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**SUBJECT:** SOLVENCY I - REVISED MEMBER'S MARGIN OF SOLVENCY  
**SUBJECT AREA(S):** 2003 Solvency Test  
**ACTION POINTS:** **Note the arrangements to be made in relation to Solvency I**

In order to comply with two new EU solvency directives, Directives 2002/12/EC (life) and 2002/13/EC (non-life) (the *Solvency I Directives*), the Financial Services Authority (*FSA*) have made changes to the Lloyd's sourcebook (*LLD*). These changes are to take effect for the financial years beginning on or after 1 January 2004.

Changes to calculation of member's margin

A member's minimum margin of solvency is calculated by reference to premiums and claims. Attached at Appendix 1 is an explanation of the current methodology. The changes to the *LLD* require the value attributed to premiums and claims associated with three liability classes of business – general, marine and aviation – to be increased by 50%. Appendix 2 sets out the risk codes likely to be treated as 'liability' business for the purpose of these rules.

The other change is that the reinsurance recoverables factor used in the calculation of the member's margin will be based on the ratio of net claims incurred to gross claims incurred over the last three calendar years rather than over the last calendar year as at present.

2003 solvency test

Although the amendments to the *LLD* do not apply to the statutory 31 December 2003 solvency calculations, the *FSA* requires Lloyd's to demonstrate its solvency position under both the existing rules at 31 December 2003 and the new rules applicable from 1 January 2004 (*Solvency I rules*).

The solvency statements to be issued to members in early April 2004 will reflect the solvency position based on the current rules. However, in order to satisfy the requirements of the FSA a revised solvency position will be calculated for each member taking into account the new requirements. This will not be possible until the Solvency and Reporting Returns (unaudited) and the FSA returns are received from managing agents on 15 April and 29 April 2004 respectively. In addition to the Lloyd's Return, Lloyd's solvency position calculated under Solvency I rules will also be filed with the FSA.

Where this revised calculation results in a material change to a member's solvency position and increases or creates a solvency shortfall then the member (through his members' agent if he has one, otherwise directly) will be advised of the solvency shortfall. Any member intending to continue to underwrite in 2005 will be required to clear such shortfall by the 2005 coming-into-line date (provisionally 26 November 2004). It is anticipated that a member's solvency position under Solvency I rules will be advised to members' agents and direct corporate participants in August 2004.

#### Release Test

The Release Test will continue to be based on, amongst other things, a factor of 2.5 of the member's solvency margin calculated under the existing solvency rules during 2004.

The impact of Solvency I rules on the members' margin will be assessed during 2004 (early indications are that the member's margin will be increased by between 15% and 25%) and the results of this exercise will be taken into account in the review of the rules for the Release Test which will also be carried during 2004.

#### Timetable

For the 31 December 2004 year end, a new form will be included within the syndicate returns (due end of February 2005) to collect the actual premiums and claims data required to calculate the member's margin under the Solvency I rules which will then be included in members' solvency statements to be issued in early April 2005. Subsequent disclosures in the FSA returns must agree with this new form. The new form will, by necessity, be subject to audit.

For the 31 December 2003 exercise the following timetable will be followed to determine the solvency position under Solvency I rules.

8 April 2004	Solvency statements issued based on current rules
29 April 2004	FSA returns received which provide premiums and claims analysis by class of business required to calculate member's margin under Solvency I rules
August 2004	Revised solvency position calculated on the basis of Solvency I rules issued by Lloyd's to members' agents and direct corporate members
26 November 2004 (provisional coming-into-line date)	Solvency shortfall under Solvency I rules to be cleared by members wishing to underwrite in 2005

Any queries on this bulletin should be referred to Kevin Nethersell ext. 6253 ([Kevin.nethersell@lloyds.com](mailto:Kevin.nethersell@lloyds.com)) or Mike Steer ext. 5709 ([mike.steer@lloyds.com](mailto:mike.steer@lloyds.com)) .

This bulletin has been sent to the compliance officer of all underwriting agents, direct corporate members and recognised accountants and for information to all market associations.

