

Schedule 2

CLEARING ACCESS SOLUTIONS DESCRIPTION

The Services consist in the provision of a Clearing Access Solution, which consists of:

- LCAP;
- eCCW;
- Web Fixed Income;
- Network Services;
- Collateral Management Services (“CMS”);
- CDSClear Portfolio Margin Calculation Web tool (“PMC”);
- CDSClear Portfolio Margin Calculation Application Programming Interface;
- CDSClear Reporting application;
- CDSClear Reporting Application Programming Interface;
- CDSClear Trade Management application;
- CDSClear Backloading application;
- CDSClear Compression application;
- Web EGCP; and
- CDSClear Reporting SFTP solution

as defined below, and/or a combination of them.

LCAP (Logical Certified Access Point): is the Logical Clearing Access Solution (hosted in LCH SA data centres) allowing the Users to gain access to the Clearing Solution as described in Schedule 2 appendix 3.

eCCW: is the Clearing Access Solution allowing the Users to gain access to the Clearing Solution on Internet or over the Network Services from its premises, as described in Schedule 2.

Web OTC or hereafter “Web Fixed Income”: is the electronic Clearing Access Solution provided by LCH SA for its Users acting on the bonds and repos markets (public government debt) cleared by LCH SA.

Web EGCP: is the electronic Clearing Access Solution provided by LCH SA for its Users acting on the €GCPlus market cleared by LCH SA.

CMS is a tool provided by LCH SA for its Users allowing them the management of the Collateral. “Collateral” shall understood as the collateral identified on the Portal (as described in Annex 2 of the Appendix 5 of this Schedule 2 and LCH SA’s website), from time to time as being eligible for lodgement and/or release utilising the Portal and in respect of which the member has completed and has in place a current and valid Request Form which has been received by LCH SA.

CDSClear Reporting application is a User Interface which allows Users of LCH SA CDSClear service to gain access to a full suite of downloadable report files and sits with the LCH SA Portal.

CDSClear Trade Management application is a User Interface which allows Users of LCH SA CDSClear service to gain access for real time information on their trade portfolios (bilateral and cleared trades) and sits with the LCH SA Portal.

CDSClear Backloading application is a User Interface which allows Users of LCH SA CDSClear service to have the ability to select and upload trades for clearing for the Weekly Backloading cycle and sits with the LCH SA Portal.

CDSClear Compression application is a User Interface which allows Users of LCH SA CDSClear service to configure their compression settings on their portfolios and sits with the LCH SA Portal. Users have several

options of compression frequency (daily or weekly) and the possibility to compress their trades at deskID level.

CDSClear Portfolio Margin Calculation (PMC) is a tool which allows Users of LCH SA CDSClear service to compute the margin requirements for their portfolios and sits with the LCH SA Portal.

CDSClear Portfolio Margin Calculation Application Programming Interface (PMC API) is a programmatic interface where Users of LCH SA CDSClear service can use scripts to access and download individual margin results.

LCH SA Portal is a single sign-on solution for various LCH SA applications (as described in Appendix 11 of this Schedule 2). Access to the LCH SA Portal is provided by LCH SA to Users of LCH SA CDSClear service over secured Internet.

CDSClear Reporting SFTP Solution is the Secure File Transfer Protocol interface allowing Users of LCH SA CDSClear service to gain access to the member reporting service as described in Appendix 13 of this Schedule 2.

CDSClear Reporting Application Programming Interface (API) is a programmatic interface where Users of LCH SA CDSClear service can use scripts to access and download individual reports.

This Schedule 2 is made of the following appendixes:

- Appendix 1: Description of LCH SA eCCW Clearing Access Solution
- Appendix 2: Description of LCH SA Web Fixed Income Clearing Access Solution
- Appendix 3: Description of the LCAP solution
- Appendix 4: Description of Network Services
- Appendix 5: Description of CMS
- Appendix 6: Description of CDSClear PMC tool
- Appendix 7: Description of the CDSClear Reporting application
- Appendix 8: Description of the CDSClear Trade Management application
- Appendix 9: Description of the CDSClear Backloading application
- Appendix 10: Description of the CDSClear Compression application
- Appendix 11: Description of the LCH SA Portal
- Appendix 12: Description of Web EGCP
- Appendix 13: Description of the CDSClear Reporting SFTP Solution
- Appendix 14: Description of the CDSClear Reporting API
- Appendix 15: Description of the CDSClear Portfolio Margin Calculation API

APPENDIX 1: DESCRIPTION OF LCH SA eCCW

1.1 GENERAL PRINCIPLES

- 1.1.1 eCCW is a Graphical User Interface provided over Internet or over LCH SA network, by LCH SA for its Users, other than Users of LCH SA CDSClear service, that enables them to interact with LCH SA Clearing Solution.

1.2 MANAGING PRINCIPLES

- 1.2.1 The access to the eCCW is delivered by LCH SA, after the Users have duly filled in and signed the LCH SA adequate Request Form.
- 1.2.2 This Request Form shall be duly completed and signed by the Users and sent by registered letter to the appropriate LCH SA interlocutor as set out on the Request Form.
- 1.2.3 The Internet access to the eCCW is managed via a Secure Access Card. The Users shall strictly comply with the terms of use of the Secure Access Card as those terms are set out in Annex 1 "Secure Access Card management", security measures set out in Schedule 1 of this Agreement and the associated Documentation.
- 1.2.4 Via the eCCW, LCH SA provides the Users with the appropriate clearing data (files and real time data) as set out in Annex 2 "Clearing Data to be accessed via eCCW "of this appendix.
- 1.2.5 Any Anomaly encountered regarding the proper use of the eCCW must be raised to LCH. SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 1.2.6 Any Changes required by the Users to LCH. SA regarding the eCCW shall be notified by the Users to LCH SA by filling in the appropriate Request Form available from LCH SA.
- 1.2.7 The costs regarding the provision of this Service are stipulated within the Request Form and are in accordance with the costs mentioned within LCH SA effective fee grid.

1.3 ANNEX 1 : Secure Access Card Management
--

1.3.1 General Principles

- 1.3.1.1 A token, hereafter referred as either "Secure Access Card" aims at delivering to the Users a secured electronic access to the following eCCW Clearing Access Solution.
- 1.3.1.2 The Secure Access Card is automatically provided by LCH SA as soon as the Users request to be granted access to eCCW.

1.3.2 Managing principles

The managing principles for a "Secure Access Card" are detailed hereafter:

- 1.3.3 In order to be granted access to eCCW, the Users shall request their LCH SA to provide the appropriate Request Form. Once this form is duly completed and signed by the Users, LCH SA takes the necessary actions to give the Users eCCW access in coordination with CTH.

