



Marine Crew Insurance



HELLENIC
ASSOCIATION
OF INSURANCE
COMPANIES

Statistics Survey 2022

Executive Summary

Survey Points	<ul style="list-style-type: none"> ○ Records Marine Crew Insurance figures (number of contracts, number of claims and reimbursements paid and outstanding) ○ Breaks down insurance premium per distribution channel ○ Analyzes the number of claims and reimbursements (paid and outstanding) by cause of incident ○ Records the evolution of claims number and reimbursements per underwriting year 															
Survey Participation	<ul style="list-style-type: none"> ○ 3 Insurance Enterprises ○ 100.0% of the total premium production of Marine Crew Insurance covers 															
Survey Findings	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: right; width: 20%;">2022</th> <th style="text-align: right; width: 20%;">2021</th> </tr> </thead> <tbody> <tr> <td>○ Number of Marine Crew Insurance Contracts</td> <td style="text-align: right;">968</td> <td style="text-align: right;">998</td> </tr> <tr> <td>○ Number of reported claims</td> <td style="text-align: right;">2.077</td> <td style="text-align: right;">1.717</td> </tr> <tr> <td>○ Total claims paid (€)</td> <td style="text-align: right;">662,502.70</td> <td style="text-align: right;">741,761.21</td> </tr> <tr> <td>○ Outstanding claims (€)</td> <td style="text-align: right;">1,999,430</td> <td style="text-align: right;">1,631,931</td> </tr> </tbody> </table>		2022	2021	○ Number of Marine Crew Insurance Contracts	968	998	○ Number of reported claims	2.077	1.717	○ Total claims paid (€)	662,502.70	741,761.21	○ Outstanding claims (€)	1,999,430	1,631,931
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The research

The Property, Reinsurance, Cargo & Yacht HAIC Committee, after considering the needs of comprehensive information of insurance companies operating in the field of Marine Crew insurance, continued for yet another year the systematic collection of statistical data of the sector.

In the context of continuously updating the information provided, HAIC has developed a questionnaire, focusing on the statistical determination of both the amount of risk undertaken in total and the number and amount of reported losses for all participating enterprises.

Therefore, the questionnaire:

- Records Marine Crew Insurance figures (number of contracts, number of claims and reimbursements paid and outstanding)
- Breaks down insurance premium per distribution channel
- Analyzes the number of claims and reimbursements (paid and outstanding) by cause of incident
- Records the evolution of claims number and reimbursements per underwriting year

Survey of 2022 includes the data of 3 insurance member-companies with establishment status, which are estimated to collect 100.0% of the total premium production of Marine Crew insurance, of insurance enterprises operating in Greece.

The data used came from the specialized questionnaire to which the member insurance companies were invited to respond. This report summarizes their responses for 2022, while the comparative tables and figures show the corresponding findings for previous years.

1. Marine Crew Insurance Figures

1.1. Survey Result

Table 1 shows the aggregated figures for the years 2022 and 2021 regarding the coverage of marine crews of the insurance enterprises that responded to the questionnaire and the corresponding annual percentage variation.

A total of 968 contracts were in force in 2022 (998 respectively in 2021). For these contracts 2,077 claims were reported (1,717 in 2021). For these claims €0.7 million reimbursements were paid while outstanding reimbursements reached €2.0 million. The corresponding figures for 2021 were €0.7 million and €1.6 million.

Table 1: Aggregated survey figures

	2022	2021	Variation (%)
Number of insurance contracts (ships) ¹	968	998	-3.0%
Number of reported claims within the year for the above contracts	2,077	1,717	+21.0%
Reimbursements paid within the year for the above claims (€)	662,503	741,761	-10.7%
Year-end reimbursements reserve for the above claims (€)	1,999,430	1,631,931	+22.5%

From the responses analysis of the questionnaire for the year 2022 (for 2021 the figures of the corresponding survey are recorded), the following results can be drawn: while there was a slight decrease in the number of contracts last year, the reported claims of the industry increased significantly (+21.0%).

There was a decrease in reimbursements paid (-10.7%) while the year-end reimbursements reserve increased considerably (+22.5%).