John Parry

**Solvency test: calculation of member's margin – 31.12.2003****Explanatory notes**Background

With effect from the 31 December 1997 solvency test, members of Lloyd's are required to provide sufficient assets to cover not only their underwriting liabilities, but also an additional margin of solvency as calculated in accordance with the Insurance (Lloyd's) Regulations 1997. This requirement is now legislated for within the Lloyd's Sourcebook (LLD). The margin is known as the 'member's margin' (formerly 'prescribed surplus'). Separate member's margins are required to be calculated for non-life and life business. The purpose of these notes is to provide guidance to the member and his agent/adviser as to how exactly his member's margin has been calculated.

Non-life member's margin - explanatory notes*General*

The non-life member's margin is calculated for any member who has an open non-life syndicate participation as at the solvency test date. It is calculated by taking into account certain 'base elements' - premiums and claims data - which are obtained from audited returns provided by managing agents to Lloyd's in respect of each syndicate. The base elements are determined initially for each open syndicate year, and then apportioned to members on that syndicate year in accordance with their share of the capacity. Finally, each member's member's margin is calculated individually. Incorporated in the calculation are the use of flat rate percentages used to gross up premiums for brokerage, and reflect inter-syndicate premiums ceded and recoveries obtained; these percentages are common to each member.

Premiums basis

Firstly, calendar year premiums (gross of reinsurance) are determined. These are then adjusted by flat rate factors, common to all members, to gross up the premium for brokerage and then reflect a deduction to exclude premiums in respect of reinsurance ceded to other Lloyd's syndicates. 16% of the adjusted gross premiums figure is then taken, to arrive at the premiums basis result.

Claims basis

Firstly, the total of gross claims incurred over the three year period to 31 December 2003 is determined. This is the sum of gross claims paid in calendar years 2003, 2002 and 2001 plus the amount of gross outstanding claims at the end of 2003, less the amount of gross outstanding claims at the beginning of 2001. The total gross claims incurred over the three year period is then divided by three to annualise it, and the annualised total adjusted by a factor, common to all members, to exclude claims relating to inter-syndicate reinsurances. The adjusted total is then multiplied by 23% to arrive at the claims basis result.

### Member's margin

The higher of the results obtained using the premiums and claims bases is taken. As this result has been determined on a gross of reinsurance basis, credit is allowed to take account of reinsurance recoverables. Thus, the gross result is adjusted by a reinsurance recoverables factor, which has been calculated individually for the member concerned - this is discussed in the notes below - to arrive at the net member's margin.

The reinsurance recoverables factor is applied to a member's gross member's margin in order to provide a credit for reinsurance recoverables. The factor, which is calculated individually for each member, is determined as the calendar year (in this case 2003) net claims incurred divided by the calendar year gross claims incurred. Calendar year net claims incurred is defined as net claims paid in the calendar year, plus the calendar year movement in net claims outstanding from the beginning to the end of the year. Calendar year gross claims incurred is defined on a similar basis in relation to gross claims, except that the total of gross claims incurred is then multiplied by the inter-syndicate reinsurance recoverables factor referred to above. The total of calendar year net claims incurred is then divided by the figure for calendar year gross claims incurred to arrive at the member's reinsurance recoverables factor. The reinsurance recoverables factor is limited to a range of 0.50 to 1.00; if a member is allocated a factor of 0.50 his net prescribed surplus is reduced to 50% of his gross prescribed surplus, the maximum credit for reinsurance recoveries allowable. A factor of 1.00 allows no credit for reinsurance recoverables. If a member's mathematically-calculated factor is less than 0.50 or greater than 1.00, 0.50 or 1.00 respectively is applied.

### *Base elements originating from closed syndicate years*

As stated above, the base elements comprising the member's margin and reinsurance recoverables factor calculations are first determined by open syndicate year, and are then apportioned to members on that syndicate year in accordance with their share of the syndicate year's capacity. However, as the aggregate of each base element must reflect the underwriting transactions of the whole Lloyd's market, it is necessary to account for those base elements which have arisen on syndicate years which are now closed at 31 December 2003. This is achieved by treating such base elements as 'belonging' to the syndicate year which has ultimately accepted the reinsurance to close (RITC) of the closed year in question (either directly or via a succession of intermediate RITCs). For instance, gross claims paid in calendar year 2001 for syndicate A for the 2001 year of account, closed at 31 December 2003 into syndicate B for the 2002 year of account, are treated as belonging to syndicate B for the 2002 year of account and allocated to members on that syndicate year, even though that syndicate year did not actually exist in 2001. So it is possible, for example, that a member may have claims paid and outstanding reported relating to calendar year 2001, even if he only started to underwrite with effect from the 2002 year of account.