- 1.3.4 The CTH is in charge of allocating a package of Secure Access Cards in accordance with the request issued by the Users through the Request Form. A package of Secure Access Cards is composed of:
- a production Secure Access Card
 - an acceptance Secure Access Card
 - a back-up Secure Access Card (on request only)
- 1.3.5 The EMSA shall distribute eCCW Secure Access Cards to the relevant eCCW Users.
- 1.3.6 The Users shall comply with the instructions provided by LCH SA in the relevant documentation in order to activate the Secure Access Card.
- 1.3.7 The following events shall be immediately communicated to LCH SA by the EMSA in order to update Users' accesses:
- leavers (eg. resignation, dismissal, any cause of leaving)
 - change of function
 - re-assignment of eCCW Secure Access Cards
 - loss of token or activation of eCCW Secure Access Cards following de-synchronisation or loss of PIN code.
- 1.3.8 In case a Secure Access Card is lost or broken, it should be notified immediately by the EMSA to LCH SA in order to for the Customer Technical Helpdesk to allocate a new card to the User once the relevant change request form would have been sent back.
- 1.3.9 The Secure Access Card is to be strictly used for eCCW connection only.
- 1.3.10 The Secure Access Card is to be charged to the Users by LCH SA according to the fee grid.

1.4 ANNEX 2: Clearing data to be accessed via eCCW

1 CASH CLEARING FILES	PRODUCTION FILES		TEST FILES	
Trade leg reconciliation (for CMF) - this file is charged	POS.SP***TC	<input type="checkbox"/>	POS.SH***TC	<input type="checkbox"/>
Trade leg reconciliation (for TMF) - this file is charged – on LCAP only	POS.SP***TT	<input type="checkbox"/>	POS.SH***TT	<input type="checkbox"/>
Position Result Third Resume (PR3)	POS.SP***S3	<input type="checkbox"/>	POS.SH***S3	<input type="checkbox"/>
Settlement Information File (SIF) cc= BE/ FR/ NL/PT/LU	EP*****ccSIFday	<input type="checkbox"/>	EH*****ccSIFday	<input type="checkbox"/>
Buy-In Information File (BIF) CC= BE/ FR/ NL/PT/LU	EP*****ccBIFday	<input type="checkbox"/>	EH*****ccBIFday	<input type="checkbox"/>
Margin account result	PB.SP***B1	<input type="checkbox"/>	PB.SH***B1	<input type="checkbox"/>
Public SPAN	SPAN.SPXXXBA SPAN.SPXXXBE	<input type="checkbox"/>	SPAN.SHXXXBA SPAN.SHXXXBE	<input type="checkbox"/>
Corporate Events File	SPAN.SPXXXOA SPAN.SPXXXOB	<input type="checkbox"/>	SPAN.SHXXXOA SPAN.SHXXXOB	<input type="checkbox"/>
Cash Static Data (morning)	EPPUBLICXXLCCD02day	<input type="checkbox"/>	EHPUBLICXXLCCD02day	<input type="checkbox"/>
Cash Static Data (evening)	EPPUBLICXXLCCD01day	<input type="checkbox"/>	EHPUBLICXXLCCD01day	<input type="checkbox"/>
Cash Static Data (morning) only for Luxembourg	EPPUBLICXXLUCD02day	<input type="checkbox"/>	EHPUBLICXXLUCD02day	<input type="checkbox"/>
Cash Static Data (evening) only for Luxembourg	EPPUBLICXXLUCD01day	<input type="checkbox"/>	EHPUBLICXXLUCD01day	<input type="checkbox"/>
Position Report (for TMF) Cash Margin Report (for TMF) Add-ons Margin Report (for TMF)	EP000*****TCPRnnqqq EP000*****TCMRnnqqq EP000*****TCAM00qqq	<input type="checkbox"/>	EH000*****TCPRnnqqq EH000*****TCMRnnqqq EH000*****TCAM00qqq	<input type="checkbox"/>
2 DERIVATIVES CLEARING FILES				

Private Matif positions & performance bond	POS.FP***S1 POS.FP***S2 POS.FP***S3 PB.FP***B1	<input type="checkbox"/>	POS.FH***S1 POS.FH***S2 POS.FH***S3 PB.FP***B1	<input type="checkbox"/>
Public Matif SPAN	SPAN.FPXXXBA SPAN.FPXXXBB SPAN.FPXXXBC	<input type="checkbox"/>	SPAN.FHXXXBA SPAN.FHXXXBB SPAN.FHXXXBC	<input type="checkbox"/>
Private Monep positions & performance bond	POS.OP***S1 POS.OP***S2 POS.OP***S3 PB.OP***B3	<input type="checkbox"/>	POS.OH***S1 POS.OH***S2 POS.OH***S3 PB.OP***B3	<input type="checkbox"/>
Daily operations Monep (all products) - this file is charged	POS.OP***J0 POS.OP***J1 POS.OP***J2	<input type="checkbox"/>	POS.OH***J0 POS.OH***J1 POS.OH***J2	<input type="checkbox"/>
Daily operations Monep (Dutch products and trading fees all derivatives clearing segments) - this file is charged	POS.OP***J3	<input type="checkbox"/>	POS.OH***J3	<input type="checkbox"/>
Public Monep SPAN	SPAN.OPXXXBD	<input type="checkbox"/>	SPAN.OHXXXBD	<input type="checkbox"/>
Derivatives instrument characteristics for the current business date (morning)	EPPUBLICXXLCDD0day	<input type="checkbox"/>	EHPUBLICXXLCDD01day	<input type="checkbox"/>
Derivatives instrument characteristics for the current business date (intra-day)	EPPUBLICXXLCDI01day	<input type="checkbox"/>	EHPUBLICXXLCDI01day	<input type="checkbox"/>
Derivatives clearing elements	EPPUBLICXXLCDC01day	<input type="checkbox"/>	EHPUBLICXXLCDC01day	<input type="checkbox"/>
Derivatives open positions	EPPUBLICXXLCDP01day EPPUBLICXXLCDP02day EPPUBLICXXLCDP03day EPPUBLICXXLCDP04day	<input type="checkbox"/>	EHPUBLICXXLCDP01day EHPUBLICXXLCDP02day EHPUBLICXXLCDP03day EHPUBLICXXLCDP04day	<input type="checkbox"/>
Derivatives exercise	EPPUBLICXXLCDE01day EPPUBLICXXLCDE02day	<input type="checkbox"/>	EHPUBLICXXLCDE01day EHPUBLICXXLCDE02day	<input type="checkbox"/>
Underlying cash closing price	EPPUBLICXXLCCC01day	<input type="checkbox"/>	EHPUBLICXXLCCC01day	<input type="checkbox"/>
Position Report (for TMF) Derivatives Margin Report (for TMF) Add-ons Margin Report (for TMF)	EP000*****TDPRnnqqq EP000*****TDMRnnqqq EP000*****TDAM00qqq	<input type="checkbox"/>	EP000*****TDPRnnqqq EP000*****TDMRnnqqq EP000*****TDAM00qqq	<input type="checkbox"/>

2 APPENDIX 2: DESCRIPTION OF WEB FIXED INCOME

2.1 GENERAL PRINCIPLES

- 2.1.1 Web FIXED INCOME is an electronic Clearing Access Solution provided by LCH SA for its Users trading on the bonds and repos markets (public government debt) cleared by LCH SA.
- 2.1.2 Web FIXED INCOME grants Users secured access to view and download the data set out in Annex 2 of this Appendix.

