0.08	0.05	0.06
Credit and suretyship	0.2	0.06	0.3	0.1	0.03	0.1
Assistance	0.2	0.2	0.4	-	-	-
Miscellaneous	0.0001	-	0.0001	-	-	-
Total	143	224	366	109	153	262

Source: Euroins Romania's QRTs, S.17.01 at 30 September 2022

MTPL LoB represents 98.7% of the total non-life BE and 99.8% of the total reinsurance recoverable.

3.2. TECHNICAL PROVISIONS

3.2.1. BEST ESTIMATE FOR CLAIMS PROVISION

EIOPA focused its assessment on estimating the final cost of claims still to be paid by Euroins Romania (or Claims Result), before inflation, expenses, and discounting modelling. Their impact on the BE was considered using the following approach:
- The impact of inflation is considered by adding a percentage to the Claims Result without inflation. See Table 3 below (line 'Impact inflation');
- The expenses are added afterwards as an amount. See Table 3 below (line 'Expenses');
- The impact of discounting is finally considered by reducing the undiscounted BE of Claims Provision by 16.2%. See Table 3 below.

Given the low materiality when computing the Claims Result, EIOPA used the same tail factors as Euroins Romania.

3.2.1.1. CLAIMS RESULT EXCLUDING BIG CLAIMS AND CLAIMS WITH ANNUITIES

3.2.1.1.1. EUROINS ROMANIA METHODOLOGY

The methodology used by Euroins Romania for the calculation of the BE of Claims Provision is described in the document *'ACT-04_Ed.2_Rev.1_10.2022_Constituirea, mentinerea si monitorizarea celei mai bune estimari a rezervelor tehnice conform regimului Solvency II'*.

Euroins Romania splits the computation of the BE of Claims Provision for the MTPL LoB in different homogeneous risk groups (HRG):

- Attritional claims Material Damage (Attritional MD), less than RON 100,000 and excluding claims with annuities;
- Attritional claims Bodily Injury (Attritional BI), less than RON 100,000 and excluding claims with annuities;
- Large claims Material Damage (Large MD) with a known cost of more than RON 100,000, less than EUR 750,000 and excluding claims with annuities;
- Large claims Bodily Injury (Large BI) with a known cost of more than RON 100,000, less than EUR 750,000 and excluding claims with annuities;
- Big claims with a known cost of more than EUR 750,000.

The annuities stemming from MTPL claims are computed separately and included in the Life BE.

For each of the five HRGs above, Euroins Romania computes the Claims Reserve, including expenses and allowance for inflation. The nominal basis of the BE is then discounted to derive the BE for Claims Provision.

The different steps are detailed in the next table. The amounts are indicated in RON as in Euroins Romania's computation files. The amount of EUR 221 million representing the BE of Claims Provision in the previous table (Table 2) translate to RON 1,096 in the table below, considering the exchange rate on 30 September 2022 of 1 EUR for 4.949 RON.

Table 3: MTPL BE for claims provision by HRG

Million RON	BI attritional	MD attritional	BI large claim	MD large claim	BI over 750K	Total
Claims Result (wo inflation)	97	414	370	199	65	1,146
Claims Result with inflation	110	457	416	225	72[3]	1,279
Impact inflation	+12.5%	+10.3%	+12.5%	+13.1%	+9.6%	+11.7%
Expenses	2	8.5	10.2	6.5	1.8	29
Undiscounted BE of Claims	112	465	426	232	74	1,308
BE of Claims						1,096
Impact Discounting						-16.2%

Source: Euroins Romania via ASF, excel files 'BE_claims_res_SII_30.09.2022' and 'BE CR MTPL 30.09.2022'

For the first four HRGs (i.e. excluding the big claims with a known cost of more than EUR 750,000), Euroins Romania uses the Chain-Ladder method on a payments triangle.

Euroins Romania is using historical claims payments for the last 10 years, at the computation date of 30 September 2022. The payments are grouped by claim's accident year[4] and by development year.

Euroins Romania defines the development years with regard to the delay in the payments compared to the date of the accident. Some individual development factors are excluded as they are considered atypical by Euroins Romania. A tail factor is then applied before deriving to the Claims Result. For the last accident period, Euroins Romania is using an ultimate loss ratio approach.

More explanations on the development years, the development factors, their exclusion when relevant and the tail factor are given in the next section on the EIOPA assessment.

3.2.1.1.2.   ANALYSIS

Non-life BE scope

Euroins Romania defines 4 HRGs below EUR 750 000 which exclude any claims with annuities and a 5th HRG with claims above EUR 750 000 that includes the claims with annuities.

All claims with annuities, below EUR 750 000 are excluded from the non-life BE and treated as life BE. In other words, Euroins Romania considers claims with annuities as annuities.

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[3] In the file "BE_Claims_res_SII_30.09.2022", tab "summary MTPL sep.22", cell G3, another amount of RON 73.5m is indicated for the Claims Result with inflation. The value of RON 71.7m reported in this table is coming from BE_Claims_res_SII_30.09.2022\Claims BE Solvency II\B12.

[4] As the computation date refers to 30 September 2022, an accident year represents in this case a period of 12 months, from 01.10.N to 30.09.N+1.

Using the known claims with annuities, Euroins Romania estimates the cost of the unknown claims with annuities (or 'IBNR annuities' as defined by Euroins Romania in the file 'BE_Claims_res_SII_30.09.2022' sheet 'summary MTPL sep.22').

According to Euroins Romania's historic data of claims with annuities, 17% of the estimated final cost of the claims represents annuities and 83% represents other costs.

Euroins Romania's approach regarding claims with annuities is not aligned with the Solvency II substance over form principle. Considering that the life BE is related to biometric risks, only the annuity itself should be considered as a life liability.

Before an insurance undertaking starts to pay the annuity, the economical estimated cost of the annuity and all the other costs of the related claim is expected to be considered as a non-life liability given that the risk is not biometric but 'statistic', i.e. estimating the final cost of the claim including the amount of the annuity.

When an insurance undertaking starts to pay the annuity, an annuity is then recognised as a life liability and included in the Life BE. In the non-life BE, the annuity amount is considered paid by the claim's handler (the principle of not double counting) when estimating the Reported But Not Settled (RBNS) reserve of the initial opened claim. All the other costs relative to the claim are considered as a non-life liability.

As such, in EIOPA's assessment, an additional HRG corresponding to the claims with annuities is recognised in the non-life BE.

EIOPA equally underlines Euroins Romania's inconsistency in the treatment of the claims with annuities, as the claims with annuities below EUR 750 000 are treated as a life liability, and the claims above EUR 750 000 (28 big claims in total of which 11 with annuities) are treated as a non-life liability.

Compilation of triangles

EIOPA performed a recompilation of the claims triangles, as Euroins Romania's compilates its claims triangles in an own, not traditionally used, methodology.

For the estimation of non-life Claims Reserve with classical actuarial methods, the claims data is regrouped in claims triangles (or run-off triangles), for each HRG (see Annex 2 for more details on the Chain Ladder methodology). More precisely, claims data is regrouped per accident period (i.e. the period the claim has occurred) and per development period (i.e. the period in which payments or incurred amounts of the claim are observed).

While traditionally development periods are defined starting from the accident period, Euroins Romania defines the development periods starting from the **exact accident date** of the claims. As a result, Euroins Romania's last diagonal of the triangles is not complete, i.e. claims information is missing

from the last diagonal. The insurance undertaking applies the classic Chain-Ladder method to its triangles **without adjusting** for the fact that the last diagonal is not complete. This results in an underestimation of the projected ultimate claims and thus of the Claims Reserve, particularly for the less developed accident periods.

As a simple example for the missing information, for the last accident period, 01 October 2021 till 30 September 2022, all the payments that would occur 12 months after the exact accident date are not to be known at the computation date of 30 September 2022, e.g. for accidents occurred during May 2022, if payments are done after 30 September 2022 but before May 2023, those payments are not known by the insurance undertaking at the computation date, thus should be estimated using statistical methods or expert judgment. One year later, i.e. at 30 September 2023, the information will be known by the insurance undertaking and those payments will be included in the run-off triangle, but it will be missing the new accident period (i.e. 01 October 2022 till 30 September 2023, same reasoning as before one year later). As such, there is always a lack of information on the last diagonal.

A simple way to visualize the difference is to rebuild the payment triangles as if at computation date 30 September 2021 (i.e. 1 year before) and compare to the triangles at 30 September 2022 (see Figure 1 below). The triangles are from the Attritional MD HRG using EIOPA extractions, and the payments are indicated in an incremental manner, not cumulative.

Figure 1: HRG Incremental Attritional Claims MD

| Euroins method MD attritional 30.09.2022 | | | | | | | | | |
Accident period	1	2	3	4	5	6	7	8	9	10
2012-10-01:2013-09-30 1	147,926,582	51,980,124	20,218,492	6,239,323	1,886,428	1,259,596	219,263	339,368	298,977	82,964
2013-10-01:2014-09-30 2	157,114,616	33,383,450	10,729,693	3,467,002	1,653,811	1,146,415	835,832	588,163	65,224	
2014-10-01:2015-09-30 3	217,280,654	21,390,507	5,977,479	2,644,518	1,967,344	1,809,304	1,362,312	144,313		
2015-10-01:2016-09-30 4	267,866,647	16,554,209	5,036,078	3,919,793	2,053,125	1,937,965	300,645			
2016-10-01:2017-09-30 5	356,231,924	22,062,173	8,877,602	5,709,295	3,679,339	451,429				
2017-10-01:2018-09-30 6	463,947,069	37,477,847	13,945,672	12,122,865	2,167,576					
2018-10-01:2019-09-30 7	658,940,241	107,726,099	56,085,638	9,286,969						
2019-10-01:2020-09-30 8	584,866,515	202,432,201	50,624,119							
2020-10-01:2021-09-30 9	784,581,221	64,205,899								
2021-10-01:2022-09-30 10	555,709,421									

| Euroins method MD attritional as if 30.09.2021 | | | | | | | | | |
Accident period	1	2	3	4	5	6	7	8	9	10
2012-10-01:2013-09-30 1	147,926,582	51,980,124	20,218,492	6,239,323	1,886,428	1,259,596	219,263	339,368	204,453	
2013-10-01:2014-09-30 2	157,114,616	33,383,450	10,729,693	3,467,002	1,653,811	1,146,415	835,832	305,565		
2014-10-01:2015-09-30 3	217,280,654	21,390,507	5,977,479	2,644,518	1,967,344	1,809,304	1,001,695			
2015-10-01:2016-09-30 4	267,866,647	16,554,209	5,036,078	3,919,793	2,053,125	772,283				
2016-10-01:2017-09-30 5	356,231,924	22,062,173	8,877,602	5,709,295	1,679,115					
2017-10-01:2018-09-30 6	463,947,069	37,477,847	13,945,672	5,337,027						
2018-10-01:2019-09-30 7	658,940,241	107,726,099	23,738,438							
2019-10-01:2020-09-30 8	584,866,515	109,706,156								
2020-10-01:2021-09-30 9	339,350,567									
2021-10-01:2022-09-30 10										

Source: EIOPA extraction using Euroins claims payments database

When comparing the first nine accident periods between the two different triangles, all amounts are identical, except the last diagonal of the triangle at computation date 30 September 2021. At that point in time, for each accident period Y (Y from 1 to 9) the insurance undertaking cannot have the information of all payments done 10-Y after the accident (similar reason as the example of claims from May *supra*). Only the complete information for payments done 9-Y years or before is available and the insurance undertaking lacks some information regarding the last diagonal (i.e. payment done 10-Y after the accident).

It is important to note that this is not the case when the triangles are build using the traditional definition of the development year (i.e. the time difference with the accident period and not date). The payment triangles as if at computation date 30 September 2021 is obtained by simply removing the last diagonal of the triangle at 30 September 2022. In other words, at the computation date 30 September 2021, the insurance undertaking knows all payments done during the accident period 01 October 2020 – 30 September 2021.

When following the Chain-Ladder approach, the first development factors should represent the link ratio between the payments done during the first 2 years when compared to the payments done during the first year of the accident.

As such, based on EIOPA's assessment, and considering the application steps and underlying assumptions of the Chain-Ladder method, Euroins Romania triangles lead to an underestimation of the claims reserves as:

- The payments for claims that have occurred during the accident period 01 October 2021-30 September 2022 known at 30 September 2022, i.e. RON 555,709,421 in the first triangle *supra*, do not represent the total amount paid during the first 12 months after the accident, contrary to the other amounts of the first column in the triangle which represent the full 12 months of development, as defined by Euroins Romania;
- The development factor is underestimated given that the amount of payments for accident period 01 October 2020 – 30 September 2021 and paid before 12 and 24 months after the accident are not totally known at the computation date 30 September 2022, and are not estimated with other methods.

The consequence is therefore an underestimation of the ultimate charge and of the claims' amount, which also result in an underestimation of the past loss ratios that are used for the estimation of the reserve of the last accident year.

EIOPA rebuilt the run-off triangles in the classical Chain-Ladder way to compute the Claims Reserve. Several methods were used to give a plausible range of possibilities.

First, EIOPA used the payments triangles for the four main HRGs (all excluding the claims with annuities and the big claims above EUR 750,000):

- Attritional claims Material Damage (Attritional MD);
- Attritional claims Bodily Injury (Attritional BI);
- Large claims Material Damage (Large MD) with a known cost of more than RON 100 000 and less than EUR 750,000;
- Large claims Bodily Injury (Large BI) with a known cost of less than EUR 750,000.

Seven scenarios were used for the selection of the individual developments factors (IDF):

- Scenario 1: No exclusions;
- Scenario 2: Using the same exclusions as the insurance undertaking (which are different for each HRG);
- Scenario 3: Excluding the 2 biggest individual development factors (the most aggressive scenario) for the first 4 development factors;
- Scenario 4: Excluding the 2 smallest individual development factors (the most prudent scenario) for the first 4 development factors;
- Scenario 5: Excluding the 2 extremes (i.e. the biggest and the smallest) individual developments factors for the first 4 developments factors);
- Scenario 6: Excluding the individual development factors that from a statistical perspective are outside of the return period 1 in 10 years (the exclusions were performed using Pearson residuals[5]);
- Scenario 7: Excluding the individual development factors that from a statistical perspective are outside of the return period 1 in 20 years.