### Life member's margin - explanatory notes

#### *General*

A member's margin for life business is calculated in respect of each member who has a participation in the most recent open year of a life syndicate as at the solvency test date. For the 31 December 2003 solvency test, this is generally the 2003 year of account, although it will be an earlier year of account in respect of a life syndicate which ceased trading before 2003 but which has an open year as at 31 December 2003. The life member's margin is calculated by taking into account certain 'base elements' - net and gross liabilities and sums

assured for the life syndicate as at the solvency test date - details of which are provided by the managing agent to Lloyd's in respect of each life syndicate in the syndicate return. The base elements are determined initially for each syndicate - and are allocated to the most recent open year - and then apportioned to members on that syndicate year in accordance with their share of the capacity. Finally, each member's margin is calculated individually.

The life member's margin is determined as the sum of two results:

Result 1 is calculated as 4% of the gross outstanding liabilities in respect of life business (the 'gross mathematical reserves'), as adjusted by a factor - calculated individually for each member - to reflect reinsurance recoverables. This factor is the ratio of the net mathematical reserves to gross mathematical reserves, but is limited to the range of 0.85 to 1.00; hence, if the calculated ratio is less than 0.85 or greater than 1.00, 0.85 or 1.00 respectively is applied as the factor.

To calculate Result 2, firstly the amount of gross sums assured is multiplied by a factor, which varies according to the length of the term the policy was issued for at the time of issuance: the sums assured relating to 'short term' policies (those covering three years or less) is multiplied by 0.001; 'medium term' policies (three to five years) by 0.0015; and 'long term' policies (longer than five years) by 0.003. The sum of this calculation is then multiplied by another factor to reflect reinsurance recoverables. This factor is calculated as the ratio of net sums assured to gross sums assured but is limited to the range of 0.50 to 1.00.

The life member's margin is then simply determined as the sum of Result 1 and Result 2.