2.2 MANAGING PRINCIPLES

- 2.2.1 The access to the Web FIXED INCOME is delivered by LCH SA, after the Users have duly filled in and signed the LCH SA adequate Request Form
- 2.2.2 This Request Form shall be duly completed and signed by the Users and sent by registered letter to the appropriate LCH SA interlocutor as set out on the Request Form.
- 2.2.3 The access to the Web FIXED INCOME is managed via a Secure Access Card. The Users shall strictly comply with the terms of use of the Secure Access Card as those terms are set out in clause 2.2 of this appendix, security measures set out in Schedule 1 of this Agreement and the associated Documentation.
- 2.2.4 The access to the Web FIXED INCOME can also be managed via the implementation of a push or pull solution (hereafter "Push/Pull Solution"), on request of the Users. Either the Users connects to the Appropriate Network and pulls the Web FIXED INCOME files onto its information system; or LCH SA pushes the Web FIXED INCOME files on to the Clearing Member's information system via internet.
- 2.2.5 LCH SA offers to its Users two technical solutions to get access to the Push / Pull Solution:
 - either a PGP solution (encrypted), or
 - a public solution (non encrypted solution).

The choice between these two solutions remains under the sole responsibility of the Users. Each User declares that he has the accurate knowledge to assess the consequences each solution may generate. In this context, the Users acknowledge and agree that LCH SA would not suffer any liability regarding the consequences associated with the choice described above and notably where the Users opt for the public solution.

Further to clause 13 of the Access Agreement and notwithstanding anything to the contrary, in no circumstances whatsoever will LCH SA be liable for any direct or indirect loss or damage including without limitation, loss of data or loss of profits arising out of, or in connection with, the use of the public solution. Any reliance the User places on information received through the public solution is therefore at its own risk.

- 2.2.6 Via the Web FIXED INCOME, LCH SA provides the Users with the appropriate clearing data (files) as set out in Annex 2 “Clearing Data to be accessed via Web FIXED INCOME “.
- 2.2.7 The following events shall be immediately communicated to LCH SA Account Managers by the Users Web FIXED INCOME administrator (MSA) in order to update the Users’ accesses to the Web FIXED INCOME:
- leavers (eg.resignation, dismissal, any cause of leaving);
 - change of function;
 - re-assignment of Secure Access Card;
 - loss of Secure Access Card or activation of Secure Access Card following the synchronisation or loss of PIN code.
- 2.2.8 Any Anomaly encountered regarding the proper use of the Web FIXED INCOME must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 2.2.9 Any Changes required by the Users to LCH SA regarding the Web FIXED INCOME shall be notified by the Users to LCH. SA by filling in the adequate Request Form “Web FIXED INCOME Change Request Form” attached in Annex 1 of this Appendix.

2.3 ANNEX 1 : Secure Access Card Management
--

2.4 General Principles

- 2.4.1 A token, hereafter referred as “Secure Access Card” aims at delivering to the Users a secured electronic access to the Web FIXED INCOME Clearing Access Solutions.
- 2.4.2 The Secure Access Card” is automatically provided by LCH. SA as soon as the Users request to be granted access to Web FIXED INCOME.

2.5 Managing principles

- 2.5.1 The Secure Access Card enables access to the Web FIXED INCOME production interface.
- 2.5.2 The Secure Access Card is provided to the Users when they issue a request to LCH SA CTH in order to be granted access to the Web FIXED INCOME platform via Internet.
- 2.5.3 The Users may also wish to be granted access to the FIXED INCOME files via a “push or pull” solution, which consists in granting access to fixed income files via FTP network
- 2.5.4 The Users shall specify in the Request Form which Clearing Access Solution they require and also give details on the Users:
- Names
 - Address (site, country)
 - E-mail address
 - Phone number
 - Fax number

- 2.5.5 LCH SA CTH is in charge of providing the Users with the following relevant and sufficient information to have access to the Web FIXED INCOME production interface:
- Pin code
 - Password
 - Instructions for use.
- 2.5.6 The Users shall comply with the instructions provided by LCH SA in the relevant documentation.
- 2.5.7 Secure Access Cards operate for a limited period of time (3 years in average). It will therefore be replaced at LCH SA initiative in due course.
- 2.5.8 Any Anomaly or problem encountered by the Users regarding the Web FIXED INCOME access via the Secure Access Card shall be raised to LCH SA CTH.
- 2.5.9 The costs regarding the Web FIXED INCOME Clearing Access Solution are the ones set out in the effective LCH SA fee grid.

2.6 ANNEX 2: Clearing data to be accessed via Web FIXED INCOME

- 2.6.1 The Web FIXED INCOME solution gives access to the Users to the following data:
- in real-time :
 - daily operations (validated and refused) recorded by LCH SA during the day
 - all the instructions that are still unmatched reported every 30 min
 - at the end of day :
 - reporting after batch on file reports
 - 08.00 next morning (Paris time) :
 - financial report
 - monthly :
 - invoicing details with possibility to have a view over 12 months
- 2.6.2 Hereunder is the list of files provided via the Web FIXED INCOME Clearing Access Solution:

Report name	Technical name	PRODUCTION: description	TEST: description
real time trade report	TRAD	XXPRYYYYMMDDTRAD.txt	XXTSYYYYMMDDTRAD.txt
initial margin	TRDG	XXPRYYYYMMDDTRDG.txt	XXTSYYYYMMDDTRDG.txt
Fails	SUSP	XXPRYYYYMMDDSUSP.txt	XXTSYYYYMMDDSUSP.txt
regularisations	REGU	XXPRYYYYMMDDMARG.txt	XXTSYYYYMMDDMARG.txt
Positions and margin s	MARG	XXPRYYYYMMDDMARG.txt	XXTSYYYYMMDDMARG.txt
Bonds and Repo financial statement	BRFS	XXPRYYYYMMDDBRFS.txt	XXTSYYYYMMDDBRFS.txt
detail of net instructions	DNET	XXPRYYYYMMDDDNET.txt	XXTSYYYYMMDDDNET.txt
trades of the day	DTRD	XXPRYYYYMMDDDTRD.txt	XXTSYYYYMMDDDTRD.txt

securities settlement prices	CVAL	XXPRYYYYMMDDCVAL.txt	XXTSYYYYMMDDCVAL.txt
detail of cleanet operations	KOND	XXPRYYYYMMDDKOND.txt	XXTSYYYYMMDDKOND.txt
Euro Financial statement	SFEU	XXPRYYYYMMDDSFUE.txt EP0000XXPRZZZ00(Day) (XML edition)	XXTSYYYYMMDDSFUE.txt EH0000XXTSZZZ00(Day) (XML edition)
Intra-day Euro Financial statement	SFE1	XXPRYYYYMMDDSF1.txt EP0000XXPRZZZ01(Day) (XML edition)	XXTSYYYYMMDDSF1.txt EH0000XXTSZZZ01(Day) (XML edition)
Forward repos	FORW	XXPR YYYYYMMDDFORW.HTML XXPR YYYYYMMDDFORW.TXT	XXTS YYYYMMDDFORW.HTML XXTS YYYYYMMDDFORW.TXT
BOND LIST	BOND	XXPRYYYYMMddbOND.txt	XXTSYYYYMMddbOND.txt
Detail of same day instructions	SDRD	XXPRYYYYMMDDSDRD.TXT	XXTSYYYYMMDDSDRD.TXT

*** Only available for the Spanish government bonds clearing solution

3 APPENDIX 3: DESCRIPTION OF THE LCAP

3.1 GENERAL PRINCIPLES

The LCAP is the Logical Certified Access Point which is a clearing gateway hosted in LCH SA data centres, enabling the Users to gain access to LCH SA Clearing Solution.

