

Underwriting methodology

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Setting the standard
for service and security

The Standard



John Reily

Director of Underwriting
T: +44 20 3320 8838 john.reily@ctplc.com

Renewal 2014

The board has recently announced the club's general increase for 2014/15, and we thought that members would like an explanation of how their premiums are spent and how we carry out our underwriting.

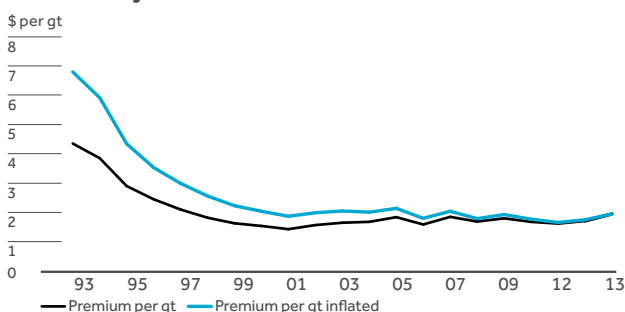
The overriding principles

The underwriting process is designed to achieve fairness between members and to balance the books, not to generate any surplus for the club. The intention is that each member should pay in what he costs the club in claims and overheads over the long term.

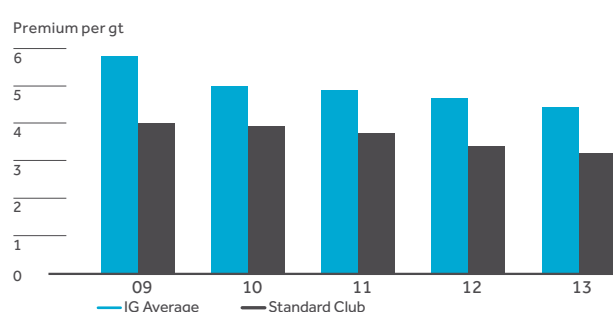
Value for money

The graphs below show that premiums charged by the club have reduced significantly since 1993, and, in addition, that the club's premiums appear to be lower than the average in the International Group.

Average premiums per gt 1993 – 2013, absolute and inflation-adjusted



Standard Club premium per gt compared to IG average 2009 – 2013



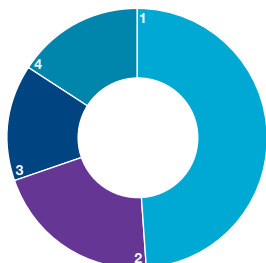
NB: The chart shows the clubs' overall premiums as disclosed in their accounts, divided by their poolable tonnage.

Where does your money go?

Overall, the club's premiums are expended as shown below, but individual members' premiums may be spent in different proportions, depending on a number of factors, explained later in this bulletin.

In essence, premiums are spent across four cost categories:

- burning layer claims
- abatement layer claims
- International Group Pool claims
- reinsurance costs.



1	Burning layer claims
2	Abatement layer claims
3	IG Pool claims
4	Reinsurance

(In addition to these, there are the residual administration costs, but these are generally covered by investment income).

Members are often unaware of, or surprised by, the amount of premium that has to be allocated to the last three of these four elements compared to the first. Members often believe that if their own claims are less than the premium they pay, then they are paying their way and the club is in surplus from their membership. This is never the whole story, so it is worth explaining exactly how the underwriting calculations are carried out.

The experience record

Each member has an experience record; this is the record of his premiums compared to the outgoings relating to his membership. The experience record shows:

- the member's premiums
- the overheads attributable to the member's fleet
- the premiums net of overheads
- the net amount remaining to pay burning claims
- the actual amount of burning claims; and
- the ratio between the last two, as a percentage.

A sample experience record is explained on the back page of this bulletin.

Burning layer claims

This is the cost of routine claims, that is to say, claims that cost individually up to \$1.5m. (This figure is adjusted periodically to reflect inflation and the club's dynamics.) The principle here is that these claims are included in full in each member's own experience record, and each member should fund these claims over the 'record period' – generally the previous six years, plus the current year. These claims are considered to reflect the member's own operations, trade and fleet. They are included in full in his record, as this is the essence of fairness and mutuality – each member pays contributions to reflect his own cost and risk.

In addition to historical claims, the factors that also need to be taken into account in assessing the likely ongoing burning claims cost include:

- changes in the fleet, trade, manning, deductibles, risks covered, legislation, etc.
- the expected cost of claims on ships of the same type, based on the club's statistics
- inflation: claims next year will cost more than claims last year
- deterioration, also known as IBNR (incurred but not (enough) reported) – the fact that some claims have already occurred, or will occur during the policy year, are not yet shown in the claims record, or are not shown at the final value

Abatement layer claims

These are claims that cost between \$1.5m and \$9m. (These parameters are adjusted periodically, the upper figure being the International Group's determination of the individual club retention).