For scenarios 3, 4 and 5, EIOPA considered exclusions only related to the first four development factors for two different reasons:

- First and main reason, the first four development factors are the most impactful for the estimation of the Claims Result;
- Exclusions for the last development factors would result in smaller statistical representativeness.

The impact on the Claims Result is given on the next table.

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[5] Pearson residuals are the difference between observed and fitted values divided by an estimate of the standard deviation of the observed value, see the article of y P. D. England and R. J. Verrall, 'Stochastic claims reserving in general insurance' sm0201.pdf (actuaries.org.uk). EIOPA used the assumption that the Pearson residuals follow a standard normal distribution.

Table 4: Impact on the Claims Result for main HRG when run-off triangles are built using classical Chain-Ladder approach on payments triangles

Million RON	Attritional MD	Attritional BI	Large MD	Large BI	Total	Impact
Euroins estimation	414	97	199	370	1,080	NA
No exclusions	941	109	406	1,083	2,540	+135%
Similar exclusion as Euroins	902	97	311	1,031	2,341	+117%
Exclusion 2 biggest IDF	729	98	346	919	2,092	+94%
Exclusion 2 smaller IDF	1,067	126	462	1,233	2,889	+167%
Exclusion the 2 extremes IDF	889	110	415	1,029	2,443	+126%
Exclusion outside 1 in 10 years	780	115	358	920	2,173	+101%
Exclusion outside 1 in 20 years	780	109	374	986	2,250	+108%

Source: EIOPA using Euroins Romania's row data

The Claims Result for the Attritional BI HRG are close (even identical where considered the same exclusions as Euroins Romania) to the ones obtained by EIOPA. This is explained by the fact that Euroins Romania builds, contrary to its own methodology, the run-off triangle for this HRG following the classical method, as performed by EIOPA.

As regards the other HRGs, the estimates from EIOPA differ significantly from the ones presented by Euroins Romania, as a result of the recompilation of the triangles. Annex 3 compares the Euroins Romania estimation with the Claims Reserve distribution estimated by EIOPA. Except for the Attritional BI HRG where the run-off triangle is built with the classic Chain Ladder approach, the Euroins Romania Claims Result is below the 0.5% quantile of EIOPA's estimated distribution. In other words, Euroins Romania's Claims Result is lower than the Claims Result resulting from the most optimistic 1 in 200 EIOPA scenario.

Loss ratio approach

Euroins Romania is using for the last accident year an ultimate loss ratio approach. Given the high volatility of last accident year, especially for large claims, the loss ratio approach is considered a good practice.

EIOPA also applied this method for the last accident year but using the historical loss ratios as derived by the previous method. EIOPA did not use the loss ratios used by Euroins Romania as those were derived using a projection method that underestimates the Claims Result (as previously explained), and as such are considered inappropriate.

The next table indicates the ultimate loss ratios for the past accident years for the Attritional MD, which is the HRG containing most of the claims and with the highest ultimate loss ratio of all HRGs. The accident year 1 (AY1) indicates the oldest period (01 October 2012 – 30 September 2013) and AY9 indicates the accident period 01 October 2020 – 30 September 2021.

Table 5: Loss ratios for the Attritional MD for past years (excluding the last period)

	AY1	AY2	AY3	AY4	AY5	AY6	AY7	AY8	AY9
No exclusions	53%	49%	45%	41%	42%	58%	78%	70%	75%
Similar exclusion as Euroins	53%	49%	45%	41%	42%	58%	78%	70%	74%
Exclusion the 2 extremes IDF	53%	49%	45%	41%	42%	58%	78%	70%	75%
Exclusion outside 1 in 10 years	53%	49%	45%	41%	42%	58%	78%	69%	72%
Exclusion outside 1 in 20 years	53%	49%	45%	41%	42%	58%	78%	69%	72%
Increase / decrease in the average premium	NA	+1.2%	-0.5%	+12.7%	+2%	-18%	-3.1%	+2.4%	+0.1%

Source: EIOPA using Euroins Romania data

It is noticed that the ultimate loss ratios are stable regardless of the scenario[6]. This is justified by the fact this HRG has a quite short tail. In average, 85% of the payments are done in the first two development periods.

It is also equally important to notice how the loss ratios for the Attritional MD HRG oscillate. In the first 3 years the loss ratios are roughly 50%, after that they decrease to roughly 40% following two consecutive increases in the average premiums (+12.7% and +2%), and afterwards the loss ratios significantly increase following considerable decreases in premium (-18% and -3.1%) to attain a level of roughly 75%.

As such, EIOPA used the average of the 3 previous years for deriving the ultimate loss ratio of the last accident year (AY10). The oldest years do not reflect the latest price decrease in premium, the policyholders' behaviour and/or the cost of repairing the material damages. EIOPA also considered the significant increase in the average premium in the last year between AY9 and AY10, +54%. The impact on the total Claims Result for the 4 HRG is given in table 6 below.

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[6] The two extreme scenarios were not considered.

Table 6: Impact on the Claim Result for main HRG when run-off triangles are built using classical Chain-Ladder approach on payments triangles and ultimate loss ratio method for last accident period

Million RON	Attritional MD	Attritional BI	Large MD	Large BI	Total	Impact
Euroins estimation	414	97	199	370	1,080	**NA**
No exclusions	765	116	393	1,084	2,357	**+118%**
Similar exclusion as Euroins	751	108	326	1,024	2,210	**+105%**
Exclusion 2 biggest IDF	678	109	350	883	2,021	**+87%**
Exclusion 2 smaller IDF	805	129	427	1,267	2,628	**+143%**
Exclusion the 2 extremes IDF	761	117	398	1,017	2,293	**+112%**
Exclusion outside 1 in 10 years	702	122	364	888	2,076	**+92%**
Exclusion outside 1 in 20 years	702	116	381	970	2,169	**+101%**

Source: EIOPA using Euroins Romania data

The impacts remain close to the previous method (only applying the Chain-Ladder method including last accident period), but slightly lower. This is explained by the latest individual first development factor (i.e. the bottom of the triangles) which is one of the highest IDF (contributing to the first development factor) for all four HRG. Moreover, a significant number of the individual development factors from the last diagonals (all HRG) are higher than the others (on the same column). This is an indication of potential changes in the claims' payment pattern.

The table below indicates the payment pattern (payments by development years divided by the total ultimate estimated reserve) for the Attritional MD, which is the HRG containing the majority of the claims. The payment patterns are built under the scenario of no exclusion, but the output is very similar for all scenarios.

Table 7: Payment pattern for Attritional MD

	DY1	DY2	DY3	DY4	DY5	DY6
AY1	34%	74%	92%	97%	99%	99%
AY2	36%	86%	94%	97%	98%	99%
AY3	55%	91%	96%	97%	98%	99%
AY4	63%	93%	96%	97%	98%	99%
AY5	59%	92%	95%	97%	98%	
AY6	51%	90%	94%	97%		
AY7	45%	83%	92%			
AY8	40%	78%				
AY9	34%					

Source: EIOPA using Euroins Romania data

It is noticed that less and less payments, relative to the final estimated cost, were done during the first development period. Indeed, the decrease in payments can be observed for the first development period, for AY4 nearly 2/3 of the total claims were made in the first development period while for AY9 the proportion decreased to only 1/3. Furthermore, less payments were made during the period 01 October 2020 - 30 September 2021 compared to the estimated final cost by accident period. Indeed, only 34% of the payments were done during the first development period for AY9 compared with other accident years (i.e. first column). And this phenomenon is equally noticed for the second development year, for AY8 (only 78% of the payments were done after 2 years compared with previous accident periods). This explains the importance of the individual development factors observed in average on the last diagonal.

Some of the individual development coefficients from the last diagonal were excluded when following the statistical approach (both 1 in 10 years and 1 in 20 years). However, if an undertaking slows down the payments, these individual development coefficients should not be excluded as they represent the actual activity of the undertaking. While the final cost of the claims remains the same, delaying payments increases the amount that remains to be paid (i.e. the Claims Result).

Chain-Ladder method on incurred triangles

A good practice, especially for long-tail business as MTPL, is to work with incurred triangles instead of the payments triangles, in particular for large claims and for bodily injury claims. The table below illustrates the impact on the Claims Result when applying the Chain-Ladder method on incurred triangles (similar scenarios for excluding individual development factors).

Table 8: Impact on the Claims Reserve for main HRG when applying classical Chain-Ladder method on incurred triangles

	Attrition al MD	Attritional BI	Large MD	Large BI	Total	Impact
Euroins estimation	414	97	199	370	1,080	**NA**
No exclusions	794	201	307	1,153	2,455	**127%**
Similar exclusion as Euroins	768	191	219	1,336	2,514	**133%**
Exclusion 2 biggest	655	169	259	805	1,888	**75%**
Exclusion 2 smaller	886	227	349	1,610	3,072	**184%**
Exclusion the 2 extremes	738	198	310	1,134	2,380	**120%**
Exclusion outside 1 in 10 years	708	190	294	989	2,181	**102%**
Exclusion outside 1 in 20 years	729	201	297	1,153	2,380	**120%**

Source: EIOPA using Euroins Romania data

The Claims Result for both BI HRGs are higher than if the payments triangles where used (for similar scenarios) and _vice versa_ for the MD HRGs. However, the overall impact remains similar (when comparing the same scenario).

EIOPA equally tested the merger of attritional with large claims (but continuing to have separate run-off triangles for bodily injury and material damage). The overall impact remains similar when comparing the same scenario (see Annex 4).

Euroins method adjusted

In addition, EIOPA tested a modified version of Euroins Romania's methodology, as not using the traditional method is not *per se* a reason to reject a methodology. The underestimation in the Euroins Romania estimation derives, as previously explained, from the missing information on the last diagonal.

As such, EIOPA elaborated on the quantification of the missing information, in a simplified manner. For that purpose, EIOPA compared the payments on the last diagonal from the triangle as of 30 September 2021 (incremental triangle) with the payments on the penultimate diagonal of the triangle as of 30 September 2022, and after adjusted the last diagonal of the incremental triangle with this estimated missing information.

As an illustrative example, it the payments on the last diagonal from the triangle as of 30 September 2021 correspond to half of the payments on the penultimate diagonal from the triangle as of 30 September 2022, it means that 50% of the payments are in general missing on the last diagonal (on incremental triangle). In this case, the adjustment would be to double the amount of payments on last diagonal on the incremental triangle, and after to build the adjusted cumulative triangle before applying classical Chain-Ladder method.

The impact in the total Claims result when using the adjusted Euroins Romania method for the 4 HRG is given in the next table.

Table 9: Impact on the Claims Reserve for main HRG when applying the adjusted Euroins methodology

	Attritional MD	Attritional BI	Large MD	Large BI	Total	Impact
Euroins estimation	414	97	199	370	1,080	**NA**
No exclusions	1,378	99	463	1,578	3,518	**226%**
Similar exclusion as Euroins	1,358	103	366	1,188	3,015	**179%**
Exclusion 2 biggest	1,237	104	384	1,008	2,733	**153%**
Exclusion 2 smaller	1,446	124	505	1,640	3,715	**244%**
Exclusion the 2 extremes	1,333	113	446	1,261	3,153	**192%**
Exclusion outside 1 in 10 years	1,275	116	397	1,195	2,983	**176%**
Exclusion outside 1 in 20 years	1,277	116	449	1,297	3,139	**191%**

Source: EIOPA using Euroins Romania data

The Claims result for all HRGs are significantly higher than when the payments triangles are built in the classical way (for similar scenarios). One possible explanation could be the delay observed in the payment patterns especially for the accident period AY9 01 October 2020 – 30 September 2021.

Indeed, the adjustment to address the missing information was performed for this accident period and it might not be representative (i.e. possibly too high) for all the run-off triangle.

3.2.1.2. BIG CLAIMS

3.2.1.2.1. EUROINS ROMANIA METHODOLOGY

For the big claims (i.e. with a known cost more than EUR 750,000), Euroins Romania is splitting them in two categories: known claims (or RBNS big claims) and unknown claims (or IBNR big claims).

For the known claims, Euroins Romania is using the RBNS reserve as estimated by the claims handlers at the computation date 30 September 2022.

For the unknown big claims, Euroins Romania is using a cost-frequency approach:

- The frequency is estimated as the number of known big claims divided by the exposure (number of earned cars) on the last 10 years;
- The cost is estimated as the average of the known big claims on the last 10 years.

3.2.1.2.2. ANALYSIS

The approach used by Euroins Romania is widely used, however with two significant differences regarding the frequency computation:

- The last years are not used in the frequency estimation given that the unknown big claims would mostly be attached at these last development periods;
- The frequency should in theory be computed only from years where there is a certainty that no claims could developed and be recategorized as big claims.

In addition, Euroins Romania does not respect its own methodology for the computation of average cost of known big claims.

While Euroins Romania has the total number of known big claims (28 according to Excel file 'BE CR MTPL 30.09.2022' sheet 'big claims > 750 000' – see table in Annex 5), it reallocates each claim to different claimants (when more than 1). By doing this, Euroins Romania unduly counts, for the purpose of the estimation of the average big claims, a total number of 61 claims, instead of 28, and arrives to the counterintuitive conclusion that the average cost of big claims above EUR 750,000 is EUR 551,000.

EIOPA analysed, for each of the 28 claims, how many years after the accident year, the claim was identified as being a big claim. More precisely, how many years after the accident, the incurred amount of the claim was higher than EUR 750,000. Among the 28 claims, 3 were identified as major claims more than 5 years after the year of the accident, 1 after 6 years, 1 after 7 years and 1 after 8 years (see Annex 6). Following the idea that the frequency should be computed only from years where there is a

certainty that no new claims could be recategorized as big, only two years would remain to estimate the frequency which might be considered as not relevant (i.e. not enough information).

Given the limited history, EIOPA computed the frequency of the big claims with the assumption that after 5 years of the accident period all big claims are known, thus using 5 years to compute the frequency. The average cost of big claims above EUR 750,000 was estimated using the 28 known big claims. Under this scenario, the Claims Result for big claims is RON 316 million, instead of RON 65 million estimated by Euroins Romania (or +383%).

EIOPA also considered two alternative scenarios:
- assuming that all big claims are known 6 years after the accident period (and using only 4 years to compute the frequency);
- given that the accident period 01 October 2014 - 30 September 2015 is the one with the highest number of big claims, considering that half of them are exceptional, and not representative for computing the frequency.