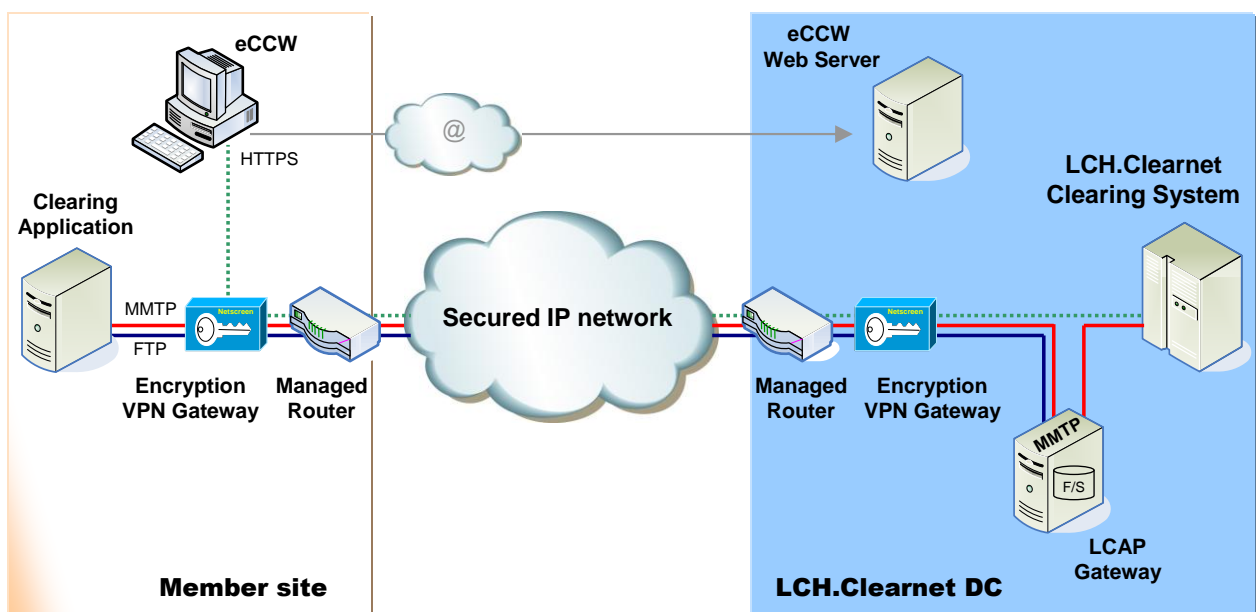
The LCAP is dedicated to the clearing services; therefore, no trading activity transits on a LCAP.

3.2 COMPOSITION OF THE LCAP

The LCAP supplies the Users with certified access points to the Clearing Solution enabling the management of incoming and outgoing data flows:

- Real time message flows, on the basis of exchange protocol established by LCH SA (MMTP),
- File flows, on the basis of international file transfer protocol (FTP).

LCAP handles the certification, and storage of data interchanged between the Users and LCH SA. The LCAP is single-platform (live or testing), single function station and each LCAP can handle five subscribers (also referred as "SLE"s). It can be used both for cash and derivatives markets.



3.3 MANAGING PRINCIPLES

- 3.3.1 Whenever Users require to be given access to the Clearing Solution, the appropriate Request Form, available from LCH SA Account Managers, shall be duly completed and signed by the Users and sent by registered letter to the appropriate LCH SA interlocutor as set out on the Request Form.
- 3.3.2 The LCAP provides the Users with the appropriate clearing data (real time messages, files) as set out in Annex 1 “Clearing Data to be accessed via LCAP”.
- 3.3.3 Any Anomaly encountered regarding the proper use of the LCAP must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 3.3.4 Any Changes required by the Users to LCH SA regarding the LCAP shall be notified by the Users to the appropriate LCH SA interlocutor by filling in the relevant Request Form available from LCH SA Account Manager.
- 3.3.5 The invoicing principles applicable to the LCAP Clearing Solution are similar to those set out in Appendix 4 “Network Services”.

3.4 ANNEX 1: Clearing data to be accessed via LCAP

CLEARING FILES:

1 CASH CLEARING FILES	PRODUCTION FILES		TEST FILES
Private positions	POS.SP***S3 PB.SP***B1	<input type="checkbox"/> <input type="checkbox"/>	POS.SH***S3 PB.SH***B1
Settlement Connect CC= BE/ FR/ NL/PT/LU	EP*****ccSIFday EP*****ccBIFday	<input type="checkbox"/> <input type="checkbox"/>	EH*****ccSIFday EH*****ccBIFday
Trade leg reconciliation (for CMF) - this file is charged	POS.SP***TC	<input type="checkbox"/>	POS.SH***TC
Trade leg reconciliation (for TMF) - this file is charged – on LCAP only	POS.SP***TT	<input type="checkbox"/>	POS.SH***TT
Public SPAN	SPAN.SPXXXBA SPAN.SPXXXBE	<input type="checkbox"/>	SPAN.SHXXXBA SPAN.SHXXXBE
Corporate Events	SPAN.SPXXXOA SPAN.SPXXXOB	<input type="checkbox"/>	SPAN.SHXXXOA SPAN.SHXXXOB
Instrument characteristics current business date (morning)	EPPUBLICXXLCDD02day	<input type="checkbox"/>	EHPUBLICXXLCDD02day
Instrument characteristics current business date (evening)	EPPUBLICXXLCDD01day	<input type="checkbox"/>	EHPUBLICXXLCDD01day
Instrument characteristics current business date (morning) only for Luxembourg	EPPUBLICXXLUCD02day	<input type="checkbox"/>	EHPUBLICXXLUCD02day
Instrument characteristics current business date (evening) only for Luxembourg	EPPUBLICXXLUCD01day	<input type="checkbox"/>	EHPUBLICXXLUCD01day
Position Report (for TMF) Cash Margin Report (for TMF) Add-ons Margin Report (for TMF)	EP000*****TCPRnnqqq EP000*****TCMRnnqqq EP000*****TCAM00qqq	<input type="checkbox"/>	EH000*****TCPRnnqqq EH000*****TCMRnnqqq EH000*****TCAM00qqq