<b>Current risk codes</b>		
Those treated as 'liability' business for the purpose of Solvency I (Provisional)		
Risk Code	Risk Code Description	Accounting Class
2E	OVERSEAS LEG TERRORISM ENERGY OFFSHORE LIABILITY	Marine
EG	ENERGY LIABILITY OFFSHORE CLAIMS MADE	Marine
EH	ENERGY LIABILITY OFFSHORE ALL OTHER	Marine
G	MARINE LEGAL LIAB ALL OTHER NO CARGO EX WRO	Marine
GC	MARINE LEGAL LIAB CLAIMS MADE NO CARGO EX WRO	Marine
GX	XOL MARINE LEGAL LIAB EX CARGO ALL OTHER EX WRO	Marine
1	AVIATION HULL AND LIAB INC WAR EX WRO NO PROPOR RI	Aviation
2	AVIATION HULL AND LIAB INC WAR EX WRO NO PROPOR RI	Aviation
3	AVIATION HULL AND LIAB INC WAR EX WRO NO PROPOR RI	Aviation
4	AVIATION HULL AND LIAB INC WAR EX WRO NO PROPOR RI	Aviation
5	AVIATION HULL AND LIAB INC WAR EX WRO NO PROPOR RI	Aviation
AO	AVIATION PREMISES LEGAL LIABILITY NO PRODUCTS	Aviation
AP	AVIATION OR AEROSPACE PRODUCTS LEGAL LIABILITY	Aviation
AX	AVIATION LIABILITY EXCESS OF LOSS	Aviation
L	AIRCRAFT OPERATORS AND OWNERS LEGAL LIABILITY	Aviation
L2	AIRLINE LIABILITY	Aviation
L3	GENERAL AVIATION LIABILITY	Aviation
LX	AIRCRAFT OPERATORS AND OWNERS LEGAL LIAB	Aviation
PX	AVIATION OR AEROSPACE PRODUCTS LEGAL LIABILITY	Aviation
SL	SPACE RISK LIABILITY NO PRODUCTS LEGAL LIABILITY	Aviation
SX	SPACE RISK LIABILITY EX AEROSPACE PRODUCTS	Aviation
Y1	AVIATION HULL AND LIAB PROPORT RI INC WAR EX WRO	Aviation
Y2	AVIATION HULL AND LIAB PROPORT RI INC WAR EX WRO	Aviation
Y3	AVIATION HULL AND LIAB PROPORT RI INC WAR EX WRO	Aviation
Y4	AVIATION HULL AND LIAB PROPORT RI INC WAR EX WRO	Aviation
Y5	AVIATION HULL AND LIAB PROPORT RI INC WAR EX WRO	Aviation
4E	OVERSEAS LEG TERRORISM ENERGY ONSHORE LIABILITY	General liability
7T	OVERSEAS LEG TERRORISM THIRD PARTY LIABILITY	General liability
BB	FIDELITY COMPUTER CRIME AND BANKERS POLICIES	General liability
D2	D AND O LIAB USA EXCL FINANCIAL INSTITUTIONS	General liability
D3	D AND O LIAB EXCL USA EXCL FINANCIAL INSTITUTIONS	General liability
D4	D AND O LIAB FOR FINANCIAL INSTITUTIONS INC USA	General liability
D5	D AND O LIAB FOR FINANCIAL INSTITUTIONS EXCL USA	General liability
DM	DIRECTORS AND OFFICERS LIAB FOR FINANCIAL INST	General liability
DO	DIRECTORS AND OFFICERS LIAB EXCL FINANCIAL INST	General liability
E2	PROF INDTY E AND O FOR LEGAL PROFESSIONS INC USA	General liability
E3	PROF INDTY E AND O FOR LEGAL PROFESSIONS EX USA	General liability
E4	PROF INDTY E AND O FOR ACCOUNTANTS INC USA	General liability
E5	PROF INDTY E AND O FOR ACCOUNTANTS EX USA	General liability
E6	PROF INDTY E AND O ARCHITECTS ENGINEERS INC USA	General liability
E7	PROF INDTY E AND O ARCHITECTS AND ENGINEERS EX USA	General liability
E8	MISC PROF IND E AND O INC USA EX E2 E4 E6 CODES	General liability
E9	MISC PROF IND E AND O EX USA EX E3 E5 E7 CODES	General liability
EA	ENERGY LIABILITY ONSHORE CLAIMS MADE	General liability
EB	ENERGY LIABILITY ONSHORE ALL OTHER	General liability
F2	PROF INDTY E AND O FOR FIN INSTITUTIONS INC USA	General liability
F3	PROF INDTY E AND O FOR FIN INSTITUTIONS EX USA	General liability
GP	MEDICAL MALPRACTICE NON MARINE	General liability
NA	NM GENERAL AND MISC LIABILITY ALL OTHER EXC USA	General liability
NC	NM GENERAL AND MISC LIAB CLAIMS MADE EXC USA	General liability
NL	NUCLEAR LIABILITY	General liability
PI	E AND O OR PROFESSIONAL INDEM EXCL FINANCIAL INST	General liability
PL	NM LEGAL LIAB FOR DMGE TO PPTY OF OTHERS	General liability
PM	PROFESSIONAL INDEMNITY FOR FINANCIAL INSTITUTIONS	General liability

<b>Current risk codes</b>		
Those treated as 'liability' business for the purpose of Solvency I (Provisional)		
Risk Code	Risk Code Description	Accounting Class
UA	NM GENERAL AND MISC LIABILITY ALL OTHER INC USA	General liability
UC	NM GENERAL AND MISC LIAB CLAIMS MADE INC USA	General liability
W2	US WORKERS COMPENSATION	General liability
W3	UK EMPLOYERS LIABILITY	General liability
W4	INTL WORKERS COMP AND EMPLOYERS LIAB EX USA AND UK	General liability
WC	WORKERS COMPENSATION AND EMPLOYERS LIABILITY	General liability
X4	NM LIABILITY EXCESS OF LOSS ON EXCESS OF LOSS	General liability
XD	PER RISK EXCESS OF LOSS PROFESSIONAL INDEM REINS	General liability
XL	NM LIABILITY EXCESS OF LOSS	General liability