The principles behind the allocation of these costs include the following:

- These claims are infrequent – the club has around 17 such claims each year, out of a total claims count of about 5,000, across 6,000 ships insured
- These claims are fairly random – there is little pattern according to ship type, size, nationality, trade, claim type, etc.
- Any member could have a claim of this size, and it is generally unfair, if a member has such a claim, to require him to recognise it in full in his own record
- The cost of these claims is therefore mutualised, i.e. spread across the whole membership, according to a formula designed to achieve fairness
- The formula used is based on a combination of the tonnage (US x cents per ton) and premium (x% of premium) of each ship, and reflects the tonnage and premium in the club as a whole
- Generally, the club only allows one claim to be abated in the six year record period
- Occasionally, it is clear that a member has a particular exposure to claims in this layer, so, in such cases, fairness dictates that the member should recognise the full cost in his own record.

IG pool claims

These are claims that cost between \$9m and \$70m (again, these parameters are adjusted periodically and are common to all clubs in the International Group). They are partly reinsured through the IG's captive insurance company, Hydra. The factors underlying the cost allocation system are:

- Like abatement claims, but even more so, these claims are infrequent and random
- The club has an average of only two such claims each year
- All members should contribute to the cost of these claims
- Each club contributes to other clubs' claims based on a formula, being a blend of each club's tonnage, premium, claims and loss record compared to the IG as a whole
- A formula is then used to allocate this cost to each member of the club based, like the abatement costs, on a combination of the tonnage (US x cents per ton) and premium (x% of premium) of each ship, and reflecting the tonnage and premium in the club as a whole
- Within the IG, over time, each club should pay towards other clubs' claims approximately what it takes out in contributions from other clubs towards its own claims; this is assessed over roughly a five-year cycle, and clubs' contributions are adjusted each year to try to achieve an approximately neutral position over that timeframe.

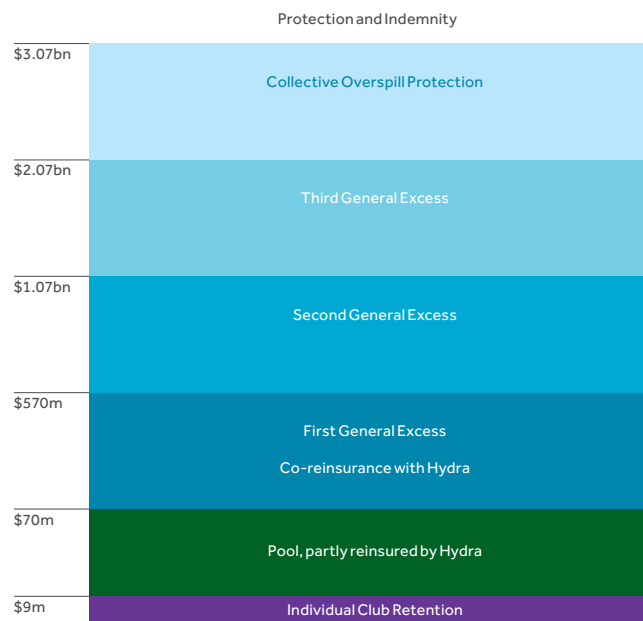
Reinsurance costs

These costs are incurred in order to give members the very high levels of cover that the club provides, through the International Group system. The IG collectively buys a general excess of loss (GXL) reinsurance contract from the world's reinsurance markets. The factors to be taken into account are:

- There are very few claims at this level – maybe one or two, and sometimes none – in the IG as a whole each year, out of 58,000 ships insured by IG clubs
- Hydra plays a role as a reinsurer in the IG programme and itself buys market reinsurance
- There are agreed reinsurance costs per gt that apply to all clubs in the International Group
- These per gt costs are allocated across (currently) four different ship types – dirty tankers, clean tankers, passenger ships and all other ships (including dry cargo ships)
- The allocation is designed to achieve fairness over the long term, bearing in mind that the incidence of claims at this level is very low and so the statistical evidence for allocation needs to be looked at over a very long period
- The question of cost allocation is delicate, and a balance needs to be struck between reliance on the actual claims experience and the underlying relative exposures of different ship types, bearing in mind the statistical volatility of a small number of high-value claims.

