

Notice n° 2006-0158, of 26 October 2006

Pursuant to Article 20 of Instruction I.6-1 LCH.Clearnet SA hereby publishes the calculation method and parameters for the Clearing Fund for Markets cleared through Clearing 21®. This Notice repeals and replaces the Notice n° 2006-0149, of 11 October 2006.

Changes will be enforceable on 31th October 2006 end of business day and are appearing in italic.

Parameters of the Calculation of the *contributions* to the Clearing Fund of LCH.Clearnet SA dedicated to markets cleared through Clearing 21 ®

This Notice aims at to provide information on :

- *the algorithms and parameters used for each market and type of products*
- *the date of calculation and of contribution calls.*

For details related to (i) the principles of the methodology used for the calculation of the uncovered risks and (ii) to how the size of the Clearing Fund is set and how the individual contributions of the Clearing Members are calculated, please refer to Instruction I.6-1.

1. Algorithm and parameters used for uncovered risks calculations

❖ Securities markets

On Securities markets, the uncovered risk is given by the following formula:

$$\text{uncovered risk}_D = \text{stress liquidation risk}_D - (\text{regular liquidation risk}_{D-1} - \text{Min}(\text{negotiation risk}_{D-1}, 0)) - \text{negotiation risk}_D$$

The stress-test, providing stress liquidation risk is performed with the SPAN® Cash algorithm and a set of parameters as follows:

- For stocks:

Specific risk parameters: $x = 10\%$ (for all liquidity classes)

General risk parameter: Y

Liquidity Class	Parameter Y
Liq01	10.5 %
Liq02	22.5 %
Liq03	19.5%
Liq04	50%

Inter-classes parameters: same as daily Initial Margin

- For bonds:

	Duration classes		
	DUR4ZZ [0-1[Year	DUR5ZZ [1-4[Year	DUR6ZZ [4-30[Year
Specific risk parameters X	0.63%	0.91%	0.94%
General risk parameter Y	0.25%	0.25%	0.26%

Intra and inter classes parameters: same as the ones used for daily Initial Margin calculation.

❖ Derivatives markets

The uncovered risk is given by the following formula:

$$\text{uncovered risk}_D = \text{stress risk}_D - \text{Initial Margin}_{D-1} - \text{Variation Margin}_D$$

The stress-test is performed with the SPAN® Derivatives algorithm with the following parameters:

- For equity options and futures:

Range of underlying equity: cf. Appendix 1

- For equity index Derivatives: (Futures and Options)

Range of underlying index variation:

Index	Underlying Parameter Scan Range
CAC40	14%
BEL20	18%
AEX	18%
PSI20	13%

- For currency derivatives and special products:

Same parameters as for the daily Initial Margin

- For commodities Derivatives:

Scanning range of +/- 12%

Volatility scan range parameters :

- For all equity options contracts: cf. Appendix 1

- For all commodity options contracts: +/- 25%

- For index options contracts:

CAC 40 : +/- 29%

BEL 20 : +/-28%

AEX : +/-20%

2. Date of calculation and date of contribution call:

Monthly reviews of the clearing fund:

The date of calculation, i.e the latest day of the 60 Clearing Days period used for monthly review of the contribution is:

- *the latest clearing business day of each month (position at end of day)*

Date of contribution calls:

The contributions are called on the morning of the 4th Clearing Day of each month.

Replenishment of the clearing fund in case of default of a clearing member:

In case of default with a replenishment required, the date of calculation is linked to the end of the liquidation process of the defaulting Clearing Member positions.

Both date of calculation and contribution calls will be communicated to the Clearing Members by LCH.Clearnet SA ad hoc notice.