¹ Concerning only the marine crew insurance

1.2. Distribution channels

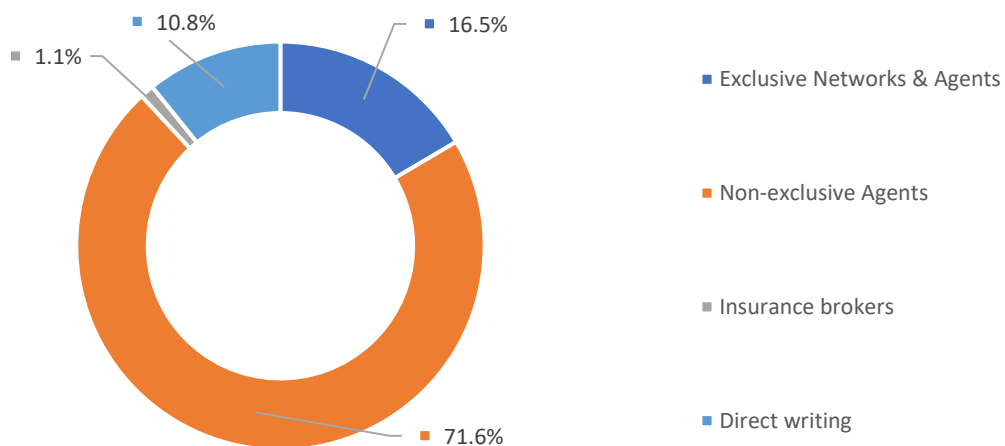
The survey of the premium allocation (including policy fees) per distribution channel for the year 2022 was also conducted in full alignment with Law 4583/2018 "Distribution of Insurance Products".

Distribution channels defined in terms of their form of cooperation (same definition for all HAIC research) are reported as follows: Insurance Intermediaries of exclusive cooperation, Non-exclusive insurance intermediaries, Insurance brokers, Cooperation with banks, Direct sales (mail order sales, insurance employees, internet, call centers), Secondary activity intermediaries (whose main activity is not intermediation of insurance products).

The dominant distribution channel in marine crew insurance was non-exclusive insurance intermediaries (71.6% of total premium production in the industry), followed by exclusive insurance intermediaries (16.5% respectively).

The percentage participation of all mediation channels, according to the responses of the insurance companies – members that participated in the survey, is shown in the graph below.

Figure 1: : Distribution channels - Share (%)



2. Claims – Reimbursement analysis by cause

The claims incident causes are analyzed, separately for paid and outstanding reimbursements. The causes are categorized as follows: fatality (due to illness or accident), permanent disability, temporary disability (due to illness or accident), inpatient care, outpatient care and repatriations-replacements.

2.1. Paid reimbursements cause analysis

According to the data on reimbursements by cause collected for 2022, it can be seen that the largest number of paid claim cases corresponds to outpatient care, while the largest amount of reimbursements corresponds to repatriations - replacements.

Table 2: Paid reimbursements cause analysis year 2022

		Claims	%	Reimbursements (€)	%
Fatalities	Illness	1	0.1%	11.267	1.7%
	Accident	2	0.3%	11.910	1.8%
	Total	3	0.4%	23.177	3.5%
Permanent Disability		0	0.0%	0	0.0%
Temporary disability	Illness	105	12.3%	141.618	21.4%
	Accident	1	0.1%	8.462	1.3%
	Total	106	12.4%	150.080	22.7%
Inpatient Care		49	5.7%	126.420	19.1%
Outpatient Care		556	65.0%	147.516	22.3%
Repatriations - Replacements		141	16.5%	215.310	32.5%
Total		855	100.0%	662.503	100.0%

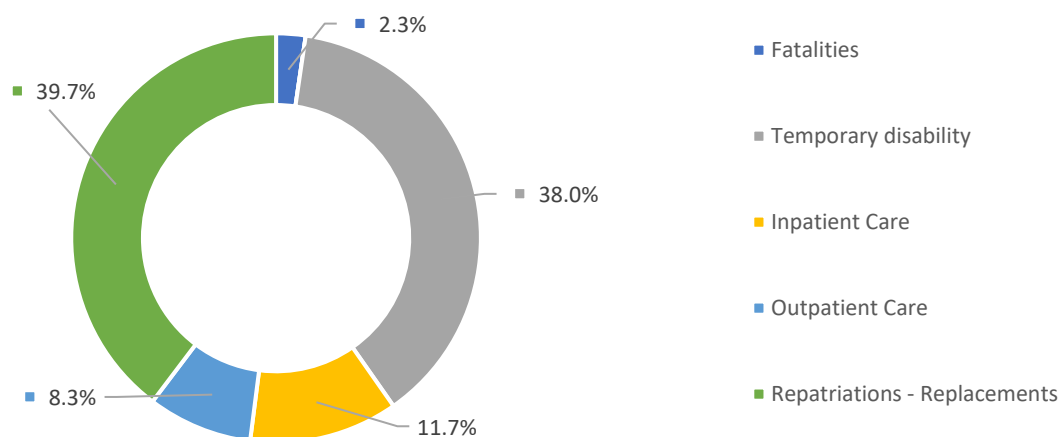
2.2. Outstanding reimbursements cause analysis year 2022