The Claims Result for big claims in these scenarios would be RON 373 million (or +470%) and respectively RON 273 million (or +318%).

3.2.1.3. CLAIMS WITH ANNUITIES

3.2.1.3.1. EUROINS ROMANIA METHODOLOGY

The methodology for claims with annuities is similar to the one for big claims (i.e. with a known cost of more than EUR 750,000). Euroins Romania is splitting them in two categories: known claims with annuities (or RBNS annuities) and unknown claims with annuities (or IBNR annuities).

For the known claims, Euroins Romania is using the RBNS reserve as estimated by the claims' handlers at the computation date 30 September 2022.

For the IBNR annuities, Euroins Romania is using a cost-frequency approach:
- The frequency is estimated as the number of known big claims divided by the exposure (number of earned cars) on the past years;
- The cost is estimated as the average of the known claims with annuities on the last 10 years.

3.2.1.3.2. ANALYSIS

As for the big claims HRG, it is a common approach that last years are not used in the frequency estimation given that the unknown claims with annuities would mostly be attached at these latest development periods. The frequency should in theory be computed only from years where there is a certainty that no claims with annuities could developed.

Given the limited history of 10 years, EIOPA computed the frequency of the claims with annuities considering that 5 years after the accident period all claims with annuities are known, thus using 5 years to compute the frequency. This assumption appears as reasonable given that only 20 claims with annuities were identified by Euroins Romania for the last 5 accident periods, while for the 5 most ancient accident periods there were 24 by year in average (see Annex 7).

EIOPA used the average cost of claims with annuities and below EUR 750,000 as computed by Euroins Romania. Under this scenario, the Claims Reserve for claims with annuities is RON 237 million, instead of RON 81 million estimated by Euroins Romania (or +193%). EIOPA used the RBNS reserve estimated by the company[7], i.e. RON 4.2 million.

EIOPA also considered two alternative scenarios:
- assuming that all claims with annuities are known 6 years after the accident period (and using only 4 years to compute the frequency);
- given that the accident period 01 October 2012 – 30 September 2013 is the one with the highest number of claims with annuities, excluding this year as exceptional, and not representative for computing the frequency.

The Claims Reserve for claims with annuities in these scenarios would be respectively RON 261 million (or +222%) and RON 220 million (or +171%).

According to the Excel file *'BE_Claims_Res_SII_30.09.2022'* sheet *'Claims_BE_Solvency II'*, EIOPA understands that the amount of Claims Result for claims with annuities is not discounted. While this approach is considered prudent, it is not in line with the Solvency II framework. In the case where the amount of the annuities takes already into account the time value of money, only the rest of the Claims Result should be discounted using EIOPA yield curves.

3.2.1.4. CONCLUSIONS

3.2.1.4.1. DATA QUALITY FROM AN ACTUARIAL PERSPECTIVE

From an actuarial perspective the data is not stable. In other words, the data does not verify the mathematical underlying assumptions of the Chain-Ladder method. Indeed, one of the main assumptions for the Chain-Ladder model is the fact that the cumulative payments are independent[8] for

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[7] The insurance undertaking estimates RON 18.5 million of RBNS, RON 14.3 million being annuities and RON 4.2 million of RBNS which are not annuities.

[8] For more detail see the paper of Michael Merz and Mario Wuthrich, *'Modelling The Claims Development Result For Solvency Purposes'* Modelling The Claims Development Result For Solvency Purposes (casact.org).

all accident years. This assumption is not verified given the changes in the payment pattern due to the delay in payments (see above Table 7).

Another simplified manner to verify the instability is analysing the difference between Scenario 3 (the most aggressive among the 7 considered) and Scenario 4 (the most prudent among the 7 considered). In Scenario 4, the Claims Result is roughly twice comparing to Scenario 3. This is an indicator of the very high uncertainty and volatility in the data from an actuarial perspective. As a point of comparison, according to the Standard Formula shocks, the Claims Result in the 1 in 200 scenario for the MTPL is 27% higher than the Claims Result in the 50%-50% scenario (i.e. best estimate scenario). From this perspective, the Standard Formula may not be appropriate for the computation of the solvency capital requirement for premiums and reserve risk. This is equally suggested by Annex 3 where the volatility (i.e. 'sigma' using the DR wording) for the reserve risk are roughly twice higher that the shocks used in the Standard Formula for the reserve risk for MTPL LoB.

EIOPA could not analyse the data quality in the sense of article 19 of the DR, but this could equally be an explanation for the poor data quality from an actuarial perspective.

As a result of the poor data quality, it would be expected that Euroins Romania adopts a prudent approach for the final reserve in order to properly factor for this uncertainty.

3.2.1.4.2.   FINDINGS AND ESTIMATION

Based on the above assessment, EIOPA's main findings regarding the BE of Claims Provision are:
- Euroins Romania's methodology of constructing the triangles results in a lack of information on the last diagonal of the payments run-off triangles. Without any further adjustments, this lack of information results in a significant underestimation of the BE for Claims Provision. It is worth to reflect that even in the more aggressive scenario (i.e. Scenario 3), the underestimation of the Claims Result remains significant;
- The scope of the non-life BE is not complete given that Euroins Romania considers the unknown claims with annuities as a life liability;
- According to the observed payment pattern, Euroins Romania slowed down claims payments in the last years which should consequently translate in bigger reserves than in the past years (all other things considered equal);
- The claims with annuities and the big claims above EUR 750,000 are underestimated by the inconsistent application of the frequency - severity methodology;
- The run-off triangles are unstable, volatile and Euroins Romania would be expected to have a more prudent approach for the final reserve to reflect this uncertainty. Indeed, according to Article 76(4) from the Solvency II directive, *'technical provisions shall be calculated in a prudent, reliable and objective manner'*. When the assumptions underlying the technical provision computation cannot

be considered reliable and objective from a data quality perspective, the technical provisions shall be calculated in a prudent manner.

On the basis of the above-mentioned findings, EIOPA used the following assumptions regarding the BE of Claims provision's computation considered as reliable and objective in the sense of Article 76 of the Solvency II Directive

1. To use payments triangles over incurred triangles, given the lack of information on how claims are handled and the RBNS estimation performed by Euroins Romania. However, for all methods tested, the impacts were similar when comparing similar scenarios;

2. To use the Classical Chain-Ladder method instead of the adjusted Euroins method, as the latter is not widely used for reserving or as validation method, in addition to the lack of evidence as regards its effectiveness in the past;

3. To use the ultimate loss ratio approach for the last accident year, given the significant increase in premiums and Euroins Romania's adoption of this option;

4. To replace Scenarios 6 and 7 by similar ones (Scenario 6 bis and Scenario 7 bis in the table below) with a 50% weight for all initially excluded individual development factors on the last diagonal, given the evidence of significant changes in the payment pattern and considered as a reliable assumption in the sense of Article 76(4) from the Solvency II Directive (see above);

5. To consider for the big claims above EUR 750,000 the assumption that 5 years after the accident period all big claims are known;

6. To consider for the claims with annuities below EUR 750,000 the assumption that after 5 years the accident period for all claims with annuities are known.

Table 10: Different Scenarios for the Best Estimate of Claims Provision

Million RON	Euroins estimation	Scenario 1	Scenario 2	Scenario 5	Scenario 6 bis	Scenario 7 bis
Attritional MD	414	765	751	761	736	736
Attritional BI	97	116	108	117	117	117
Large MD	199	393	326	398	385	388
Large BI	370	1,084	1,024	1,017	993	1,032
Claims with annuities	81	237	237	237	237	237
Big Claims	65	316	316	316	316	316
Total Claims Result	1,224	2,911	2,762	2,846	2,784	2,826
With Inflation	1,367	3,250	3,084	3,177	3,108	3,155
With Expenses	29	29	29	29	29	29
Total Undiscounted wo annuities	1,396	3,279	3,113	3,206	3,137	3,184
BE for Claim Provision	1,170[9]	2,747	2,608	2,687	2,629	2,668
Impact	NA	+133%	+122%	+128%	+128%	+127%

Source: EIOPA using Euroins Romania data

The above table, based on several scenarios, gives a range of plausible possibilities for the BE of Claims Provision. While the scenarios were built from different perspectives, the outputs remain comparable and indicate a significant underestimation of the BE for Claims Provision.

Given the data and information received, EIOPA estimates that **the BE of Claims Reserve is more than double the amount of Euroins Romania's estimation (between +122% and +133%** according to the selected scenarios).

3.2.2. BEST ESTIMATE FOR PREMIUMS PROVISION

3.2.2.1. EUROINS ROMANIA METHODOLOGY

The approach used by Euroins Romania for the computation of the BE for Premiums Provision is the following:

- The Unearned Premiums at 30 September2022 adjusted by the lapse rate is multiplied by the combined ratio defined as the sum of the loss ratio, the administrative costs and the acquisition costs;
- For the future premiums within the contract boundaries, a similar approach as above is applied and the amount of the future premiums is extracted from the BE of Premiums Provision.

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[9] The BE of claims provisions is presented including the RON 81 million of Claims with IBNR estimated by the insurance undertaking and considered as BE Life.

3.2.2.2. ANALYSIS

The methodology used by Euroins Romania for computing the BE for the Premiums Provision is in line with the actuarial standards and EIOPA's Supervisory Handbook except for the treatment of the bound but not incepted (BBNI) contracts. Euroins Romania did not consider BBNI contracts even if these contracts are in the contract boundary as defined by article 18 of the Delegated Acts. The amount of gross written premium related to BBNI remains however not significant (EUR 5 million).

Concerning the most material assumption, i.e. the ultimate loss ratio (ULR), Euroins Romania is using an average of the ultimate loss ratios of the last two years.

In practice, Euroins Romania computes a weighted average of the ultimate loss ratios of the two precedent accident years and an estimated ultimate loss ratio of the Unearned Premium Reserve (UPR). This computation is considered inconsistent given that the objective is exactly to compute a loss ratio for the UPR and future premiums in the contract boundaries (circular computation).

For computation purposes, EIOPA followed the estimation process of Euroins Romania (on the basis of the excel computation file provided) only changing the ULR and including BBNI contracts. No further changes were performed in other assumptions given the materiality of the ULR assumption. EIOPA used the same overall discounting effect as Euroins Romania without projecting all future cash flows.

The table below indicates the URL by accident period for Scenario 1 and Scenario 2 as these represent the highest and the lowest impact according to the previous table.

Table 11: Ultimate Loss Ratio by accident period

	ULR Scenario 1	ULR Scenario 2	Average Premium	Changes in the average premium with previous year
AY1	91.8%	91.8%	RON 517	NA
AY2	86.0%	86.0%	RON 523	+1.2%
AY3	91.6%	91.4%	RON 520	-0.5%
AY4	74.3%	74.1%	RON 586	+12.7%
AY5	75.4%	74.7%	RON 598	+2.0%
AY6	102.2%	101.4%	RON 489	-18.2%
AY7	121.7%	120.1%	RON 474	-3.1%
AY8	110.3%	108.4%	RON 485	+2.4%
AY9	123.0%	119.0%	RON 486	+0.1%
AY10	76.9%	75.3%	RON 747	+53.7%

Source: EIOPA using Euroins Romania data

The ULR by accident years changes significantly in the opposite direction with the change in the average premiums. When the average premium increases as for AY4 or AY10, the ULR improves compared to

the previous year. When the average premium decreases as for AY6, the ULR gets worse compared to the previous year.

As such, when estimating the ULR for the BE of Premiums Provision as an average on the past years, changes in the average premiums need to be considered.

3.2.2.3. CONCLUSIONS

3.2.2.3.1.   FINDINGS AND ESTIMATION

Based on the above assessment, the EIOPA main findings regarding the BE of Premium Provision are:
- The ultimate loss ratio is underestimated as a consequence of the underestimation of the BE of Claims Provision;
- The computation's formula of the ultimate loss ratio is circular, and Euroins Romania does not consider the changes in the average premium;
- The written premiums related to BBNI contracts are not considered.

Based on the previous approach to compute the BE of Claims Provision for last accident period with an ultimate loss ratio estimated as an average of the previous three years, the ULR of AY10 represents the same level of ultimate losses but with a significant increase in premiums (+53.7%). As such, the AY10 ULR is considered representative of the last 4 years (AY7-AY10).

The **BE of Premiums Provision is thus estimated at RON 827 million for Scenario 1 and RON 810 million for Scenario 2 which are, respectively, 19.5% and 17.1% higher than Euroins' estimation.**

3.2.3. TOTAL IMPACT ON THE BEST ESTIMATE (CLAIMS PROVISION & PREMIUM PROVISION)

According to EIOPA's assessment, **Euroins Romania's BE for MTPL LoB is underestimated within the following range** (for the highest and the lowest scenarios bar the extremes scenarios):

- For Scenario 1, the BE for MTPL is **RON 3,574 million or EUR 722 million. EUR 340 million more than Euroins Romania estimation, representing an 89% increase** of the BE for MTPL (considering the Life BE as non-life BE);
- For Scenario 2, the BE for MTPL is **RON 3,418 million or EUR 691 million. EUR 309 million more than Euroins Romania estimation, representing an 81% increase** of the BE for MTPL (considering the Life BE as non-life BE).

Table 12: Total Best Estimate - plausible range according to EIOPA's assessment

EUR million	BE Premiums Provision	BE Claims Provision	Life BE	Total BE	Impact
Euroins Romania	140	221	20	382	NA
EIOPA Scenario 1	167	555	NA	722	+89%
EIOPA Scenario 2	164	527	NA	691	+81%

Source: EIOPA using Euroins Romania data

3.3.   REINSURANCE RECOVERABLES

Five reinsurance treaties were in place at 30 September 2022 affecting the financial position of Euroins Romania:

- An excess of loss (or *XoL*) signed ███ ███. Similar treaties cover claims for past accident periods but with different attachment points and limits;
- An excess of loss on IBNR (or *XoL on IBNR*) between Euroins Romania and ████████████ ██ ████████████;
- A 50% *Quota Share with Loss Portfolio entry (*or *QS-LPE)* for the period 01 January 2022 – 31 December 2022;
- A 15% *QS-LPE* for the period 01 October 2021 – 31 December 2022 which was modified and covering only 5% starting from 01 July 2022;
- A 10% *Quota Share (*or QS) for the period 01 July 2022 – 31 December 2022 replacing the change in the previous contract but only for the claims in this period.