Appendix 1

Equity options listed on Euronext Paris

Combined commodity	Contract code	Name	UPSR* +/-	VSR +/-
AC	AC	ACCOR	12%	25%
	AC1		12%	25%
	AC2		12%	25%
AGF	AGF	AGF	21%	25%
	AG1		21%	25%
	AG3		21%	25%
AF	AF	AIR FRANCE	24%	25%
	AF1		24%	25%
	AF2		24%	25%
AI	AI	AIR LIQUIDE	11%	25%
	AI1		11%	25%
	AI2		11%	25%
ALC	ALC	ALCAN	10%	25%
	AL1		10%	25%
CGE	CGE	ALCATEL	26%	25%
	CG1		26%	25%
	CG3		26%	25%
ALS	ALS	ALSTOM RGPT	50%	25%
	AS1		50%	25%
	AS3		50%	25%
	AL3		50%	25%
LOR	LOR	ARCELOR	34%	25%
	LO1		34%	25%
	LO3		34%	25%
	MI1		34%	25%
	MI3		34%	25%
ATO	ATO	ATOS ORIGIN	21%	25%
	AT1		21%	25%
CS	CS	AXA	33%	25%
	CS1		33%	25%
	CS9		33%	25%
BNP	BNP	BNP PARIBAS	17%	25%
	BN1		17%	25%
	BN3		17%	25%
EN	EN	BOUYGUES	25%	25%
	EN1		25%	25%
	EN9		25%	25%
BOB	BOB	BUSINESS OBJECTS	25%	25%
	BO1		25%	25%
CAP	CAP	CAP GEMINI	21%	25%
	CP1		21%	25%
	CA3		21%	25%
CA	CA	CARREFOUR	19%	25%
	CA1		19%	25%
	CA2		19%	25%

* UPSR : Underlying Price Scan Range
VSR : Volatility Scan Range
Rate used : Euribor corresponding to maturity, reviewed weekly

Combined commodity	Contract code	Name	UPSR +/-	VSR +/-
CO	CO	CASINO GUICHARD	12%	25%
	CO1		12%	25%
	CO2		12%	25%
CDI	CDI	CHRISTIAN DIOR	13%	25%
	CD1		13%	25%
	CD3		13%	25%
CLR	CLR	CLARINS	21%	25%
	CL1		21%	25%
CNP	CNP	CNP ASSURANCES	13%	25%
	CN1		13%	25%
ACA	ACA	CREDIT AGRICOLE	10%	25%
	CR1		10%	25%
	AC3		10%	25%
BN	BN	GROUPE DANONE	17%	25%
	DA1		17%	25%
	BN2		17%	25%
LER	LER	DAIMLER CHRYSLER AG	12%	25%
	LE1		12%	25%
DSY	DSY	DASSAULT SYSTEMES	15%	25%
	DS1		15%	25%
	DS3		15%	25%
DX	DX	DEXIA	23%	25%
	DX1		23%	25%
	DX2		23%	25%
EAD	EAD	EADS	28%	25%
	EA1		28%	25%
	EA3		28%	25%
EDF	DF1	EDF	11%	25%
	DF3		11%	25%
EF	EF	ESSILOR INTERNATIONAL	15%	25%
	EF1		15%	25%
NXT	NXT	EURONEXT	15%	25%
	NX1		15%	25%
O	EO	FAURECIA	38%	25%
	EO1		38%	25%
FTE	FTE	FRANCE TELECOM	29%	25%
	FT1		29%	25%
	FT3		29%	25%
GAZ	GA1	GAZ DE FRANCE	23%	25%
	GA3		23%	25%
HAV	HAV	HAVAS	20%	25%
	HA1		20%	25%
RMS	RMS	HERMES INTERNATIONAL	11%	25%
	RM1		11%	25%
IFG	IFG	INFOGRAMES ENTERTAINMENT	12%	25%
	IF1		12%	25%
LG	LG	LAFARGE	20%	25%
	LG1		20%	25%
	LG2		20%	25%
MMB	MMB	LAGARDERE SCA	17%	25%
	MM1		17%	25%
	MM3		17%	25%