According to the data of outstanding reimbursements by cause, which were recorded at the end of the year 2022, it can be seen that the largest number of outstanding claims corresponds to the cases of repatriations - replacements, while the highest amount of outstanding reimbursements (in aggregate) corresponds to temporary disability due to illness or accident.

Table 3: Outstanding reimbursements cause analysis year 2022

		Claims	%	Reimbursements (€)	%
Fatalities	Illness	4	0.3%	38,533	1.9%
	Accident	2	0.1%	0	0.0%
	Total	6	0.4%	38,533	1.9%
Permanent Disability		0	0.0%	0	0.0%
Temporary disability	Illness	196	12.8%	681,404	34.1%
	Accident	15	1.0%	179,111	9.0%
	Total	211	13.8%	860,515	43.1%
Inpatient Care		129	8.4%	186,285	9.3%
Outpatient Care		132	8.6%	72,798	3.6%
Repatriations - Replacements		1,054	68.8%	841,299	42.1%
Total		1,532	100.0%	1,999,430	100.0%

Figure 2: Breakdown of reimbursements (paid + pending) by cause



3. Reimbursements evolution study

The recording of the marine crew insurance aggregated reimbursements by underwriting year and the statistical analysis of their evolution over time follows.

3.1. Recording of claims and reimbursements per insurance year

This paragraph shows the evolution of claims and reimbursements of all the insurance companies - members that participated in the survey, per underwriting year for the last nine years. The data collected relate to reimbursements paid, outstanding reimbursements, the number of claims paid and closed as well as those outstanding for the period 2014-2022.

Table 4: Reimbursements paid (€)

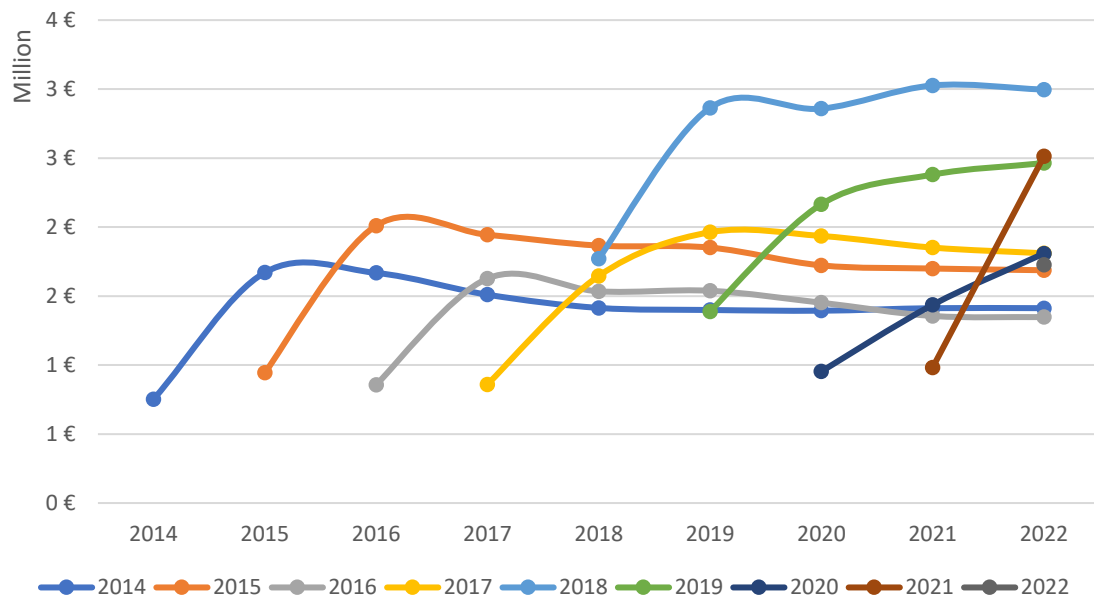
		Payment Year ²									
		€	2014	2015	2016	2017	2018	2019	2020	2021	2022
Underwriting year	2014	161,651	672,432	386,635	125,88	11,269	17,72	18,34	18,34	0	
	2015		106,207	780,439	608,911	128,831	34,768	21,527	6,672	0	
	2016			115,31	793,352	345,736	62,336	7,449	4,003	1,739	
	2017				177,733	856,94	550,612	103,087	58,929	13,025	
	2018					684,763	1,381,509	424,412	310,515	59,711	
	2019						370,481	879,748	605,968	248,700	
	2020							191,37	477,453	650,785	
	2021								272,849	839,819	
	2022									314,395	

² For contracts issued in 2014, the reimbursements paid in 2014, in 2015 and so on.