2 DERIVATIVES CLEARING FILES			
Private Matif positions & performance bond	POS.FP***S1 POS.FP***S2 POS.FP***S3 PB.FP***B1	<input type="checkbox"/>	POS.FH***S1 POS.FH***S2 POS.FH***S3 PB.FP***B1
Public Matif SPAN	SPAN.FPXXXBA SPAN.FPXXXBB SPAN.FPXXXBC	<input type="checkbox"/>	SPAN.FHXXXBA SPAN.FHXXXBB SPAN.FHXXXBC
Private Monep positions & performance bond	POS.OP***S1 POS.OP***S2 POS.OP***S3 PB.OP***B3	<input type="checkbox"/>	POS.OH***S1 POS.OH***S2 POS.OH***S3 PB.OP***B3
Daily operations Monep (all products) - this file is charged	POS.OP***J0 POS.OP***J1 POS.OP***J2	<input type="checkbox"/>	POS.OH***J0 POS.OH***J1 POS.OH***J2
Daily operations Monep (Dutch products and trading fees all derivatives clearing segments) - this file is charged	POS.OP***J3	<input type="checkbox"/>	POS.OH***J3
Public Monep SPAN	SPAN.OPXXXBD	<input type="checkbox"/>	SPAN.OHXXXBD
Derivatives instrument characteristics for the current business date (morning)	EPPUBLICXXLCDD0day	<input type="checkbox"/>	EHPUBLICXXLCDD01day
Derivatives instrument characteristics for the current business date (intra-day)	EPPUBLICXXLCDI01day	<input type="checkbox"/>	EHPUBLICXXLCDI01day
Derivatives clearing elements	EPPUBLICXXLCDC01day	<input type="checkbox"/>	EHPUBLICXXLCDC01day
Derivatives open positions	EPPUBLICXXLCDP01day EPPUBLICXXLCDP02day EPPUBLICXXLCDP03day EPPUBLICXXLCDP04day	<input type="checkbox"/>	EHPUBLICXXLCDP01day EHPUBLICXXLCDP02day EHPUBLICXXLCDP03day EHPUBLICXXLCDP04day
Derivatives exercise	EPPUBLICXXLCDE01day EPPUBLICXXLCDE02day	<input type="checkbox"/>	EHPUBLICXXLCDE01day EHPUBLICXXLCDE02day
Underlying cash closing price	EPPUBLICXXLCCC01day	<input type="checkbox"/>	EHPUBLICXXLCCC01day
Position Report (for TMF) Derivatives Margin Report (for TMF) Add-ons Margin Report (for TMF)	EP000*****TDP Rnnqqq EP000*****TDM Rnnqqq EP000*****TDAM00qqq	<input type="checkbox"/>	EP000*****TDP Rnnqqq EP000*****TDM Rnnqqq EP000*****TDAM00qqq

CREDIT DEFAULT SWAP (CDS) FILES

Trade management reports		Production	<input type="checkbox"/>	Test	EUA1	<input type="checkbox"/>	EUA2	<input type="checkbox"/>
Clearing Eligibility Report	CCER	EPXXXXXXXXCCERnnqqq.csv		EHXXXXXXXXCCERnnqqq.csv				
Matching and Eligibility Report	CMEL	EPXXXXXXXXCMELnnqqq.csv EPXXXXXXXXCMELnnqqq.xml		EHXXXXXXXXCMELnnqqq.csv EHXXXXXXXXCMELnnqqq.xml				
Bilateral Trades Report	CBTR	EPXXXXXXXXCBTRnnqqq.xml EPXXXXXXXXCBTRnnqqq.csv		EHXXXXXXXXCBTRnnqqq.xml EHXXXXXXXXCBTRnnqqq.csv				
Cleared Trades Report	CCTR	EPXXXXXXXXCCTRnnqqq.xml EPXXXXXXXXCCTRnnqqq.csv		EHXXXXXXXXCCTRnnqqq.xml EHXXXXXXXXCCTRnnqqq.csv				
TIW Operations Report	CCLR	EPXXXXXXXXCCLRnnqqq.csv		EHXXXXXXXXCCLRnnqqq.csv				
Restructuring Matched Pairs	CMRP	EPXXXXXXXXCMRPnnqqq.xml EPXXXXXXXXCMRPnnqqq.csv		EHXXXXXXXXCMRPnnqqq.xml EHXXXXXXXXCMRPnnqqq.csv				
Cross Trades Report	CXTR	EPXXXXXXXXCXTRnnqqq.csv		EHXXXXXXXXCXTRnnqqq.csv				
Compression Result File	CCPR	EPXXXXXXXXCCPRnnqqq.csv		EHXXXXXXXXCCPRnnqqq.csv				
CER Result File	RCER	EPXXXXXXXXRCERnnqqq.csv		EHXXXXXXXXRCERnnqqq.csv				
Variation Margin Report House	CVMH	EPXXXXXXXXCVMHnnqqq.csv		EHXXXXXXXXCVMHnnqqq.csv				

		EPXXXXXXXXXCVMHnnqqq.xml	EHXXXXXXXXXCVMHnnqqq.xml
Variation Margin Report Client	CVMC	EPXXXXXXXXXCVMCnnqqq.csv EPXXXXXXXXXCVMCnnqqq.xml	EHXXXXXXXXXCVMCnnqqq.csv EHXXXXXXXXXCVMCnnqqq.xml

Public reports		Production	<input type="checkbox"/>	Test	EUA1	<input type="checkbox"/>	EUA2	<input type="checkbox"/>
Open Interest	COIN	EPPUBLICXXCOINnnqqq.csv EPPUBLICXXCOINnnqqq.xml		EHPUBLICXXCOINnnqqq.csv EHPUBLICXXCOINnnqqq.xml				
Product Index	CPDI	EPPUBLICXXCPDInnqqq.csv EPPUBLICXXCPDInnqqq.xml		EHPUBLICXXCPDInnqqq.csv EHPUBLICXXCPDInnqqq.xml				
Product Single Names	CPDS	EPPUBLICXXCPDSnnqqq.csv EPPUBLICXXCPDSnnqqq.xml		EHPUBLICXXCPDSnnqqq.csv EHPUBLICXXCPDSnnqqq.xml				
Event File - Restructuring	CEVR	EPPUBLICXXCEVRnnqqq.csv EPPUBLICXXCEVXnnqqq.xml		EHPUBLICXXCEVRnnqqq.csv EHPUBLICXXCEVXnnqqq.xml				
Event File - Rename	CEVN	EPPUBLICXXCEVNnnqqq.csv EPPUBLICXXCEVXnnqqq.xml		EHPUBLICXXCEVNnnqqq.csv EHPUBLICXXCEVXnnqqq.xml				
Event File - Failure to Pay / Bankruptcy	CEVF	EPPUBLICXXCEVFnnqqq.csv EPPUBLICXXCEVXnnqqq.xml		EHPUBLICXXCEVFnnqqq.csv EHPUBLICXXCEVXnnqqq.xml				
Event File - Succession	CEVS	EPPUBLICXXCEVSnnqqq.csv EPPUBLICXXCEVXnnqqq.xml		EHPUBLICXXCEVSnnqqq.csv EHPUBLICXXCEVXnnqqq.xml				