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Combined commodity	Contract code	Name	UPSR +/-	VSR +/-
OR	OR	L'OREAL	17%	25%
	OR1		17%	25%
	OR2		17%	25%
MC	MC	LVMH	13%	25%
	MC1		13%	25%
	MC2		13%	25%
MMT	MMT	M6 METROPOLE TELEVISION	18%	25%
	MT1		18%	25%
ML	ML	MICHELIN	17%	25%
	ML1		17%	25%
	ML2		17%	25%
RI	RI	PERNOD-RICARD	10%	25%
	RI1		10%	25%
	RI2		10%	25%
UG	UG	PEUGEOT SA	10%	25%
	UG1		10%	25%
	UG2		10%	25%
PP	PP	PINAULT PRINTEMPS REDOUTE	15%	25%
	PP1		15%	25%
	PP2		15%	25%
PUB	PUB	PUBLICIS GROUPE	16%	25%
	PU1		16%	25%
RNO	RNO	RENAULT	12%	25%
	RN1		12%	25%
	RN3		12%	25%
SAG	SAG	SAFRAN (ex SAGEM)	10%	25%
	SM1		10%	25%
SGO	SGO	SAINT-GOBAIN	12%	25%
	SG1		12%	25%
	SG3		12%	25%
SAN	SAN	SANOFI-AVENTIS	14%	25%
	SA1		14%	25%
	SA3		14%	25%
	AVE		14%	25%
	AV3		14%	25%
SU	SU	SCHNEIDER ELECTRIC SA	11%	25%
	SU1		11%	25%
	SU2		11%	25%
SCO	SCO	SCOR	29%	25%
	SC1		29%	25%
GLE	GLE	SOCIETE GENERALE	14%	25%
	GL1		14%	25%
	GL3		14%	25%
SW	SW	SODEXHO ALLIANCE	17%	25%
	SW1		17%	25%
	SW2		17%	25%
STM	STM	STMICROELECTRONICS	16%	25%
	ST1		16%	25%
	ST3		16%	25%
SZE	SZE	SUEZ	29%	25%
	SZ1		29%	25%
	SZ3		29%	25%

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Combined commodity	Contract code	Name	UPSR +/-	VSR +/-
TEC	TEC	TECHNIP	19%	25%
	TE1		19%	25%
	TE3		19%	25%
TF1	TF1	TF1	16%	25%
	TF1		16%	25%
	TF3		16%	25%
HO	HO	THALES	14%	25%
	HO1		14%	25%
	HO2		14%	25%
TMS	TMS	THOMSON	25%	25%
	TM1		25%	25%
	TM3		25%	25%
FP	TO1	TOTAL	10%	25%
	TO2		10%	25%
FPCB	FP1	TOTAL ARKEMA	10%	25%
	FP2		10%	25%
UL	UL	UNIBAIL	16%	25%
	UL1		16%	25%
FR	FR	VALEO	12%	25%
	FR1		12%	25%
	FR2		12%	25%
DG	DG	VINCI	10%	25%
	DG1		10%	25%
	DG2		10%	25%
VIE	VIE	VEOLIA ENVIRONNEMENT	21%	25%
	VI1		21%	25%
	VI3		21%	25%
EX	EX	VIVENDI SA	24%	25%
	EX1		24%	25%
	EX2		24%	25%
	VIV		24%	25%
	VV2		24%	25%

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Equity options listed on Euronext Brussels

Combined commodity	Contract code	Name	UPSR +/-	VSR +/-
AGE	AGE	AGFA-GEVAERT	18%	25%
BAR	BAR	BARCO (NEW)	10%	25%
BLG	BLG	BELGACOM	10%	25%
COL	COL	COLRUYT	10%	25%
DEL	DEL	DELHAIZE GROUP	35%	25%
DXB	DXB	DEXIA	24%	25%
FRB	FRB	FORTIS (B)	38%	25%
GBL	GBL	GPE BRUXEL.LAMBERT	10%	25%
INT	INT	INBEV	11%	25%
KBC	KBC	KBC	18%	25%
MOB	MOB	MOBISTAR	14%	25%
OME	OME	OMEGA PHARMA	37%	25%
SOL	SOL	SOLVAY	14%	25%
TOTCB	TOT	TOTAL ARKEMA	10%	25%
UCB	UCB	UCB	13%	25%
UMC	UMC	UMICORE	12%	25%