Table 13 below indicates the amount of reinsurance recoverable for each reinsurance treaty, before discounting and adjustment for the default of the reinsurers. As Euroins Romania is using a gross-to-net approach to the overall BE of Premiums Provision for the calculation of the Ceded BE for Premiums Provision, only the total amount of the Ceded Best Estimate for Premium Provision comes from Euroins Romania. The split of the Ceded BE of Premiums Provision by treaty (in *italic* on the last column of the next table) was calculated by EIOPA using proxy methods.

Table 13: Reinsurance Recoverable by reinsurance treaty

Million RON	Ceded Claims Provision		Ceded Premiums Provision
	RBNS	IBNR	
XoL	23	144	*135*
50% QS-LPE	1	300	*402*
5% QS-LPE	31.8	30	*40.2*
10% QS	14	13	*33.7*
XoL IBNR	6.5	109	*12*
Total	971		625
% Undiscounted Claims	74.45%		77.58%
Discounted Ceded BE before counterparty adjustment	827		538
Effect discounting		*-15.3%*	*-13.9%*
Ceded BE	824		536
Effect counterparty adjustment		*-0.37%*	*-0.26%*

Source: EIOPA using Euroins Romania data and documents 'Summary_reserves_SII_30.09.2022',
'BE_Claims_res_SII_30.09.2022', 'BE_premium_res_SII_30.09.2022' and 'Reins recoverables_30.09.2022'

In the next sections, the following details are described:

- Main features for each reinsurance contract;
- How Euroins Romania applies those reinsurance treaties for the Ceded BE computation;
- EIOPA's assessment of the Euroins Romania computation;
- EIOPA estimation of reinsurance recoverable on the EIOPA scenarios for BE (as computed above).

When assessing the computation of the Ceded BE of Premiums Provision, EIOPA applied the following simplifications:

- EIOPA assumed the same reinsurance program would be in place starting from 1 January 2023 as the ones in place at 30 September 2022;
- EIOPA did not consider the premiums to be paid by Euroins Romania to the reinsurer for keeping in place the same reinsurer program;
- The discounting effect is considered by reducing the undiscounted ceded BE of Claims Provision reserves by 15.3% and the undiscounted ceded BE of Premiums Provision by 13.9% (according to the table above);
- The adjustment for the reinsurance counterparty risk is considered by reducing the discounted Ceded BE before adjustment for counterparty risk by 0.37% and 0.26% for the Claims Provision and for the Premiums Provision, respectively (according to the table above).

3.3.1. EXCESS OF LOSS TREATY

3.3.1.1. KEY FEATURES OF THE TREATY

The excess of loss (or *XoL*) treaty covers risks ██████████████████████████████
████████

Euroins Romania is covered for all events triggered by an MTPL guarantee with a net final cost above EUR 750,000. The reinsurers cover for all events the losses above EUR 750,000 (the attachment point), and the number of reinstatements is unlimited and free, but the contracts have an annual aggregate limit (AAL) of EUR 17 million.

The XoL cover is split between several reinsurers with different shares for the first layer (the excess of EUR 4.25 million of EUR 0.75 million) and second layer (unlimited in excess of EUR 5 million):

- ███████████████████ has 52% of Layer 1 and 47% of Layer 2;
- ████████ has 24.5% of both layers;
- ██████████████████████ has 8.5% of both layers;
- ████████████████████████ has 5% of Layer 1;
- ███████████████ has 7.5% of both layers;
- ████████████ has 2.5% of both layers.

While for both layers the reinsurers' parts sum to 100%, Euroins Romania ceded an additional 7.5% of EUR 2.25 million in excess of EUR 0.75 million to ████████████████████████ with an AAL of EUR 13 million. According to ASF's understanding, this treaty would be used as an annual aggregate deductible.

3.3.1.2. EUROINS ROMANIA METHODOLOGY

Ceded BE of Claims Provisions

The reinsurance recoverable for the RBNS reserve is extracted from the accounting information. For each known claims, giving the final estimated cost, Euroins Romania can compute which part will be ceded to the reinsurer (depending on the XoL reinsurance treaties in place at accident date). The final reinsurance recoverable amount is afterwards computed by extracting the eventual payments received from the reinsurers for each claim. According to the excel file '*BE_premium_res_SII_30.09.02022*' sheet '*RBNS+IBNR recalculated*', it is EIOPA's understanding that the expected amount of reinsurance recoverable on RBNS is RON 23 million.

The reinsurance recoverable for the IBNR reserve is computed by Euroins Romania by applying a gross-to-net approach estimated on the historical data and afterwards applied to the IBNR for claims above RON 100,000. More precisely, according to the Excel file '*BE_Claims_res_SII_30.09.2022*' sheet '*avg %*

RBNS Big claims', Euroins Romania selects, for the past 6 accident periods, all incurred claims with an estimated cost at that period in time above RON 100,000 and computes the percentage (i.e. ratio gross-to-net) of what should be ceded to the reinsurers according to the XoL treaties in place for each accident year. The final gross to net ratio of 23.76% is the average of the 6 ratios gross-to-net for each accident year (see a copy of Euroins Romania's computation table in Annex 8).

The final reinsurance recoverable for IBNR triggered by the XoL treaties is computed by applying this gross-to-net ratio to the IBNR provision for claims above RON 100,000.

Ceded BE of Premium Provisions

As explained above, Euroins Romania applies a gross-to-net approach for all reinsurance recoverable for the BE of Premium Provisions.

3.3.1.3. ANALYSIS

Ceded BE of Claims Provisions

The reinsurance recoverable computation related to the XoL treaty as computed by Euroins Romania is not commensurate with the real risk mitigation effect of this treaty given the methodology in place for the IBNR reserve.

The XoL treaties for past accident years had different attachment points explaining why the gross-to-net ratio for oldest periods were higher (31% in 2017, 28% in 2018, 39% 2019) than for the latest periods (19% in 2020, 16% in 2121 and only 10% for the first three quarters of 2022). As such, the average gross-to-net ratio computed by Euroins Romania (i.e. 23.76%) on the historical data is not representative for the entire IBNR provision. The gross-to-net ratio is relevant for past claims where the attachment point was lower (so the ceded part more important) and the most important part of the IBNR reserve is related to latest accident periods when the attachment point is higher (so the ceded claims lower).

EIOPA did not have all the necessary information to compute the reinsurance recoverable triggered by the XoL treaties for the IBNR reserve. As an example, EIOPA did not have the reinsurance XoL treaty for the period 01 April 2019 – 31 March 2020. In addition, other operational issues prevented a plausible computation of the reinsurance recoverable triggered by the XoL treaties for the IBNR reserve:
*   Before 01 January 2022, the coverage period of the XoL treaties where from 01 April N to 31 March N+1 which does not coincide with the definition of the accident periods use in the BE computation, from 01 October N to 30 September N+1 meaning that for an accident period different treaty apply;
*   The segmentation of Euroins Romania only isolates the big claims above EUR 750,000 while in the past, the attachment points where lower (see Annex 9). As such, claims that could trigger XoL

treaties from the past are mixed with claims that do not trigger the XoL treaties (the large HRG contain all claims between RON 100,000[10] and EUR 750,000).

As such, EIOPA considers that the reinsurance recoverable triggered by the XoL treaties for the IBNR reserve are at most RON 70 million in the Euroins Romania scenario. EIOPA took into account the reinsurance recoverable as computed by Euroins Romania, unless those related to the last 2 accident years because the attachment point for the last 21 months was EUR 750,000 and the average cost for big claims computed by the insurance undertaking is EUR 551,000 (so under the attachment point).

In the case of the EIOPA scenario for IBNR, EIOPA opted for a different approach under the following assumptions:

- The claims that could trigger XoL treaties are only claims above EUR 750,000;
- The attachment point for the missing period 01 April 2019 – 31 March 2020 is EUR 250,000;
- Where two different attachment points could apply to a claim depending on the accident year, the one giving the higher reinsurance recoverable was used.

Under this assumption, the reinsurance recoverable for the IBNR reserve in the EIOPA BE scenario is RON 190 million.

Ceded BE of Premium Provisions

Based on the documents shared with EIOPA, Euroins Romania does not compute separately the reinsurance recoverable triggered by the XoL treaty for the BE of Premiums Provision. However, given that the RBNS and IBNR ceded provision triggered by the XoL treaties represent 17% of the total ceded Claims Provision, the Ceded BE of Premiums Provision for the XoL treaty could be approximated as 17% of the BE of Premiums Provision, or RON 116 million (in the Euroins scenario).

To compute the Ceded BE for Premiums Provision, EIOPA considered the contribution of the big claims over EUR 750,000 on the ULR and applied a gross-to-net ratio similar to the one computed for the Ceded BE of Claims Provisions, restricted to those kinds of claims.

As the big claims above EUR 750,000 represent 3.2% of the ULR, EIOPA's estimation of the Ceded BE for Premiums Provision triggered by the XoL treaty represents 3.2% x 43.07% = 1,38% or RON 18 million.

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[10] Roughly EUR 20,000.

3.3.2. QUOTA SHARE WITH LOSS PORTFOLIO ENTRY TREATY

3.3.2.1.   KEY FEATURES OF THE TREATIES

There are two Quota Share with Loss Portfolio entry (or QS-LPE) treaties with similar features.

In one treaty, the parts in the 50% QS-LPE are split between ███████ with 36.5%, ██████ with 7%[11], ████ with 3.5%, ██████ with 5%, ████████████ with 18% and ███ with 30%. The second treaty, initially 15% QS-LPE that afterwards decrease at 5% is only assumed by ██████████.

For the 50% QS-LPE cover, 5 different contractual agreements were signed, one with ██████████ and ████████, and a different one for all the others.

The features of the contracts are similar, with some exceptions as the reinsurance margin (or RM that represent the reinsurance premium as percentage of the ceded earned premiums) which is slightly different: 5.5% with ██████████ and ████, 4% with ██████, 5.85% with ██████, 4.25% with ████████████ and 5.06% with ██████. The RM with ██████████ is 2%. The treaties apply after the XoL treaties.

Formally, both treaties (50% QS-LPE and 5% QS-LPE) have a quota share agreement where the reinsured cedes:

* 50%/5% of the earned premiums during the coverage period. However, the ceded earned premiums are not paid in cash in advance, only the RM is partially paid in advance (5 different tranches, the first on 31 May 2022 and the last on 30 April 2023);
* 50%/5% of the losses incurred during the new accident period (i.e. year 2022 for the 50% QS-LPE and from 01 October 2021 to 31 December 2022 for the 5% QS-LPE);
* 50%/5% of the changes in the existing loss reserves at inception of the treaty (i.e. loss portfolio entry). The loss on the LPE is the run-off result of the reserves over one-year (15 months for the 5% QS-LPE) period;

There are two limits to the losses shared:

* 20% of the initial loss reserves;
* The overall loss ratio of the treaty, defined as the sum of the run-off result plus the losses of the new accident year all divided by the earned premiums, is limited to 135%.

In the case of ██████, there is no limit.

The treaties also include two additional clauses:

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[11] While the proposed part by the intermediary was 7%, which sum with the others reinsurers up to 100%, ████ signed for 7.5%. EIOPA didn't investigate further but considers for the computation of reinsurance recoverable that the part of ████ is 7%.

- a loss corridor from 100% - RM to 105% where the reinsured retains all losses. The loss corridor depends on the RM but remains quite similar. In the case of ███████ the loss corridor is 100% - RM to 125%.
- a sliding commission from loss ratio 0% to loss ratio 100 - RM. In other words, the reinsurer commission is:
  - zero if the loss ratio of the treaty is above ratio 100% - RM;
  - the difference between 100%-RM and the loss ratio of the treaty.

The economic consequence of the last two clauses is that no losses are shared when the loss ratio of the treaty is below 105% (125% in the case of ███████). Indeed, when the loss ratio of the treaty is below 105% (125% in the case of ███████), the cash flows between the reinsurer and reinsured cancel each other out, except the RM which represents the reinsurer's premium.

This means that, despite having the legal form of a QS agreement, the underlying economic nature is non-proportional. The reinsurance agreement has the same economic effects as an XoL reinsurance agreement with a participation of 50%, attachment point 105%, detachment point 135% (with a 20% loss limit on the reserves at inception of the treaty) and 5.5% reinsurance premium.

The contract equally has an early cancellation clause, where the terms of the reinsurance change e.g reinsurer margin, the corridors, etc. However, the same conclusion holds, despite the QS legal form, the economic nature is non-proportional.

3.3.2.2. EUROINS ROMANIA METHODOLOGY

The Euroins Romania methodology for valuing the reinsurance recoverable triggered by the two QS-LPE treaties is applying, respectively, 50% and 5% ratios on the BE of Claims Provision and BE of Premiums Provision net of XoL treaties.

3.3.2.3. ANALYSIS

As explained above, despite having the legal form of a QS agreement, the underlying economic nature of the two treaties is non-proportional.

Accordingly with the assumptions of Euroins Romania, the ultimate loss ratio of the treaties at 30 September 2022 is 57.29% (cf. document 'Point 3 - Decont MTPL QS AY LPE 50_30.09.2022'). This means that the ratio/attachment point is below 105% (125% in the case of ███████), and the cash flows between the reinsurer and reinsured cancel each other out (except the RM which represents the reinsurer's premium).

Euroins Romanian estimated however an amount of recoverable of RON 1.010 million and RON 101 million for the 50% QS-LPE and 5% QS-LPE respectively (according to table 13 above).

For the purpose of EIOPA's re-computation, EIOPA considered that two scenarios are possible given the contribution of the run-off result of reserves (EIOPA's gross BE estimation) at the inception of the contract on the global loss ratio of the treaty:

- The reinsurers could ask for a re-computation of the reserve at the inception of the contract, which is the most plausible scenario;
- The reinsurer will not ask for a re-computation of the reserves at the inception of the contract.

The scenario where Euroins Romania would be expected to have the highest reinsurance recoverable would be the second one, given the significant negative run-off result of the portfolio when the reserves are computed according to EIOPA estimation.

However, the contribution of the run-off result to the overall loss ratio of the treaty is limited to 20% on the initial reserve, or RON 260 million (representing 20% of the undercounting BE at 31 December 2021 according to annual QRTs). Compared to the estimated earned premiums for the last accident period, this represents around 12%. Given that the ultimate loss ratio for the period 01 October 2021 - 30 September 2022 is around 75% (see table 11 above), the overall loss ratio of the treaty, approximated at less than 90%, remains above the beginning of the corridor, i.e. 105%, which is the attachment point for the reinsurers.