Risk management reports		Production	<input type="checkbox"/>	Test	EUA1	<input type="checkbox"/>	EUA2	<input type="checkbox"/>
Margin Result House	CMRG	EPXXXXXXXXCMRGnnqqq.csv EPXXXXXXXXCMRGnnqqq.xml		EHXXXXXXXXCMRGnnqqq.csv EHXXXXXXXXCMRGnnqqq.xml				
Margin Result Client	CMRC	EPXXXXXXXXCMRCnnqqq.csv EPXXXXXXXXCMRCnnqqq.xml		EHXXXXXXXXCMRCnnqqq.csv EHXXXXXXXXCMRCnnqqq.xml				
Risk Portfolio	CPTF	EPXXXXXXXXCPTFnnqqq.csv EPXXXXXXXXCPTFnnqqq.xml		EHXXXXXXXXCPTFnnqqq.csv EHXXXXXXXXCPTFnnqqq.xml				

Simulation reports		Production	<input type="checkbox"/>	Test	EUA1	<input type="checkbox"/>	EUA2	<input type="checkbox"/>
Simulation Matching and Eligibility Report	SMEI	EPXXXXXXXXSMELnnqqq.csv EPXXXXXXXXSMELnnqqq.xml		EHXXXXXXXXSMELnnqqq.csv EHXXXXXXXXSMELnnqqq.xml				
Simulation Member Margin Result House	SMRG	EPXXXXXXXXSMRGnnqqq.csv EPXXXXXXXXSMRGnnqqq.xml		EHXXXXXXXXSMRGnnqqq.csv EHXXXXXXXXSMRGnnqqq.xml				
Simulation Risk Portfolio	SPTF	EPXXXXXXXXSPTFnnqqq.csv EPXXXXXXXXSPTFnnqqq.xml		EHXXXXXXXXSPTFnnqqq.csv EHXXXXXXXXSPTFnnqqq.xml				

Treasury/Collateral reports		Production	<input type="checkbox"/>	Test	EUA1	<input type="checkbox"/>	EUA2	<input type="checkbox"/>
AC0101E – Invoicing cash call report (fees)	CNMC	EP000XXXXX101A00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX101A00day.xml EH000XXXXXCNMcnnday.txt				
AC0102E – Specific default fund market report	CNMC	EP000XXXXX102A00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX102A00day.xml EH000XXXXXCNMcnnday.txt				
AC0102E – Specific market margin report	CNMC	EP000XXXXX102B00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX102B00day.xml EH000XXXXXCNMcnnday.txt				
AC0102E – Specific market non-margin report	CNMC	EP000XXXXX102C00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX102C00day.xml EH000XXXXXCNMcnnday.txt				
AC0103E – Global cash call report	CNMC	EP000XXXXX103A00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX103A00day.xml EH000XXXXXCNMcnnday.txt				
AC0104E – Daily accounting report	CNMC	EP000XXXXX104A00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX104A00day.xml EH000XXXXXCNMcnnday.txt				
AC0105E – Monthly accounting report	CNMC	EP000XXXXX105A00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX105A00day.xml EH000XXXXXCNMcnnday.txt				
AC0106E – Interests monthly report	CNMC	EP000XXXXXCNMcnnday.txt		EH000XXXXXCNMcnnday.txt				
AC0110E – Financial and global situation	CNMC	EP000XXXXX110A00day.xml EP000XXXXXCNMcnnday.txt		EH000XXXXX110A00day.xml EH000XXXXXCNMcnnday.txt				

AC0111E – History of withdrawal & deposit requests	CNMC	EP000XXXXX111A00day.xml EP000XXXXXCNMcnnday.txt	EH000XXXXX111A00day.xml EH000XXXXXCNMcnnday.txt
AC0112E – Detail of regularisations report	CNMC	EP000XXXXX112A00day.xml EP000XXXXXCNMcnnday.txt	EH000XXXXX112A00day.xml EH000XXXXXCNMcnnday.txt
AC0113E – Net payment position document	CNMC	EP000XXXXXCNMcnnday.txt	EH000XXXXXCNMcnnday.txt
AC0126E – Monthly interest scales report	CNMC	EP000XXXXX126A00day.xml EP000XXXXXCNMcnnday.txt	EH000XXXXX126A00day.xml EH000XXXXXCNMcnnday.txt
AC0129E - CDS Default fund contribution	CNMC	EP000XXXXXCNMcnnday.txt	EH000XXXXXCNMcnnday.txt
Collateral Value Situation Report	CCVS	EPXXXXXXXCCVSnnqqq.csv EPXXXXXXXCCVSnnqqq.xml	EHXXXXXXXCCVSnnqqq.csv EHXXXXXXXCCVSnnqqq.xml

4 APPENDIX 4: DESCRIPTION OF NETWORK SERVICES

4.1 NETWORK SERVICES PRINCIPLES

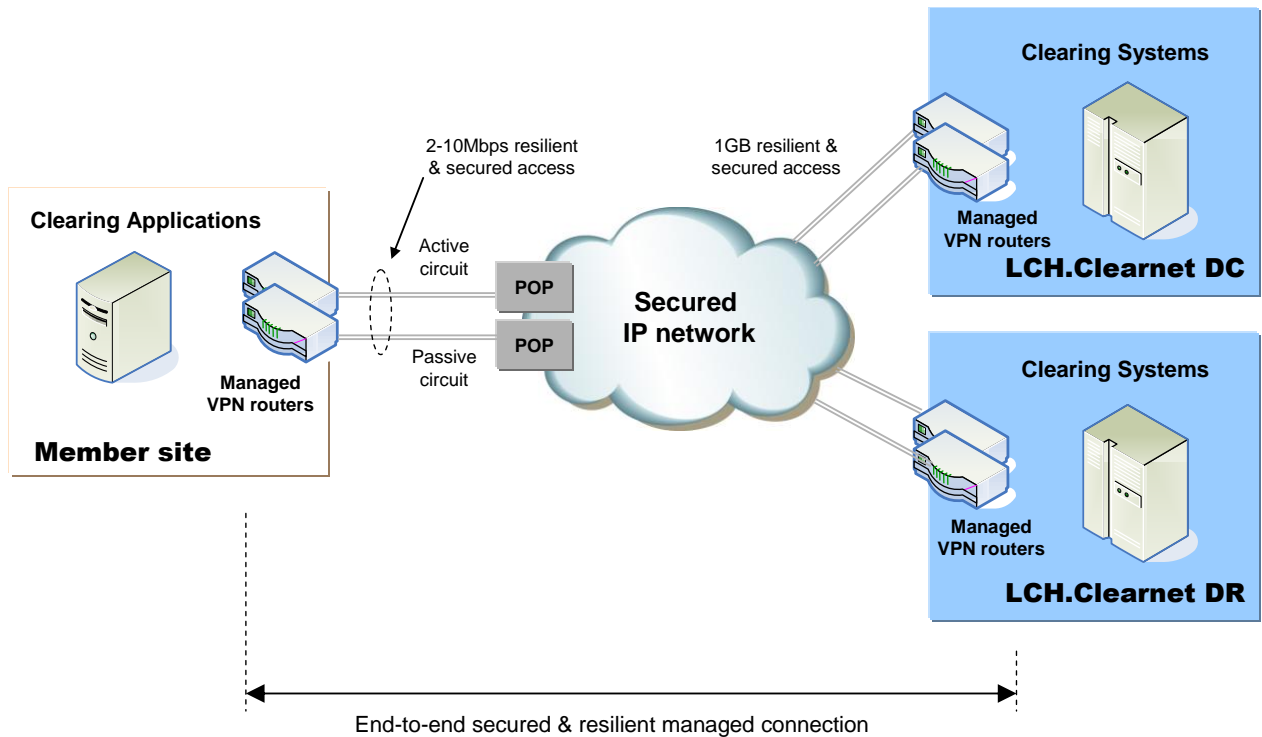
- 4.1.1 LCH SA, through its Subcontractors, shall provide the Users with an end to end managed and secured IP network between the Users sites and LCH SA data centres.
- 4.1.2 LCH SA Network Services is compliant with the best security and business continuity practices.
- 4.1.3 The Users shall select one of LCH SA network solutions as detailed in the relevant Request Form.