The club also has reinsurance costs for its own non-IG reinsurances, and these costs are allocated across members either as a general overhead or, for the major part of them, appropriately to the members that use the specific reinsurance programme. The major programme is the club's non-Pool reinsurance programme for special risks, and the cost is borne by those members who benefit from the cover provided.

Retention, pool and GXL reinsurance programme – 2013 year



Illustrative rate composition

While every ship is individually rated, and rates vary widely and reflect the actual claims experience and risk profile, *illustrative* calculations for two ship types might be as follows:

	15,000 gt container ship US\$	80,000 gt tanker US\$
Burning cost claims	38,000	13,000
Abatement (tonnage and premium)	11,700	29,000
Pool (tonnage and premium)	11,900	30,000
GXL reinsurance cost	7,500	60,000
Total premium	69,100	132,000
Premium per ton	4.61	1.65

Quality control

Although not part of the mathematical process, quality control as to the tonnage insured by the club is paramount. We are extremely focused on ensuring that we only underwrite those shipowners who operate their ships to acceptable standards. We have a safety and loss prevention department whose function includes monitoring quality and safety across the membership. Each year, we review the club's membership to assess any issues and we take appropriate action to ensure that the quality of the club's portfolio is maintained.

**Pro-rata Number of Ships/
Entered Tonnage – NAV**
The number of navigating
ships and tonnage entered
in each policy year

**Pro-rata Entered
Tonnage – LUR**
The amount of laid up
tonnage

GXL/Pool/Abatement costs
These are the GXL
reinsurance costs plus
contributions to its
Abatement pool
claims layers

Policy Year

Sub-Total
The total of the previous
six years

EXPERIENCE RECORD

ABC Shipping Company

The Standard 

All figures shown in USD

Policy Year	2007	2008	2009	2010	2011	2012	Sub-Total	2013	Total
Pro-rata Number of Ships – NAV	10.00	12.00	12.53	10.13	10.04	12.88	67.58	12.00	79.85
Pro-rata Entered Tonnage – NAV	60,251	65,230	67,670	61,691	61,495	72,021	388,357	70,657	459,014
Pro-rata Entered Tonnage – LUR	0	0	0	0	0	0	0	0	0
Mutual Premiums	785,201	856,332	854,392	776,941	801,601	1,206,289	5,280,757	1,251,323	6,532,080
GXL/Pool/Abatement costs	233,087	230,268	247,228	222,910	205,904	321,098	1,460,495	404,366	1,864,862
Total Premium Net of Overheads	552,114	626,064	607,164	554,031	595,698	885,191	3,820,261	846,956	4,667,218
Paid Claims	85,260	986,320	67,180	2,500,000	117,395	201,468	3,957,623	560,000	4,517,623
Estimated Claims		0	0	605,620	25,000	88,932	719,552	8,000	727,552
Total Claims	85,260	986,320	67,180	3,105,620	142,395	290,400	4,677,175	568,000	5,245,175
Total Claims Net of Abatement	85,260	986,320	67,180	2,105,620	142,395	290,400	3,677,175	568,000	4,245,175
Abated Claims	0	0	0	1,000,000	0	0	1,000,000	0	1,000,000
Premiums Per Pro-rata Ship	55,211	52,172	48,440	54,714	59,342	68,742	83,822	70,580	58,651
Premiums Per Pro-rata Entered Ton	9.16	9.60	8.97	8.98	9.69	12.29	14.53	11.99	10.17
Claims Per Pro-rata Ship	8,526	82,193	5,360	207,941	14,185	22,552	80,683	47,333	53,348
Claims Per Pro-rata Entered Ton	1.42	15.12	0.99	34.13	2.32	4.03	13.99	8.04	9.25
Policy Year Loss Ratio	15%	158%	11%	380%	24%	33%	96%	67%	91%
Cumulative Loss Ratio	15%	91%	64%	139%	115%	96%	96%	91%	91%

Mutual Premiums
This includes all the
instalments of estimated
total premiums

**Total Premiums Net
of Overheads**
Premiums remaining
available, after the
deduction of overheads, for
claims up to \$1.5m each

Abated Claims
The value of any claim
excess US\$1.5m removed
from the record

**Total Claims Net
of Abatement**
Total claims excluding any
amount excess of US\$1.5m
or an Abated claim. Claims
figures do not include any
allowance for IBNR or
inflation

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Charles Taylor & Co. Limited Standard House, 12–13 Essex Street,
London, WC2R 3AA, UK
Registered in England No. 2561548 Telephone: +44 20 3320 8888
Emergency mobile: +44 7932 113573
Email: pandi.london@ctplc.com Website: www.standard-club.com

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