In conclusion, given the improvement of the loss ratio for the last accident period 01 October 2021 - 30 September 2022 following the significant increase in premiums, the QS-LPE treaties would not trigger any reinsurance recoverable.

In order to account for alternatives approaches of Euroins Romania in terms of presentation in the Solvency II Balance Sheet, EIOPA further considered the possibility of Euroins Romania considering the cash flows from the reinsurer to the reinsured as a reinsurance recoverable and the cash flows from the reinsured to the reinsurer as a reinsurance payable. However, if that would be the approach taken by Euroins Romania, it:

- would have recognised an overvalued reinsurance recoverable as the QS does not apply to all the BE of Claim Reserve but only to the run-off result of the BE of Claim Reserve over 1-year period;
- did not recognise the reinsurance payables (i.e. 50% of the estimated earned premium on the coverage period).

Both ways of recognising the QS-LPE reinsurance treaties would result in the same amount of own funds (excepting the reinsurance counterparty default adjustment which is not material according to table 12).

Following the substance over form principle of the Solvency II Directive, EIOPA's opinion is that the contract should be recognised following a profit-and-loss approach. In case Euroins Romania would have adopted the above-mentioned alternative presentation, the net BE for Claims Provision would be reduced and by consequence the SCR for the reserve risk in a proportional manner (i.e. -50%) while

the economic substance of the treaty is non-proportional. As such, the relief in the capital requirement would not have been commensurate with the risk reduction and would not be in line with the EIOPA Opinion on the use of risk mitigation techniques by insurance undertakings[12].

3.3.3. QUOTA SHARE TREATY

3.3.3.1. KEY FEATURES OF THE TREATY

The 10% QS treaty has similar features as the QS-LPE treaties, especially concerning the sliding commission effect, but without loss portfolio entry and with a coverage period between 01 July 2022 and 31 December 2022:

- The reinsured cedes 10% of the gross earned insurance premiums during the coverage period initially estimated at RON 300 million;
- The reinsured receives 10% the losses incurred during the coverage period, but retains minimum 25% net of the current inuring reinsurance (i.e. this 10% QS);
- The losses recoverable by the reinsurer is limited to a loss ratio of 115%;
- The treaty includes a sliding commission from loss ratio 26% to loss ratio 90%:
  - o 7.3% if the loss ratio of the treaty is above ratio 90%;
  - o the difference between 97.3% and the loss ratio of the treaty if the loss ratio is higher than 26%;
  - o 71.3% if the loss ratio of the treaty id below 26%.

This QS treaty also applies after the XoL treaty.

As the QS-LPE treaties above mentioned, despite having the legal form of a QS agreement, the underlying economic nature is non-proportional.

In particular, the reinsurance agreement has the same economic effects as a XoL reinsurance agreement with a participation of 10%, attachment point 90%, detachment point 115% and 2.7% reinsurance premium (or RM).

3.3.3.2. EUROINS METHODOLOGY

Euroins Romania considers RON 13.5 million as reinsurance recoverable for RBNS at 30 September 2022, only for claims incurred between 01 July 2022 to 30 September 2022, and RON 14 million for the IBNR provision.

For the Ceded BE of Premiums Provision, as explained above, Euroins Romania applies a gross-to-net approach for all reinsurance recoverable for the BE of Premiums Provision. According to EIOPA

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[12] https://www.eiopa.europa.eu/system/files/2021-07/14.0_eiopa-bos-21-306-opinion-risk-mitigation-techniques.pdf

simplified computation, the Ceded Best Estimate for Premiums Provision triggered by this treaty would be RON 33.7 million.

3.3.3.3. ANALYSIS

Despite having the legal form of a QS agreement, the underlying economic nature of the treaty is non-proportional.

Under the assumptions of Euroins Romania , the ultimate loss ratio of the treaty for the first 3 months of coverage (i.e. between 01 July 2022 and 30 September 2022) is 49.8% (cf. document *'Point 3 – Account* ▮▮▮▮▮▮ *PE 50_30.09.2022'*). Thus, there is no reinsurance recoverable to be recognised in the BE of Claims Reserves. The conclusion remains similar also for the BE of Premium Provisions, whether under the scenarios estimated by Euroins Romania (ULR of 61.27%) or by EIOPA (ULR 76.9% and 75.3% gross of XoL treaty).

3.3.4. EXCESS OF LOSS ON IBNR TREATY

3.3.4.1. KEY FEATURES OF THE TREATY

The 'XoL on IBNR' between Euroins Romania and ▮▮▮▮ is covering the period 01 January 2022 – 31 December 2026.

In practice, the treaty was concluded starting on 01 January 2020 for a period of 48 months (i.e. 4 years) and, each year, a new annex was added translating the period coverage with 1 year (similar with a renewal and replacing the last agreement).

Some clauses were changed comparing to the initial 'XoL on IBNR', in particular the limits and the retentions, but the substance of the contract remained the same.

The reinsurance premium is EUR 1.1 million or roughly RON 5 million at the date where the last annex was signed (i.e. 01 December 2021).

According to the contract and the last annex, the risks covered are the 'ER IBNR' reserve (the wording 'ER IBNR' – as Euroins Romania IBNR – is used to not lead to confusion with the precedent acronym IBNR used before in this document; more details below) at the respective 'reference date' (more details below), after the application of all others reinsurance treaties in place. The limit of the contract is RON 121 million with additional limits:
- RON 109 million for losses with occurrence date up to 31 December 2020;
- RON 12 million for losses with occurrence date 01 January 2020 – 31 December 2021.

The retention of the treaty is:
- RON 48.6 million for losses with occurrence date up to 31 December 2020;

- RON 63.2 million for losses with occurrence date 01 January 2020 – 31 December 2021.

The 'reference date' was not precisely defined in the initial version of the treaty but added in the 2 annexes that followed. For the last version of the treaty that applies starting to 01 January 2022 until 31 December 2026, the reference date is defined as 31 December 2021.

The definition of the 'ER IBNR' is 'losses that have been incurred under MTPL and Green Card policies issued by the reinsured but have not been reported to the Reinsured as at the Respective reference Date'.

According to the initial treaty, and without any changes in the two annexes, the loss settlement is fixed as 15 days after the reinsurer payment to the policyholder and request payment from ████: 'all loss settlements made by the Reinsured [...] shall be unconditionally binding upon the Reinsurer and the Reinsurer agree to pay their share of any claim hereunder within 15 days from the date the Reinsured advises he has paid the loss amount and requested payment from the Reinsurer'.

3.3.4.2. EUROINS ROMANIA METHODOLOGY

Euroins Romania considers, before discounting and the adjustment for default counterparty risk, RON 109 million as ceded BE of Claims Provision.

Regarding the Ceded BE of Premiums Provision, it would be, applying the gross-to-net approach and EIOPA proxy computation, around RON 28 million.

3.3.4.3. ANALYSIS

Failure to respect the arm's length and the rational agents' principles

Considering the level of reserves at 30 September 2022, Euroins Romania would be expected to know with great certainty the level of IBNR at 31 December 2021. This would mean that for a premium of RON 5 million Euroins Romania would recover with great certainty RON 121 million.

From an economic perspective, this kind of treaty is not expected to be signed between two independent and rational agents[13] and does not respect the arm's length principle[14].

Euroins Romania considered RON 109 million as reinsurance recoverable, thus a surplus asset position of RON 104 million, when the reinsurance premiums are deducted.

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[13] In Economics, a rational agent or rational being is a person or entity that always aims to perform optimal actions based on given premises and information.

[14] The arm's length principle is the condition or the fact that the parties of a transaction are independent and on an equal footing.

Given the limited scope and time restrictions of EIOPA's assessment, EIOPA did not perform an independent review of how this treaty was recognised in the Solvency II balance sheet of the reinsurer ███.

Ambiguous legal wording

From a legal perspective, some terms of the treaty are not clear enough.

This includes in particular the IBNR definition. The acronym IBNR, widely used in the insurance environment, stands for 'Incurred But Not Reported'. In practice, the IBNR provision is the difference between the final reserve booked by an insurance undertaking and the RBNS provision and covers two different realities:

- The provision for claims incurred but not yet reported (IBNyR) at a computation date in the sense that the insurance undertaking does not know the occurrence of the claim (as a simple example, for a computation date end of year, an accident occurred on 30 December will be declared to the insurance undertaking most probably after 1 January next year);
- The provision for claims incurred but not enough reported (IBNeR) in the sense that the insurance undertaking knows that the claim occurred before the computation date, but the RBNS provision may prove to be insufficient for example due to the lack of information.

Given the definition used by Euroins Romania for the 'ER IBNR', taken *ad litteram*, it refers to the IBNyR (as defined above). Following this interpretation, Euroins Romania would have been expected to have considered a maximum reinsurance recoverable of RON 12 million, which is the limit for claims occurred between 01 January 2020 and 31 December 2021. At 31 December 2021, i.e. the 'reference date', the claims incurred before 31 December 2020 are expected to already have been reported to Euroins Romania.

Reinsurance recoverable recognition under the BE principles

In practice, the first two treaties (considering that there are 3 different treaties) were never settled.

The coverage period is 4 years, but each year the treaty was renewed by adding a new annex without a settlement of the previous contract. In other words, the reinsurance recoverable recognised by the insured on its balance sheet did not realize during the first two years.

This could be explained by uncertainty over the settlement clause. The contract covers a period of 4 years, and the settlement clause does not specify the year in which it will be paid. Also considered could be the fact that the IBNR is statistically estimated being an amount estimated and not a reserve relative to an opened claim, which requires time for the insurance undertaking to receive new information about a claim, to settle the claim and observe that there is a surplus which was not part of the RBNS at the 'reference date'.

In addition, as the treaty is annually renewed and there was no settlement in the past, there is a significant uncertainty on the amount that could be ceded to the reinsurer in practice given the annual renewal replacing the initial agreement.

Based on the information provided by ASF, in the last quarter of 2022, Euroins Romania collected the first claims paid recoverable of RON 5.5 million and a RBNS ceded at 30 September 2022 of 6.5 million, totalling RON 12 million, which is the first time any claims were recovered from the reinsurer on this treaty.

The reinsurance recoverable, or the Ceded Best Estimate, should be computed following an economic approach as the best estimation of the future cash flows weighted by the occurrence's probabilities. Given the past cash flows, although quite short, and even considering the cash flows after the computation date 30 September 2022, the Ceded Best Estimate triggered by the 'XoL on IBNR' treaty is estimated as RON 1.8 million (as one third of RON 5.5 million – the only past cashflow).

3.3.5. TOTAL IMPACT ON THE REINSURANCE RECOVERABLE

Based on the above assessment, the EIOPA main findings regarding the Ceded BE are:

- The reinsurance recoverable computation related to the XoL treaty as computed by Euroins Romania is not commensurate with the real risk mitigation effect of this treaty given the methodology in place for the IBNR reserve. Another direct consequence is the overestimation of the gross-to-net ratio for the Ceded BE of Premiums Provision;
- Despite having the legal form of a QS agreement, the underlying economic nature of the QS-LPE and treaties and the 10% QS are non-proportional;
- The XoL on IBNR contract presents ambiguous legal wording and fails to respect the arm's length and the rational agents' principles.

Based on the above-mentioned findings, resulting from EIOPA's analysis of the reinsurance program of Euroins Romania, the reinsurance recoverable considered by Euroins Romania is significantly overestimated.

Table 14: EIOPA Reinsurance recoverable estimation using Euroins Romania gross BE estimation

Million RON	Euroins Romania			EIOPA Estimation		
Treaties	Ceded Claims Provision		Ceded Premium Provision	Ceded Claims Provision		Ceded Premium Provision
	RBNS	IBNR		RBNS	IBNR	
XoL	23	144		23*	70**	18
50% QS-LPE	308	300		0	0	0
5% QS-LPE	30.8	30		0	0	0
10% QS	14	13		0	0	0
XoL IBNR	NA	109		NA	1,8	0
TOTAL (Undiscounted)	971		625	94.8		18
Ceded BE discounted before counterparty default	827		538	79		15
Ceded BE	824		536	79		15
Total Ceded BE	1,360			94		

Not re-assessed based on materiality

**Given the lack of information, this represents a maximum amount*

In the Euroins Romania estimation for gross BE, EIOPA's estimation for the ceded BE is RON 94 million (EUR 19 million) instead of RON 1,360 million (EUR 275 million), i.e. a EUR 256 million less (or -93%) reinsurance recoverable than the Euroins Romania estimation.

In the EIOPA estimation for gross BE, the undiscounted ceded BE would be RON 200 million (discounted ceded BE of RON 168 million (EUR 34 million)).

3.4. INTERNAL CONTROL

Considering the outcome of EIOPA's assessment, the following deficiencies in respect of the internal control system and validation process of Euroins Romania, are apparent:

- Mistreatment of some non-life liabilities as life liabilities;
- Non-compliance with Euroins Romania's own methodology regarding the calculation of the BE claims provision. This includes the compilation of the run-off triangle for HRG Attritional BI and the computation of the frequency for big claims and claims with annuities;
- Lack of sufficient controls to ensure the consistency of the methodology used with the Solvency II requirements. This includes the missing information in the compilation of triangles, the circular computation of the BE premiums provisions and the inconsistency of the ultimate loss ratios in the calculation of the ceded BE premium provision for the XoL treaty;
- Misunderstanding of the Solvency II contract boundary by the non-inclusion of BBNI contracts in the BE computation;
- Potential inappropriateness and ineffectiveness of the actuarial function controls over the calculations, methodologies and assumptions used, in light of the shortcomings described in this report that concludes for a material insufficiency of the technical provisions gross and net of

reinsurance. The document *'Validare BE TP 30.09.2022 (001)'*, which is a validation document regarding the BE computation, is signed-off by the actuarial function of Euroins Romania.

4. CONCLUSIONS

The BE of gross technical provisions subject to EIOPA's assessment represented 98.7% of the BE of the overall gross technical provisions, while the reinsurance recoverable covered 99,8% of the total recoverable on the MTPL LoB, considering the reported Solvency II balance Sheet of Euroins Romania at the reference date.

EIOPA's assessment was performed based on the data reported by Euroins Romania to the ASF. EIOPA had no access to ASF's permanent control report and adjustments' computation, ensuring full objectivity and impartiality.

EIOPA's findings are summarised as follows.