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VSR : Volatility Scan Range

Rate used : Euribor corresponding to maturity, reviewed weekly

Equity options listed on Euronext Amsterdam

Combined commodity	Contract code	Name	UPSR +/-	VSR +/-
AAB	AAB	ABN AMRO HOLDING	18%	25%
AAI	AAI	AALBERTS INDUSTRIES NV	12%	25%
AGN	AGN	AEGON	34%	25%
AH	AH	KON AHOLD	13%	25%
	AHO		13%	25%
AKZ	AKZ	AKZO NOBEL	14%	25%
ASL	ASL	ASML HOLDING	19%	25%
ASM	ASM	ASM INTERNATIONAL	23%	25%
BAM	BAM	KONINKLIJKE BAM GROEP	26%	25%
BHR	BHR	BUHRMANN	31%	25%
	BHO		31%	25%
CIO	CIO	CORIO NV	10%	25%
COS	COS	CORUS GROUP PLC	50%	25%
	COO		50%	25%
CRU	CRU	CRUCCELL	39%	25%
CSM	CSM	CSM	10%	25%
DRK	DRK	DRAKA HOLDING	40%	25%
	DRO		40%	25%
DSM	DSM	KONINKLIJKE DSM	10%	25%
FOR	FOR	FORTIS	40%	25%
FUR	FUR	FUGRO	23%	25%
GTN	GTN	GETRONICS	50%	25%
	GTO		50%	25%
	GTX		50%	25%
	GTZ		50%	25%
HEH	HEH	HEINEKEN HOLDING	12%	25%
	HHO		12%	25%
HEI	HEI	HEINEKEN	14%	25%
	HEO		14%	25%
	HEQ		14%	25%
	HEX		14%	25%
HGM	HGM	HAGEMEYER	33%	25%
	HGO		33%	25%
IHC	IHC	SBM OFFSHORE NV	14%	25%
	SBM		14%	25%
ING	ING	ING GROEP	34%	25%
KLM	KLM	KON LUCHTVAART MIJ	21%	25%
	KLO		21%	25%
	AFA		21%	25%
KPN	KPN	KON KPN	13%	25%
	KPX		13%	25%
	KPO		13%	25%
LAU	LAU	LAURUS	20%	25%
LC	LC	LOGICACMG PLC	24%	25%
	LCX		24%	25%
MOO	MOO	VAN DER MOOLEN HOLDING	31%	25%
MT	MT	MITTAL STEEL COMPANY	27%	25%
NAI	NAI	NOKIA	20%	25%
NUM	NUM	KON NUMICO	22%	25%
NUO	NUO	NUTRECO HOLDING	17%	25%
	NXO		17%	25%
OCE	OCE	OCE	13%	25%
ORD	ORD	ORDINA	31%	25%
PHI	PHI	KON PHILIPS ELECTRONICS	22%	25%
RD	RD	ROYAL DUTCH SHELL PLC (A)	10%	25%

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VSR : Volatility Scan Range

Rate used : Euribor corresponding to maturity, reviewed weekly

Combined commodity	Contract code	Name	UPSR +/-	VSR +/-
RDB	RDB	ROYAL DUTCH SHELL PLC (B)	10%	25%
REN	REN	REED ELSEVIER	18%	25%
REU	REU	RODAMCO EUROPE NV	10%	25%
RND	RND	RANDSTAD HOLDING	22%	25%
SR	SR	SNS REAAL	11%	25%
STO	STO	STORK	22%	25%
	STX		22%	25%
TTM	TTM	TOMTOM N.V.	20%	25%
TPG	TPG	TNT NV	13%	25%
UN	UN	UNILEVER	13%	25%
VDR	VDR	VEDIOR	18%	25%
VPK	VPK	KON VOPAK	12%	25%
WES	WES	KON WESSANEN	17%	25%
WHV	WHV	WERELDHAVE NV	10%	25%
WKL	WKL	WOLTERS KLUWER	25%	25%

Future on Equity listed on Euronext Lisbon

Combined commodity	Contract code	Name	UPSR* +/-
MBC	MBC	BANCO COMERCIAL PORTUGUES	13%
BBP	BBP	BANCO PORTUGUES DE INVESTIMENTO	33%
BRS	BRS	BRISA AUTOESTRADAS DE PORTUGAL	10%
EPM	EPM	ELECTRICIDADE DE PORTUGAL	10%
GAL	GAL	GALP ENERGIA SGPS SA	20%
PTS	PTS	PORTUGAL TELECOM	19%
PTA	PTA	PT MULTIMEDIA	17%
SNA	SNA	SONAE	15%

* UPSR : Underlying Price Scan Range

VSR : Volatility Scan Range

Rate used : Euribor corresponding to maturity, reviewed weekly