Table 5: Year-end outstanding reimbursements (€)

		Outstanding reimbursements ³									
		€	2014	2015	2016	2017	2018	2019	2020	2021	2022
Underwriting year	2014	591,010	836,704	446,957	163,323	56,449	23,706	0	0	0	
	2015		838,016	1,124,088	448,774	241,414	192,246	41,773	12,361	0	
	2016			741,795	718,427	279,886	221,736	127,640	27,676	17,626	
	2017				682,139	611,243	377,543	247,163	103,948	49,637	
	2018					1,086,413	798,436	367,457	225,169	135,662	
	2019						1,018,507	915,105	524,105	358,957	
	2020							761,992	767,402	489,105	
	2021								709,091	1,399,818	
	2022									1,411,966	

Figure 3: Reimbursements evolution per underwriting year



³ For contracts issued in 2014, the outstanding reimbursements at the end of 2014, 2015 and so on..

Table 6: Number of claims paid and closed

		Payment year ⁴								
		€	2014	2015	2016	2017	2018	2019	2020	2021
Year of issuance of insurance policies	2014	339	797	323	49	4	23	2	0	0
	2015		208	931	400	34	41	5	0	0
	2016			194	711	140	82	3	2	1
	2017				181	251	605	45	5	6
	2018					1.319	1.367	273	26	10
	2019						301	892	242	92
	2020							73	811	333
	2021								143	735
	2022									108

Table 7: Number of outstanding year-end claims

		Outstanding Year ⁵								
		€	2014	2015	2016	2017	2018	2019	2020	2021
Year of issuance of insurance policies	2014	273	416	197	77	16	9	0	0	0
	2015		281	490	164	67	54	7	3	0
	2016			242	334	111	88	41	8	0
	2017				348	364	164	112	76	12
	2018					654	389	144	106	68
	2019						590	543	249	117
	2020							430	461	176
	2021								749	842
	2022									1.197

⁴ For contracts issued in 2014 the number of claims paid in the 2014, of 2015 and so on.

⁵ For contracts issued in 2014, the numbers of outstanding claims in 2014, in 2015 and so on.

3.2. Reimbursements evolution statistical processing

The collection of reimbursements data per underwriting year in the previous paragraph allows us to process using the chain-ladder method, to make reasonable predictions about the evolution of reimbursements. The available data in terms of time are relatively sufficient to give us an idea of the evolution of the figures.

The following table shows the reimbursements amounts (accumulated claims paid within the period under review and claims outstanding at the end of the period under review) for the whole period per underwriting year (columns a and b). In column c, the reimbursements are reassessed using the chain-ladder method.

A basic condition for applying the method is that the information of the past is sufficiently representative for the future. The calculated ratio of outstanding reimbursements displays the percentage of outstanding reimbursements at the end of the period under review out of the total calculated reimbursements (outstanding and paid) for each underwriting year.

Table 8: Gross Reimbursements Evolution Estimation (€)

		Total Reimbursements (€) (Gross paid & outstanding)	Gross Reimbursements paid (€)	Total Reimbursements Reassessed (€)	Outstanding Reimbursements Estimation (€)	Outstanding Ratio
		a	b	c	(c - b)	(c - b) / c
Underwriting Year	2014	1,412,267	1,412,267	1,412,267	0	0,0%
	2015	1,687,355	1,687,355	1,687,355	0	0,0%
	2016	1,347,552	1,329,926	1,351,517	21,591	1,6%
	2017	1,809,964	1,760,327	1,801,271	40,945	2,3%
	2018	2,996,574	2,860,912	2,856,433	-4,478	-0,2%
	2019	2,463,854	2,104,897	2,263,725	158,828	7,0%
	2020	1,808,713	1,319,608	1,647,341	327,733	19,9%
	2021	2,512,486	1,112,668	2,437,705	1,325,037	54,4%
	2022	1,726,361	314,395	3,225,037	2,910,641	90,3%

Black font: figures reported by insurance enterprises,

Red font: chain-ladder method estimation

In the table below, the number of claims (gross paid claims within the period under review and outstanding at the end of the period) are recorded and the total claims are reassessed. In the end, the percentage of outstanding claims over the estimated number for that underwriting year is extracted.