- **Technical provisions gross of reinsurance**

1) Data quality

Euroins Romania's data is not stable, not verifying the mathematical assumptions of the Chain-Ladder method. A typical assumption of actuarial methods such as the Chain-Ladder method is that the patterns and trends in the historic data do not change over time. In the case of Euroins Romania's data, EIOPA's analysis of the run-off payments triangle data indicates that this assumption is not appropriate.

Considering that the responsibility on the quality of the data reported for supervisory purposes lies on the supervised entities and it is directly linked to their systems of governance in place, the lower reporting quality should signal for supervisors weaknesses in the system of governance.

As the run-off triangles are unstable and volatile, Euroins Romania should adopt a prudent approach for the final reserve to properly factor for this uncertainty.

2) BE of Claims Provision

The following deficiencies were identified regarding Euroins Romania's methodology for the calculation of the BE of Claims provision:

- There is a lack of information on the last diagonal of the payments run-off triangles. Without any further adjustments, this results in a significant underestimation of the BE for Claims Provision;
- The scope of the non-life BE is incomplete as Euroins Romania considers the unknown claims with annuities as a life liability;
- Reserving does not reflect the observed payment pattern, namely the slowed down claims payments in last years;
- The claims with annuities and the big claims above EUR 750,000 are underestimated by the inconsistent application of the frequency - severity methodology.

Based on the above-mentioned findings, EIOPA's assessment made use of:

- Payments triangles over incurred triangles, given the lack of information on how claims are handled and the RBNS estimation performed by Euroins Romania;
- Classical Chain-Ladder method instead of the adjusted Euroins method, as the latter is not widely used for reserving or as validation method, to which adds the lack of evidence as regards its effectiveness in the past;
- Ultimate loss ratio approach for the last accident year, given the significant increase in premiums and the insurance undertaking's adoption of this methodology;
- Different scenarios taking into account initially excluded individual development factors on the last diagonal (please refer to subchapter 3.2.1.1.2 for description of the scenarios);
- Assumption that all big claims above EUR 750 000 are known after 5 years of the accident period;
- Assumption that all claims with annuities below EUR 750 000 are known after 5 years of the accident period.

The following table illustrates the outcome of EIOPA's assessment:

Table 15: Different Scenarios for the Best Estimate of Claims Provision

Million RON	Euroins estimation	Scenario 1	Scenario 2	Scenario 5	Scenario 6 bis	Scenario 7 bis
Attritional MD	414	765	751	761	736	736
Attritional BI	97	116	108	117	117	117
Large MD	199	393	326	398	385	388
Large BI	370	1,084	1,024	1,017	993	1,032
Claims with annuities	81	237	237	237	237	237
Big Claims	65	316	316	316	316	316
Total Claims Result	1,224	2,911	2,762	2,846	2,784	2,826
With Inflation	1,367	3,250	3,084	3,177	3,108	3,155
With Expenses	29	29	29	29	29	29
Total Undiscounted wo annuities	1,396	3,279	3,113	3,206	3,137	3,184
BE for Claim Provision	1,170[15]	2,747	2,608	2,687	2,629	2,668
Impact	NA	+133%	+122%	+128%	+128%	+127%

Source: EIOPA using Euroins Romania row data

While the scenarios were built from different perspectives, the outputs remain comparable and indicate a significant underestimation of the BE for Claims Provision:

✓ **The BE of Claims Reserve is estimated between RON 2.608 million and RON 2.747 million i.e. +122% to +133% higher than Euroins Romania's estimation.**

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[15] The BE of claims provisions is presented including the RON 81 million of Claims with IBNR estimated by the insurance undertaking and considered as BE Life.

3) BE of Premiums Provision

The following deficiencies were identified as regards Euroins Romania's methodology for the calculation of the BE of Premium provision:

• The computation's formula of the ultimate loss ratio is circular, and the insurance undertaking does not consider the changes in the average premiums;
• The ultimate loss ratio is underestimated as a consequence of the underestimation of the BE of Claims Provision;
• The written premiums related to BBNI contracts are not considered.

Based on the approach used to compute the BE of Claim Provision for last accident period with an ultimate loss ratio estimated as an average of the previous three years, the AY10 ULR was considered representative of the last 4 years (AY7-AY10).

Based on Scenario 1 and 2, consistently with the findings on the BE of Claims provision:

✓ **The BE of Premiums Reserve is estimated between RON 810 million and RON 827 million i.e. +17.1% to +19.5% higher than Euroins estimation.**

• **Reinsurance Recoverable**

EIOPA's assessment covered five reinsurance treaties in place at 30 September 2022:

• A XoL signed ██
████████████████████████████████████ Similar treaties cover claims for past accident periods but with different attachment points and limits;
• A XoL on IBNR between Euroins Romania and ██████████████████ ;
• A 50% QS-LPE for the period 01 January 2022 – 31 December 2022;
• A 15% QS-LPE for the period 01 October 2021 – 31 December 2022 which was modified and covering only 5% starting with 01 July 2022;
• A 10% QS for the period 01 July 2022 – 31 December 2022 replacing the change in the previous contract but only for the claims in this period.

EIOPA's assessment analysed the features of each reinsurance treaty, the methodology adopted by Euroins Romania and performed an estimation of the ceded claims and premiums provisions.

The following findings are relevant for the purposes of EIOPA's estimations:

• The reinsurance recoverable computation of the XoL treaty performed by Euroins Romania is not commensurate with the real risk mitigation effect of the treaty given the methodology in place for the IBNR provision (the average gross-to-net ratio on the historical data is not representative for the entire IBNR provision), and the methodology used by Euroins Romania leads to inconsistent results;

- The two QS-LPE treaties and the 10% QS treaty, although having the legal form of a QS agreement, their underlying economic nature is non-proportional;
- For the XoL on IBNR, there is an ambiguous legal wording as regards the IBNR definition and unclarity about the date of settlement, as well as significant uncertainty on the amount that could be ceded to the reinsurer in practice given the annual renewal replacing the initial agreement.

The table below provides an overview of the ceded claims and premiums provisions estimated by Euroins Romania and the outcome of EIOPA's assessment of the ceded claims and premiums provisions.

As Euroins Romania does not compute separately the reinsurance recoverable for the BE of Premiums Provision, only the total aggregated amount is provided in the table.

Table 16: EIOPA Reinsurance recoverable estimation

Million RON	Euroins Romania			EIOPA Estimation		
Treaties	Ceded Claims Provision		Ceded Premium Provision	Ceded Claims Provision		Ceded Premium Provision
	RBNS	IBNR		RBNS	IBNR	
XoL	23	144		23*	70**	18
50% QS-LPE	308	300		0	0	0
5% QS-LPE	30.8	30		0	0	0
10% QS	14	13		0	0	0
XoL IBNR	NA	109		NA	1,8	0
TOTAL (Undiscounted)	971		625	93		18
Ceded BE discounted before counterparty default	827		538	79		15
Ceded BE	824		536	79		15
Total Ceded BE	1,360			94		

Not re-assessed based on materiality

**Given the lack of information, this represents a maximum amount*

✓ In accordance with EIOPA's assessment, in the Euroins estimation for gross BE, the undiscounted ceded BE is estimated as RON 112.8 million, i.e. 93% lower than the Euroins Romania estimation.

In the EIOPA estimation for gross BE, the undiscounted ceded BE would be RON 200 million (discounted ceded BE of RON 168 million (EUR 34 million)).

- **Net impact**

As such, in accordance with EIOPA's assessment, the net best estimate for the motor third part liability line of business, including annuities stemming from non-life, ranges between EUR 657 million to EUR 688 million (instead of EUR 107 million as estimated by Euroins Romania) i.e deficiency between EUR 550 million to EUR 581 million.

- **System of Governance**

As noted above, the outcome of EIOPA's assessment can be interpreted by supervisors as a sign of weaknesses in terms of Euroins Romania's system of governance including lack of sufficient controls to ensure the consistency of the methodology used with the Solvency II requirements and potential inappropriateness and ineffectiveness of the actuarial function controls over the calculations, methodologies and assumptions used. ██
████████████████████████████████████

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ABBREVIATIONS

AAL - Annual Aggregate Limit
ASF - Autoritatea de Supraveghere Financiară (Romanian national competent authority)
BBNI- Bound But Not Incepted
BE – Best Estimate
BI - Bodily Injury
DM – Material Damage
DR - Commission Delegated Regulation (EU) 2015/35 of 10 October 2014
EU – European Union
FSC – Financial Supervision Commission (Bulgarian national competent authority)
HRG - Homogeneous Risk Groups
IBNeR - Incurred But Not enough Reported
IBNR - Incurred But Not Reported
IBNyR - Incurred But Not yet Reported
IDF - Individual Developments Factors
LoB – Line of business
MCR - Minimum Capital Requirement
MTPL - Motor Third Party Liability
NCA - National Competent Authority
EOF – Eligible Own Funds
QRT – Quantitative Reporting Template
QS - Quota Share reinsurance
QS-LPE - Quota Share reinsurance with Loss Portfolio Entry
RBNS - Reported But Not Settled
RM - Reinsurance Margin
SCR - Solvency Capital Requirement
Solvency II Directive - Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009
UPR - Unearned Premium Reserve
ULR - Ultimate Loss Ratio
XoL - Excess of Loss reinsurance

ANNEXES

Annex 1: Audit trail of the data shared with EIOPA

Annex 2: Chain-Ladder reserving method

Annex 3: Claims reserve distribution

Annex 4: Chain-ladder method on incurred triangles & merge of attritional with large claims

Annex 5: Big claims above EUR 750.000

Annex 6: Big claims – Numbers of years required to identify the claim as a big claim

Annex 7: Number of claims with annuities identified by accident year

Annex 8: Euroins Romania gross-to-net ratio on RBNS computation

Annex 9: The attachement point of past XoL reinsurance treaties

ANNEX 1: AUDIT TRAIL OF THE DATA SHARED WITH EIOPA

No.	File name	Folder	Received from Euroins	Received via	Sent to EIOPA
1	10y_ay 10 2012-09.2022 motor liab.xlsx	2022.11.11-18\ij)-ii)-x)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
2	BE CR MTPL 30.09.2022.xlsx	2022.11.11-18\ij)-ii)-x)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
3	BE_Claims_res_SII_30.09.2022.xlsx	2022.11.11-18\ij)-ii)-x)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
4	BE_premium_res_SII_30.09.2022.xlsx	2022.11.11-18\ij)-ii)-x)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
5	Reins recoverables_30.09.2022.xlsx	2022.11.11-18\ij)-ii)-x)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
6	Summary_reserves_SII_30.09.2022.xlsx	2022.11.11-18\ij)-ii)-x)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
7	ACT-04_Ed.2_Rev.1_10.2022_Constituirea, mentinerea si monitorizarea celei mai bune estimari a rezervelor tehnice conform regimului Solvency II	2022.11.11-18\iii)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
8	Validare BE TP 30.09.2022 (001)	2022.11.11-18\iv)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
9	07.Balanta analitica de verificare la data 31.07.2022.xlsx	2022.11.11-18\ix)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
10	08 Balanta analitica de verificare la data 31.08.2022.xlsx	2022.11.11-18\ix)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
11	09.Balanta analitica de verificare la data 30.09.2022.xlsx	2022.11.11-18\ix)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
12	09.Balanta sintetica de verificare la data 30.09.2022.xlsx	2022.11.11-18\ix)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
13	EC-10 Procedura alocare cheltuieli de achizitie si administrare e1_r0 06.2022.pdf	2022.11.11-18\v)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
14	Consemnarea proceselor aferente BE 30.09.2022 RO (001).pdf	2022.11.11-18\vii)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
15	412_30.09.2022.xlsx	2022.11.11-18\vii)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
16	RBNS la 30.09.2022.xlsx	2022.11.11-18\xii)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
17	xiii) Situația creanțelor din asigurare la 30.09.2022 pentru produsul RCA.xlsx	2022.11.11-18\xiii)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
18	xiv) Situația veniturilor înregistrate în avans la 30.09.2022 pentru produsul RCA.xlsx	2022.11.11-18\xiv)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
19	Plati daune detaliat 01.10.2012-30.09.2022.xlsb	2022.11.11-18\xv)	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
20	BD Daune platite_30.09 2022.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
21	BD Daune platite_31.12 2012.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
22	BD Daune platite_31.12.2013.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
23	BD Daune platite_31.12.2014.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
24	BD Daune platite_31.12 2015.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
25	BD Daune platite_31.12.2016.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
26	BD Daune platite_31.12.2017.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
27	BD Daune platite_31.12.2018.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
28	BD Daune platite_31.12.2019.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
29	BD Daune platite_31.12.2020.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
30	BD Daune platite_31.12 2021.xlsx	2022.11.11-18\xv)\Reasigurare	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
31	Fisiere pregatite pentru Solicitarea ASF din 09.11.2022.docx	2022.11.11-18	SC- 31864.3 /11.11.2022.	Sharepoint	16.02.2023
32	FW_Solicitare documente.msg	2022.11.11-18	n/a	n/a	16.02.2023
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34	MTPL XL 2021_2022_1.pdf	2022.11.11-18\XoL Reinsurance	information received previosuly during the permanent supervision process		15.03.2023
35	MTPL XL 2021_2022_2.pdf	2022.11.11-18\XoL Reinsurance	information received previosuly during the permanent supervision process		15.03.2023
36	MTPL XL Sub 2020_2021_1.pdf	2022.11.11-18\XoL Reinsurance	information received previosuly during the permanent supervision process		15.03.2023
37	MTPL XL Sub 2020_2021_2.pdf	2022.11.11-18\XoL Reinsurance	information received previosuly during the permanent supervision process		15.03.2023
38	5016▮▮▮.pdf	2022.11.11-18\QS Reinsurance contracts	information received previosuly during the permanent supervision process		16.02.2023
39	5034▮▮.pdf	2022.11.11-18\QS Reinsurance contracts	information received previosuly during the permanent supervision process		16.02.2023
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41	5043▮▮.pdf	2022.11.11-18\QS Reinsurance contracts	information received previosuly during the permanent supervision process		16.02.2023
42	Contract▮▮e.pdf	2022.11.11-18\QS Reinsurance contracts	information received previosuly during the permanent supervision process		16.02.2023
43	LFT▮▮e.pdf	2022.11.11-18\QS Reinsurance contracts	information received previosuly during the permanent supervision process		16.02.2023
44	Letter of▮▮articipation.pdf	2022.11.11-18\QS Reinsurance contracts	information received previosuly during the permanent supervision process		16.02.2023
45	▮▮e QuotaShare MTPL 2022.pdf	2022.11.11-18\QS Reinsurance contracts	information received previosuly during the permanent supervision process		16.02.2023
46	Euroins Romania▮▮▮tiR XL.pdf	2022.11.11-18\▮▮Reinsurance Contract	information received previosuly during the permanent supervision process		16.02.2023
47	Euroins Romania▮▮▮NR XL_Annex1.pdf	2022.11.11-18\▮▮Reinsurance Contract	information received previosuly during the permanent supervision process		16.02.2023
48	Euroins Romania▮▮IBNR XL_Annex2.pdf	2022.11.11-18\▮▮Reinsurance Contract	information received previosuly during the permanent supervision process		16.02.2023
49	EOC 22E675010, 29, 39 E▮▮▮vp MTPL XL 2022.pdf	2022.11.11-18\XoL Reinsurance	information received previosuly during the permanent supervision process		16.02.2023
50	EOC 22E675020, 22, 24▮▮ewp MTPL XL 2022.pdf	2022.11.11-18\XoL Reinsurance	information received previosuly during the permanent supervision process		16.02.2023
51	EOC 22E675025, 25▮▮MTPL XL 2022.pdf	2022.11.11-18\XoL Reinsurance	information received previosuly during the permanent supervision process		16.02.2023
52	RBNS la 30.09 pentru anii 2012-2022.xlsx	2022.12.16\xii) Adresa SA-DG 11824 din 13.12.2022	SC-31846.6 / 16.12.2022	Sharepoint	16.02.2023
53	Raspuns adresa ASF 11824 _ partea I.pdf	2022.12.16	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
54	SA- DG 11824_13.12.2022.pdf	2022.12.16	n/a	n/a	16.02.2023
55	20221220_Raspuns adresa ASF 11824 _ partea a II a.pdf	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
56	Evaluarea tehnicii de diminuare a riscurilor _5%QS.pdf	2022.12.20	SC-31846.7 / 20.12 2022	e-mail	16.02.2023
57	Evaluarea tehnicii de diminuare a riscurilor _50%QS.pdf	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
58	Evealuarea tehnicii de diminuare a riscului _10%QS.pdf	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
59	FW_Raspuns Euroins la Adresa ASF SA-DG 11824 13 12 2022 punctul B.msg	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
60	Point 1 - CONTRACT ENDORSMENT #▮▮.pdf	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
61	Point 2 - Account▮▮01.07.2022_30.09.2022.pdf	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
62	Point 2 - email▮▮nfirmation.pdf	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
63	Point 3 - Account▮▮30.09.2022.xlsx	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
64	Point 3 - Decont MTPL QS AY LPE 50%_30.09.2022.xlsx	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
65	Point 3 - Decont▮▮Re_30.09.2022.xlsx	2022.12.20	SC-31846.7 / 20.12.2022	e mail	16.02.2023
66	Point 4.xlsx	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
67	Point 5 - reinsurance payables reconciliation.xlsx	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
68	Point 6, 7 - Risk transfer analysis▮▮Re.docx	2022.12.20	SC-31846.7 / 20.12.2022	e-mail	16.02.2023
69	SA- DG 11824_13.12.2022.pdf	2022.12.20	n/a	n/a	16.02.2023
70	ERD Euroins Romania - 2022 Accident Year QS with Outstanding Loss Portfolio Entry.pdf	2022.12.22	SC-31846.8 /22.12.2022	e-mail	16.02.2023