4.2 MANAGING PRINCIPLES

- 4.2.1 In order to guarantee full resiliency, the Network Services shall meet the below principles:
 - Resilient network equipments (2x[CPE router + switch + VPN gateway]) supplied and managed by the network Subcontractor, with automatic mechanisms of failover;
 - Resilient Users' access from Users' premises to PoP's provider, using dual carriers;
 - Dual POP per city;
 - Fully Meshed Backbone;
 - Resilient central access in LCH SA DataCenters (DC / DR).
- 4.2.2 The connectivity minimum bandwidth shall be of 2Mbps (which can handle a maximum of 9 SLEs).
- 4.2.3 All clearing flows (real-time messaging and files transfers) are encrypted at IP level, using VPN gateway supplied and managed by the Subcontractor (end-to-end IPsec tunnelling).
- 4.2.4 The Users may choose to mutualise their Network Services to access both LCH SA Limited and S.A clearing services.

In that case, the User shall elect the LCH SA group entity to whom it will order the Network Services. The entity selected will invoice the User the fees corresponding to the Network Services allowing it to access both SA and Limited clearing services.
- 4.2.5 Where a User has ordered its Network Services to LCH SA Limited in order to access both LCH SA Group entities, and faces any difficulty to access LCH SA SA, the User will however benefit from the Support Services described in Schedule 3 of this Agreement.
- 4.2.6 Network Services Acceptance Procedure: following the implementation of the first production LCAP (or test LCAP if the Users do not order any production LCAP), LCH SA will in cooperation with the Users, execute a set of acceptance tests to assess if the Network Services along with the LCAP (either test or production when relevant) are operational (hereafter referred as "Operational Service" date). After the completion of the acceptance tests, LCH SA will send to the Users an e-mail to be construed as an

acceptance test certificate. If the Users do not contest this acceptance test certificate within 7 Calendar Days, the Network Services along with the LCAP will be deemed to be accepted and LCH SA will therefore be entitled to invoice the Users as from the Operational Service date.



4.3 APPLICABLE USE POLICY

4.3.1 SCOPE AND APPLICABILITY

This Acceptable Use Policy (“AUP”) provides a code of conduct applicable to all entity using the Network Services, including the Users and the network services providers’ other customers and their employees, agents, contractors, affiliates, subsidiaries, and, if applicable, clients (all together referred as Users) in order to (i) protect all Users and assure them of the consistent, high level of trust necessary for them to use the Network Services safely, securely and effectively; and (ii) deter the abuse or misuse of the Network Services by any User.

4.3.2 ACCEPTABLE USE

Each User shall use the Network Services to conduct its business, publish and access content, and provide access to applications in accordance with this AUP and any applicable terms and conditions of this Agreement.

4.3.3 UNACCEPTABLE USE

4.3.3.1 Illegal Use

Users are prohibited from using the Network Services to commit or aid in the commission of any crime, fraud, or act which violates any applicable local, national, or international law or regulation.

4.3.3.2 Prohibited Content

Users are prohibited from using the Network Services to transmit, distribute, disseminate, publish, or store:

- any material in violation of any applicable local, national, or international law or regulation;
- material that infringes any patent, trademark, trade secret, copyright, or other intellectual property right of any Party;
- material that is defamatory, abusive, or harassing; or that threatens or encourages bodily harm, destruction of property, or infringement of the lawful rights of any Party; or otherwise constitutes an illegal threat;
- material that violates the privacy of any Party as protected by applicable local, national, or international law or regulation;
- material containing software viruses, worms, Trojan horses, time bombs, cancelbots, or other harmful or deleterious computer code, or any computer code, files, or programs designed to disrupt; destroy; disable; invade, gain unauthorized access to; or corrupt, observe, or modify without authorization, any data; network transmissions; software; computing or network devices; or telecommunications equipment;
- unsolicited or unauthorized advertising, promotional materials, bulk email, or chain letters.

4.3.3.3 Eavesdropping

Users are prohibited from the unauthorized interception or monitoring of any data or messages transmitted over the Network.

4.3.3.4 Unauthorized access

Users are prohibited from employing the Network Services to access any computer, network, or data without authorization or in a manner that exceeds authorization for any purpose, including but not limited to:

- retrieve, alter, or destroy data;
- probe, scan or test the vulnerability of a system or network; or
- breach or defeat system or network security measures such as authentication, authorization, confidentiality, intrusion detection, or monitoring.

4.3.3.5 Impersonation and forgery

Users are prohibited from:

- impersonating any Party or entity by adding, removing, or altering header information of Network, email, or other messages transmitted over the Network;
- transmitting over the Network messages that have been electronically signed using a fraudulently obtained public key certificate or with a forged electronic signature; or
- using the Network Services to commit any other form of forgery or illegal or unauthorized impersonation.

4.3.3.6 Malicious disruption

Users are prohibited from interfering with or disrupting (i) the business operations, service, or function of the Network, any User, or any computer, host, network, or telecommunications device; or (ii) the legitimate use of the Network Services by any User including by deliberate attempts to overwhelm an application, computer system, network device, or network.

4.3.3.7 Security auditing, assessments, penetration tests

Users are prohibited from conducting security audits, assessments, and penetration tests of the Network.

4.3.3.8 Misuse of CPE

Users shall not tamper with or attempt to gain unauthorized access to CPE (routers, cables, connectors).

4.3.4 CONFIDENTIALITY

4.3.4.1 Confidential Information

Each User shall hold in confidence any information it receives from LCH SA or any Clearing Access Solution Third Party Provider related to the security and architecture of the Network Services, including but not limited to: Network routing information, addresses, device configurations, topology, host names, system configurations, security access codes, encryption and authentication keys, passwords, controls, processes, procedures, and safeguards. Users shall not disclose this information except on a need-to-know basis and only to employees, agents, subcontractors, or other third parties who are contractually bound to non-disclosure obligations.