Table 9: Gross Claims Evolution Estimation

		Total Claims (Gross paid & outstanding)	Gross Claims paid	Total Claims Reassessed	Outstanding Claims Estimation	Outstanding Ratio
		a	b	c	(c - b)	(c - b) / c
Underwriting Year	2014	1,537	1,537	1,537	0	0,0%
	2015	1,619	1,619	1,619	0	0,0%
	2016	1,133	1,133	1,132	-1	-0,1%
	2017	1,105	1,093	1,099	6	0,6%
	2018	3,063	2,995	2,977	-18	-0,6%
	2019	1,644	1,527	1,569	42	2,7%
	2020	1,393	1,217	1,316	99	7,5%
	2021	1,720	878	1,757	879	50,0%
	2022	1,305	108	3,053	2,945	96,5%

Black font: figures reported by insurance enterprises,

Red font: chain-ladder method estimation

The following table calculates the average values of total reimbursements and reimbursement paid, after reassessment of reimbursements over the last nine years.

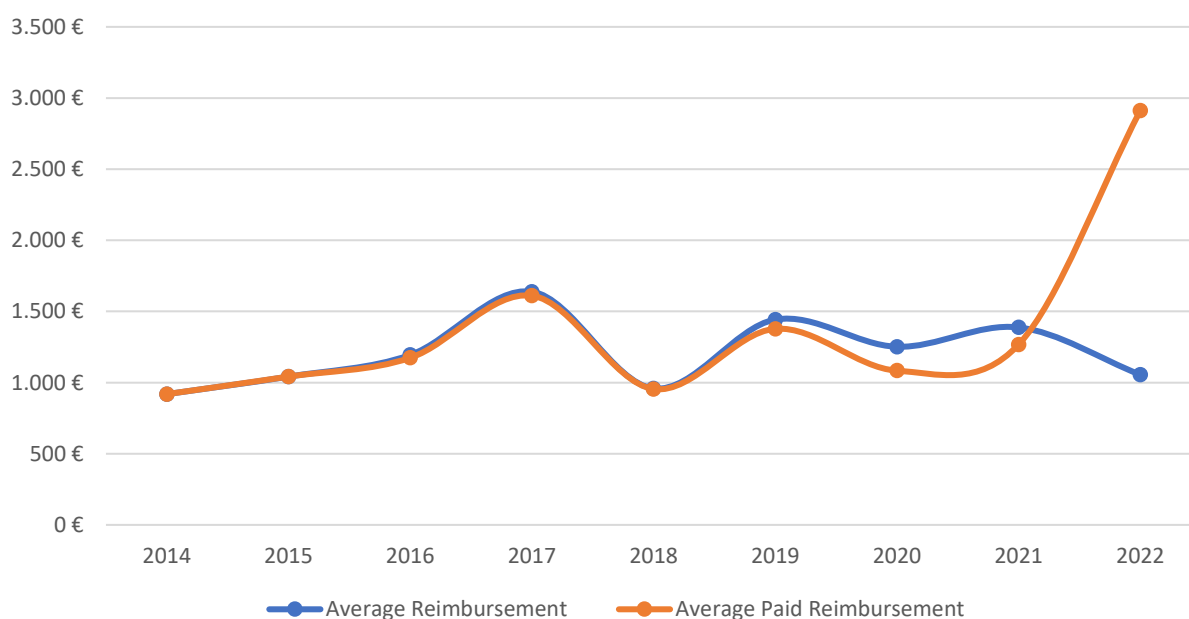
Table 10: Average Reimbursement Estimation (€)

		Average Reimbursement	Average Paid Reimbursement
Underwriting Year	2014	919	919
	2015	1,042	1,042
	2016	1,194	1,174
	2017	1,639	1,611
	2018	959	955
	2019	1,443	1,378
	2020	1,252	1,084
	2021	1,388	1,267
	2022	1,056	2,911

Black font: Details of insurance undertakings,

Red font: chain-ladder method estimates

Figure 4: Average Reimbursement Evolution Estimation (€)



16 June 2023