71 ERD Euroins Romania - 2022 AV + LPT after trigger of Early Cancellation clause.pdf	2022.12.22	SC-31846.8 /22.12.2022	e-mail	16.02.2023
72 ERD ▮▮▮▮ ▮▮ f.xlsx	2022.12.22	SC-31846.8 /22.12.2022	e-mail	16.02.2023
73 Explicatii test ERD.pdf	2022.12.22	SC-31846.8 /22.12.2022	e-mail	15.02.2023
74 FW Completare Raspuns Euroins la Adresa ASF SA DG 11824 13 12 2022 punctul B.msg	2022.12.22	SC-31846.8 /22.12.2022	e-mail	16.02.2023
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77 SA DG 10932.5 04.01.2023 FW Raspuns Euroins la Solicitarea ASF nr SA-DG 10932 4 22 12 2022.msg	2023.01.03	SC- 31864.10 / 03.01.2023	e-mail	16.02.2023
78 412_30.09 2022.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
79 Creante _401_404 - 30.09.2022.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
8▮ ▮▮ Letter_of_Support_060123.pdf	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
81 FW Raspunsul Euroins la Solicitarea ASF nr SA-DG 11151 4 28 12 2022.msg	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
82 LAC_DT_Calculation_EIRO_Q222.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
83 LAC_DT_Calculation_EIRO_Q322.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
84 LAC_of_DT_10Y_Test_Template_EIRO_Q222.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
85 LAC_of_DT_10Y_Test_Template_EIRO_Q322.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
86 SII DTADTL calculation_Q222.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
87 SII DTADTL calculation_Q322.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
88 UPR_RBNS_IBNR per RI contract.xlsx	2023.01.06	SC- 11811.86/06.01.2023	e-mail	16.02.2023
89 FW Raspuns Euroins la Adresa ASF nr SA-DG 155 1 11 01 2023 - explicatii calcul net DTA.msg	2023.01.16	SC- 11811.88 /13.01.2023	e-mail	16.02.2023
90 FW Raspuns Euroins la Adresa ASF nr SA-DG 341 13 01 2023.msg	2023.01.17	SC- 31864.12 /17.01.2023	e-mail	16.02.2023
91 00001_Corp_Email (1).pdf	2023.01.19	n/a	n/a	16.02.2023
92 00002_Toate_PDF.pdf	2023.01.19	n/a	n/a	16.02.2023
93 EC-10 Procedura aloc.chel.achiz.si admin.e1_r0 06.2022.pdf	2023.01.19	SC-31864.17 / 25.01.2023	e-mail	16.02.2023
94 FW solicitare informatii.msg	2023.01.19	SC-31864.17 / 25.01.2023	e-mail	16.02.2023
95 Polite in vigoare la 30 09 2022_part1.xlsx	2023.01.19	SC-31864.17 / 25.01.2023	Sharepoint	15.03.2023
96 Polite in vigoare la 30 09 2022_part2.xlsx	2023.01.19	SC-31864.17 / 25.01.2023	Sharepoint	16.02.2023
97 Polite in vigoare la 30.09.2022_part3.xlsx	2023.01.19	SC-31864.17 / 25.01.2023	Sharepoint	16.02.2023
98 Raspunsuri Euroins _ solicitarea SA DG 440.pdf	2023.01.19	SC-31864.17 / 25.01.2023	e-mail	16.02.2023
99 reconciliation point 7,8,9.xlsx	2023.01.19	SC-31864.17 / 25.01.2023	e-mail	16.02.2023
100 Reconciliere cheltuieli de achizitie, administrare, daune 30.09.2022.xlsx	2023.01.19	SC-31864.17 / 25.01.2023	e-mail	16.02.2023
101 FW Raspuns Euroins la Adresa ASF nr SA-DG 552 20 01 2023.msg	2023.01.25	SC-31864.19 / 26.01.2023	e-mail	16.02.2023
102 IBNR MTPL split by quarters (001) 31.12 2021 (1).xlsx	2023.01.25	SC-31864.19 / 26.01.2023	e-mail	16.02.2023
103 Reconciliere 6,477,968 cedat IBNR XL.xlsx	2023.01.25	SC-31864.19 / 26.01.2023	e-mail	16.02.2023
104 Reconciliere IBNR.xlsx	2023.01.25	SC-31864.19 / 26.01.2023	e-mail	16.02.2023
105 FW Raspuns Euroins la Adresa ASF nr SA-DG 155 3 19 01 2023.msg	2023.01.30	SC-11811.91 / 30.01.2023	e-mail	16.02.2023
106 Evaluarea recuperabilitatii rezervelor tehnice cedate in reasigurare.pdf	2023.02.01	SC-31864.22 / 02.02.2023	e-mail	16.02.2023
107 FW Raspuns Euroins la Adresa ASF SA-DG 1117 31 01 2023.msg	2023.02.01	SC-31864.22 / 02.02.2023	e-mail	16.02.2023
108 FW Raspuns Euroins la Adresa ASF SA-DG 1117 31 01 2023 _.msg	2023.02.01	SC-31864.22 / 02.02.2023	e-mail	16.02.2023
109 FW Solicitare informatii nr SA-DG 1117 31 01 2023.msg	2023.02.01	n/a	n/a	16.02.2023
110 Monografie contabila _ reasig.xlsx	2023.02.01	SC-31864.22 / 02.02.2023	e-mail	16.02.2023
111 Note contabile reasigurare.xlsx	2023.02.01	SC-31864.22 / 02.02.2023	e-mail	15.02.2023
112 RCP II - răspuns Euroins.msg	2023.02.01	SC-31864.22 / 02.02.2023	e-mail	16.02.2023
113 Reconciliation ceding XL.xlsx	2023.02.01	SC-31864.22 / 02.02.2023	e-mail	16.02.2023
114 Cashflow_Model_S2_BE_PR_v.100223_B	2023.02.10 - Attachments to EIRO comments to RCP	SC-3266.1 / 10.02.2023	e-mail	16.02.2023
115 Euroins_Romania Unpaid Reserve as at September 2022_09022023_ACTI_Opinie.pdf	2023.02.10 - Attachments to EIRO comments to RCP	SC-3266.1 / 10.02.2023	e-mail	16.02.2023
116 MTPL_QS_Acconting_Memo_CORPORATE_USE.docx	30.06.2022	SC –11811.79 / 16.11.2022	e-mail	16.02.2023
117 Opinion on Accounting Treatment_Preliminary Report 03112022.pdf	30.06.2022	SC –11811.76 / 03.11.2022	e-mail	16.02.2023
118 Methodological_Model_MTPL_QS_Final.xlsx	30.06.2022	SC –11811.79 / 16.11.2022	e-mail	16.02.2023
119 Methodological_Model_MTPL_QS_Final_250922.xlsx	30.06.2022	SC –11811.79 / 16.11.2022	e-mail	16.02.2023
120 ACTi Team Bios.pdf	30.06.2022	SC –11811.79 / 16.11.2022	e-mail	16.02.2023
121 EuroinsRomania_SCR2021vsQ22022.pdf	Presentations	SC- 23613.1 /16.08.2022	e-mail	16.02.2023
122 prezentare Euroins 2	Presentations	no exit number / 05.09.2022	e-mail	16.02.2023
123 2023_16_02_ Informare program reasigurare_ masuri implementate Euroins	2023.02.20	SC-4681/16.02.2023	e-mail	21.02.2023
124 Ref Raspuns Euroins la Adresa ASF nr. SA-DG 1318.320.02.2023.msg	2023.02.20	SC- 3266.3/20.02.2023	e-mail	21.02.2023
125 Presentation of the activities carried out on the analysis of the reinsurance programme at Euroins Romania Asigurare.docx	2023.02.24	n/a	n/a	24.02.2023
126 Aggregate Excess Damage.docx	2023.02.24	n/a	n/a	24.02.2023
127 Fw Raspunsul Euroins la Solicitare adițională de informații nr SA-DG 1318 7 23 02 2023.msg	2023.03.03	SC- 3266.10/03.03.2023	e-mail	13.03.2023
128 extras obiectiuni	2023.02.10 - Obiectiuni	SC-3266.1 / 10.02.2023	e-mail	14.03.2023

ANNEX 2: CHAIN-LADDER RESERVING METHOD

The classic Chain-Ladder method is the most common reserve method, or development method, in non-life to compute the Claims Reserve. The claims are regrouped in an aggregated manner that is useful and intuitive, the amounts of claims (paid or incurred) are aggregated by year of accident and then by years of development (also called 'run-off triangle' or simply 'triangle').

In the classic Chain-Ladder method, the development year is defined as the time difference with the accident year. As a theoretical example on a payment triangle, the amount in green in the figure above represents the cumulative payments for claims occurred during the accident year (or period) 01.10.15 – 30.09.2016 after 2 years of development (or at 30.09.2018).

Theoretical example of a payment triangle

accident period	Development years									
	1	2	3	4	5	6	7	8	9	10
01.10.2012-30.09.20	464	1,286	2,473	4,964	6,853	7,707	8,224	8,367	8,412	8,457
01.10.2013-30.09.20	108	1,348	3,991	8,072	9,939	10,932	11,688	12,042	12,216	
01.10.2014-30.09.20	989	6,680	12,378	16,769	19,638	21,271	22,141	22,714		
01.10.2015-30.09.20	2,076	8,627	13,800	18,038	20,769	22,034	22,847			
01.10.2016-30.09.20	3,128	11,069	16,251	21,499	25,228	27,677				
01.10.2017-30.09.20	4,498	16,371	22,450	26,697	31,799					
01.10.2018-30.09.20	3,080	13,974	19,502	25,981						
01.10.2019-30.09.20	2,788	9,681	15,879							
01.10.2020-30.09.20	2,651	11,147								
01.10.2021-30.09.20	2,804									

Source: EIOPA, theoretical example

For an incurred triangle, the amount would represent the total claim by claim assessment of the final cost for claims occurred during the accident year (or period) 01.10.15 – 30.09.2016 as evaluated 2 years after (or at 30.09.2018).

The first column of the triangle contains the payments done during the year of the accident, the second column contain the cumulative payments done during the year of the accident and the year after, etc., and the last column will contain all the payments relative to a specific accident year (or the ultimate charge).

To estimate the ultimate charge, the inferior part of the triangle needs to be complete. The primary underlying assumption of the Chain-Ladder method is that the claims will develop in the future as past claims developed. For each cohort and development period, it assumes that all cohorts will follow the same development pattern, that is, that the 'jumps' between development periods will be the same for all cohorts. In actuarial work, these 'jumps' are assumed to be multiplicative, and are called development factors.

As an example, given the first 9 accident periods, in average the cumulative payments at the end of the second development period (development period 1) are 4.05 higher than the payments done during the first development period, the payments from the last accident period are multiplied by 4.05. This allows to estimate the cumulative payments after 2 development year by multiplying the amount of 2,804 (corresponding to payments done for the accident period 01.10.2021-30.09.2022) with the first development factor. The method is that applied for the next development year using the first 8 accident periods, etc.

By applying this method and supposing that there are no other payments after the 9th development years, the final column will indicate an estimation for the ultimate charge, i.e. the final cost of the claims relative to each accident year. The Claim result is than deduced by extracting from the ultimate charge the payments already done (i.e. last diagonal of the initial triangle). If the claims are not completely developed after 9 years, an intermediary step is performed by adding another development factor (usually call 'tail factor') using other statistical methods or expert judgment.

Theoretical example of Chain-Ladder method

accident period	Development years									
	1	2	3	4	5	6	7	8	9	10
01.10.2012-30.09.2013	464	1,286	2,473	4,964	6,853	7,707	8,224	8,367	8,412	8,457
01.10.2013-30.09.2014	108	1,348	3,991	8,072	9,939	10,932	11,688	12,042	12,216	12,281
01.10.2014-30.09.2015	989	6,680	12,378	16,769	19,638	21,271	22,141	22,714	22,958	23,079
01.10.2015-30.09.2016	2,076	8,627	13,800	18,038	20,769	22,034	22,847	23,428	23,680	23,805
01.10.2016-30.09.2017	3,128	11,069	16,251	21,499	25,228	27,677	28,998	29,736	30,055	30,214
01.10.2017-30.09.2018	4,498	16,371	22,450	26,697	31,799	34,573	36,224	37,145	37,545	37,743
01.10.2018-30.09.2019	3,080	13,974	19,502	25,981	30,901	33,597	35,201	36,097	36,485	36,678
01.10.2019-30.09.2020	2,788	9,681	15,879	18,155	21,593	23,477	24,597	25,223	25,494	25,629
01.10.2020-30.09.2021	2,651	11,147	17,232	19,701	23,432	25,477	26,693	27,372	27,666	27,813
01.10.2021-30.09.2022	2,804	11,366	17,571	20,090	23,894	25,979	27,219	27,911	28,212	28,361
Development factors		4.05	1.55	1.14	1.19	1.09	1.05	1.03	1.01	1.01

Source: EIOPA, theoretical example

The individual development factors are defined as the 'jumps' by accident period (see above). For a specific development year, the overall development factor is the weighted average of individual development factors.

Using expert judgement, some individual development factor could be excluded. As an example, for the first development year, the individual development factor for accident year 01.10.2013 – 30.09.2014 (12.5 in the figure above) is extremely high compared to the others. An option would be to exclude it (if there are proper justifications) which would imply that the new development factor will be 4.04 instead of 4.05. The change is not insignificant given the weight of the individual development factor excluded (108 in this example which is not significant compared to latest accident periods).

Individual development factor

| accident period	Individual development factors								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
01.10.2012-30.09.2013	2.8	1.9	2.0	1.4	1.1	1.1	1.0	1.0	1.0
01.10.2013-30.09.2014	12.5	3.0	2.0	1.2	1.1	1.1	1.0	1.0	
01.10.2014-30.09.2015	6.8	1.9	1.4	1.2	1.1	1.0	1.0		
01.10.2015-30.09.2016	4.2	1.6	1.3	1.2	1.1	1.0			
01.10.2016-30.09.2017	3.5	1.5	1.3	1.2	1.1				
01.10.2017-30.09.2018	3.6	1.4	1.2	1.2					
01.10.2018-30.09.2019	4.5	1.4	1.3						
01.10.2019-30.09.2020	3.5	1.6							
01.10.2020-30.09.2021	4.2								

Source: EIOPA, theoretical example

ANNEX 3: CLAIMS RESERVE DISTRIBUTION

Since the "point estimate" of the Claims Reserve, regardless of the methodology, may represent merely a random realisation of an underlying stochastic process, it is beneficial to apply statistical and actuarial techniques to also estimate the probability distribution of the reserve. This will allow to estimate the underlying implied volatility, as well as to identify the theoretical percentile of the distribution that correspond to the point estimate. A too low (high) percentile may signal excessive aggressive (prudent) assumptions in the reserve.

To this purpose, EIOPA has calibrated an over-dispersed Poisson generalised linear model to the four paid triangles with no exclusions: Attritional MD, MD big claims below 750k, Attritional BI and Large BI. Furthermore, a bootstrap procedure has been applied to each triangle: the residuals of the model have been repeatedly (10k times) resampled, obtaining for each HRG 10k pseudo datasets on which the over-dispersed Poisson GLM was each time recalibrated, leading to 10k triangles, 10k ultimate and 10k undiscounted claim reserve.

The result, summarised in the chart below, was the estimate of the undiscounted claims reserve distribution, as well as the implied volatility of the four HRGs. The distribution was then compared with the point estimate provided by the Undertaking and by EIOPA's application of the standard chain ladder model. The 0th implied percentile for Attritional MD, MD big claims below 750k, Attritional BI and Large BI suggests a very high aggressiveness in the UT assumptions for these HRG.
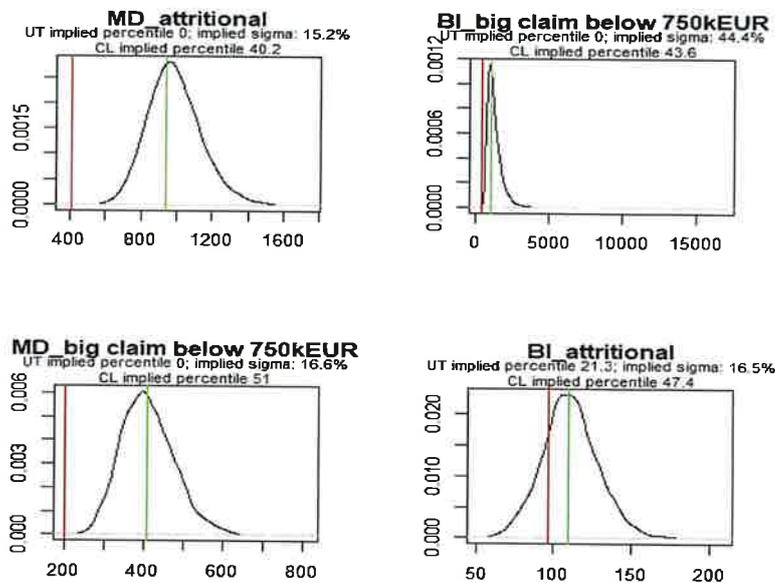
ANNEX 4: CHAIN-LADDER METHOD ON INCURRED TRIANGLES & MERGE OF ATTRITIONAL WITH LARGE CLAIMS

	Material Damage	Bodily Injury	Total	Impact
Euroins estimation	613	467	1,080	NA
No exclusions	1,083	1,356	2,439	126%
Similar exclusion as Euroins	1,114	1,570	2,684	149%
Exclusion 2 biggest	914	1021	1,935	79%
Exclussion 2 smaller	1,196	1,703	2,899	168%
Exclusion the 2 extremes	1,020	1,371	2,391	121%
Eclusion outside 1 in 10 years	945	1,125	2,070	92%
Eclusion outside 1 in 20 years	1,010	1,395	2,405	123%

Source: EIOPA using Euroins Romania raw data

ANNEX 5: BIG CLAIMS ABOVE EUR 750.000

eveniment	ay	Sum of Sum of Plata_RON_cu_anuitati	Sum of rbns cu anuitati	Sum of total incurred RON cu anuitati
2002273765-15.08.2013-RCA	01.10.2012-30.09.2013	4,101,634	0	4,101,634
2002613960-31.05.2013-RCA	01.10.2012-30.09.2013	2,727,821	762,410	3,490,231
2003314653-09.11.2013-RCA	01.10.2013-30.09.2014	3,827,030	0	3,827,030
2003531784-12.09.2014-RCA	01.10.2013-30.09.2014	5,855,314	0	5,855,314
2003599330-14.01.2015-RCA	01.10.2014-30.09.2015	5,622,053	0	5,622,053
2003876715-08.04.2014-RCA	01.10.2013-30.09.2014	5,849,235	306,454	6,155,689
2004191256-07.06.2014-RCA	01.10.2013-30.09.2014	5,666,086	0	5,666,086
2004564321-29.11.2014-RCA	01.10.2014-30.09.2015	9,680,083	0	9,680,083
2004581947-25.10.2014-RCA	01.10.2014-30.09.2015	20,808,698	0	20,808,698
2005082912-05.11.2015-RCA	01.10.2015-30.09.2016	5,196,591	0	5,196,591
2005447959-19.07.2015-RCA	01.10.2014-30.09.2015	5,823,534	0	5,823,534
2005750629-10.09.2015-RCA	01.10.2014-30.09.2015	4,737,252	75,779	4,813,031
2005879037-23.02.2016-RCA	01.10.2015-30.09.2016	5,386,340	0	5,386,340
2006019893-18.05.2015-RCA	01.10.2014-30.09.2015	10,000,335	1,302,348	11,302,684
2006037856-24.05.2015-RCA	01.10.2014-30.09.2015	0	3,970,479	3,970,479
2006929982-10.10.2015-RCA	01.10.2015-30.09.2016	3,732,553	0	3,732,553
2008998613-11.06.2016-RCA	01.10.2015-30.09.2016	3,529,989	0	3,529,989
2009474911-27.03.2016-RCA	01.10.2015-30.09.2016	1,782,827	5,711,088	7,493,914
2010277664-29.09.2016-RCA	01.10.2015-30.09.2016	4,635,975	1,000	4,636,975
2011971466-19.11.2016-RCA	01.10.2016-30.09.2017	3,661,403	0	3,661,403
2015521578-22.08.2017-RCA	01.10.2016-30.09.2017	3,506,288	345,854	3,852,142
2015684347-08.06.2017-RCA	01.10.2016-30.09.2017	6,896,608	0	6,896,608
2018755438-20.09.2017-RCA	01.10.2016-30.09.2017	4,682,437	0	4,682,437
2019417915-25.11.2017-RCA	01.10.2017-30.09.2018	5,906,943	0	5,906,943
2019538945-22.10.2017-RCA	01.10.2017-30.09.2018	666,770	5,940,616	6,607,386
2041200232-05.06.2020-RCA	01.10.2019-30.09.2020	3,910,096	2,107	3,912,204
2041606048-13.09.2020-RCA	01.10.2019-30.09.2020	5,575,693	68,874	5,644,566
2044218209-10.08.2020-RCA	01.10.2019-30.09.2020	4,220,795	0	4,220,795
Grand Total		**147,990,385**	**18,487,008**	**166,477,393**

Source: Euroins Romania 'BE CR MTPL 30.09.2022' sheet 'big claims > 750 000'

ANNEX 6: BIG CLAIMS – NUMBERS OF YEARS REQUIRED TO IDENTIFY THE CLAIM AS A BIG CLAIM

Policy number	Development years									
	1	2	3	4	5	6	7	8	9	10
2002273765			YES							
2002613960				YES						
2003314653					YES					
2003531784					YES					
2003599330							YES			
2003876715				YES						
2004191256				YES						
2004564321		YES								
2004581947			YES							
2005082912	YES									
2005447959		YES								
2005750629				YES						
2005879037		YES								
2006019893				YES						
2006037856								YES		
2006929982		YES								
2008998613		YES								
2009474911		YES								
2010277664				YES						
2011971466				YES						
2015521578						YES				
2015684347		YES								
2018755438		YES								
2019417915				YES						
2019538945					YES					
2041200232			YES							
2041606048			YES							
2044218209		YES								

ANNEX 7: NUMBER OF CLAIMS WITH ANNUITIES IDENTIFIED BY ACCIDENT YEAR

Accident period	No of claim files
01.10.2012-30.09.2013	27
01.10.2013-30.09.2014	21
01.10.2014-30.09.2015	24
01.10.2015-30.09.2016	18
01.10.2016-30.09.2017	29
01.10.2017-30.09.2018	9
01.10.2018-30.09.2019	6
01.10.2019-30.09.2020	5
01.10.2020-30.09.2021	0
01.10.2021-30.09.2022	0
	139

Source: Euroins Romania, excel file 'BE CR MTPL 30.09.2022' sheet 'annuities'

ANNEX 8: EUROINS ROMANIA GROSS-TO-NET RATIO ON RBNS COMPUTATION

2,017	Sum of Reserve, RON	Sum of XL DOL	
Claims with inccured over 100.000 le	198,293,577	61,416,634	30.97%
Claims with inccured <=100.000 lei	135,464,831	-	
Grand Total	333,758,408	61,416,634	

2,018	Sum of Reserve, RON	Sum of XL DOL	
Claims with inccured over 100.000 le	226,107,784	62,348,575	27.57%
Claims with inccured <=100.000 lei	194,760,109	-	
Grand Total	420,867,893	62,348,575	

2019	Sum of Reserve, RON	Sum of XL DOL	
Claims with inccured over 100.000 le	234,327,920	91,522,780	39.06%
Claims with inccured <=100.000 lei	309,315,990	-	
Grand Total	543,643,910	91,522,780	

2,020			
Row Labels	RBNS RON 31.12.2020	XL	
Claims with inccured over 100.000 le	148,316,972	27,742,131	18.70%
Claims with inccured <=100.000 lei	348,361,856	-	0.00%
Grand Total	496,678,828	27,742,131	

2021	Sum of Reserve, RON	Sum of XL DOL	
Claims with inccured over 100.000 le	244,388,058	38,941,836	15.93%
Claims with inccured <=100.000 lei	256,947,892	-	
Grand Total	491,517,235	38,941,836	

Q3 2022	Sum of Reserve, RON	Sum of XL DOL	
Claims with inccured over 100.000 le	223,052,570	22,980,373	10.30%
Claims with inccured <=100.000 lei	412,683,092	-	
Grand Total	635,735,661	38,941,836	

	AVG	23.76%

Source: Excel file *'BE_Claims_res_SII_30.09.2022'* sheet *'avg % RBNS Big claims',*

ANNEX 9: THE ATTACHEMENT POINT OF PAST XOL REINSURANCE TREATIES

Attachment point XoL	begin	end
€ 250,000	01/04/2017	31/03/2018
€ 250,000	01/04/2018	31/03/2019
€ 250,000	01/04/2019	31/03/2020
€ 500,000	01/04/2020	31/03/2021
€ 750,000	01/04/2021	31/03/2022
€ 750,000	01/01/2022	31/12/2023

EIOPA assumption as the information was missing