4.3.4.2 Disclosure

LCH SA reserves the right to disclose information relating to Users' activities that may be in violation of this AUP:

- to law enforcement, regulatory, or other agencies in response to lawful requests including, without limitation, as required by any securities exchange or regulatory or governmental body to which a User is subject;
- to the extent required by law or for the purposes of judicial process; or

- to other Users to protect the rights, property, and operations of the Network Services, and the public including, without limitation, the right to notify a User of any event, condition, or activity, of which LCH SA is aware, potentially affecting the security or operations of said Users' computer networks and systems.

4.3.5 MONITORING/ENFORCEMENT

4.3.5.1 Network Usage Monitoring

LCH SA reserves the right to monitor all usage of the Network for purposes of Network management, performance management, capacity planning, and security monitoring and management. Usage monitoring may include:

- monitoring (i) source and destination addresses, protocol type, size and other attributes of individual network packets other than content, and (ii) network routes traversed by individual packets within the Network as necessary to detect potential, incipient, or actual security breaches, intrusions, attacks, or malicious code;
- using devices and techniques such as network intrusion detection, host intrusion detection, and system integrity auditing to inspect packet contents for the presence of software viruses, worms, Trojan horses, time bombs, cancelbots, or other harmful or deleterious computer code, or any computer code, files, or programs designed to disrupt; destroy; disable; invade; gain unauthorized access to; or corrupt, observe, or modify without authorization, any data; network transmissions; software; computing or network devices; or telecommunications equipment, provided, however, that LCH SA shall use such detection devices and techniques solely for the aforesaid purpose; and
- monitoring network traffic for patterns potentially indicating the misuse or abuse of the Network.

4.3.5.2 Content Monitoring

LCH SA does not monitor, review, edit, or censor information transmitted by Users on the Network. Users are solely responsible for the information they transmit on the Network and for complying with all laws and regulations applicable to such information. Users acknowledge that LCH SA is not responsible for the truthfulness, accuracy, or legality of any information transmitted, published, or accessed by Users on the Network.

4.3.5.3 Investigations

LCH SA reserves the right to:

- initiate investigations into potential misuse or abuse of the Network Services by Users;
- involve, and cooperate to the fullest extent possible with, law enforcement, regulatory, and other authorized agencies in the investigation and prosecution of crimes alleged or suspected to have been committed using the Network Services;
- terminate or suspend use of the Network Services by a User found to have violated this Acceptable Use Policy or other applicable terms and conditions to which Users are legally bound to LCH SA; and
- immediately, without notice, and at LCH SA's sole discretion, completely or partially suspend use of, and access to, the Network Services by any User to the extent, as LCH SA determines in its sole discretion, required to maintain and protect the security and

operations of (i) LCH SA or the Network Services, or (ii) any User or any User's computer networks or systems, where LCH SA reasonably believes such security and operations are under potential, threatened, or actual attack or compromise.

In each case LCH SA suspends the Network Services, it shall advise its Users as promptly as possible. Such Service may be restored, within LCH SA sole discretion, after any violation or threat has been remedied or corrected.

5 APPENDIX 5 DESCRIPTION OF CMS

5.1 GENERAL PRINCIPLES

5.1.1 CMS is a graphical user interface provided over Internet by LCH SA for its Users, that enables them to visualise their collateral positions and create collateral instruction requests.

5.2 MANAGING PRINCIPLES

5.2.1 Access to CMS is delivered with either of the following rights in the following way:

- Admin User: first Admin User must be appointed by User's authorised signatory using the Form of Notification of an Admin User for CMS. Additional Admin Users can be created by any existing Admin User directly using the CMS tool;
- Super User: must be appointed by User's authorised signatory using the Form of Notification of a Super User for CMS;
- ordinary user: must be appointed by Admin User or Super User directly via CMS.

5.2.2 The Internet access to CMS is managed via passwords.

5.2.3 LCH SA provides Super Users and ordinary users access to collateral data (real time data) for the relevant Member Code as set out in Annex 2 "Collateral Data to be visualised via CMS" of this appendix.

5.2.4 Via CMS, LCH SA provides the Users with the possibility to create collateral instructions aimed at LCH. SA.

5.2.5 Via CMS, LCH SA provides the Users with a status on their past and current Collateral instructions as set out in Annex 3 "Collateral instructions workflow in CMS" of this appendix.

5.2.6 Any Anomaly encountered regarding the proper use of CMS must be raised to LCH. SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.

5.2.7 Any Changes requested by the Users from LCH. SA regarding CMS shall be LCH SA made

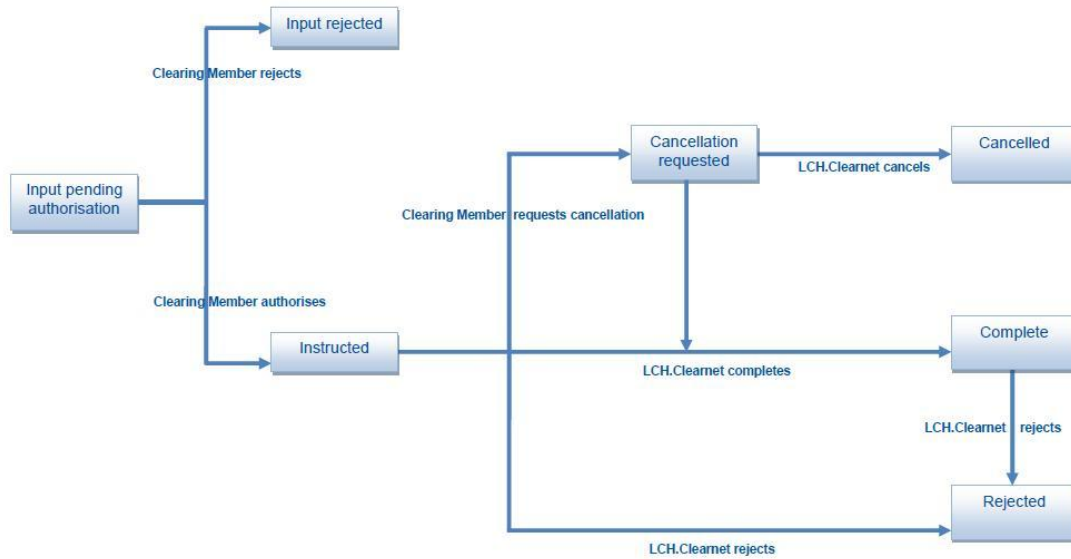
- for the first Admin User per Member Code, by LCH SA upon receipt of a signed request form;
- for additional Admin Users, by an existing Admin User directly through CMS;
- for Super Users, by LCH SA upon receipt of a signed request form; and
- for ordinary users, by an Admin User or Super User directly through CMS.

5.3 ANNEX 2: Collateral Data to be visualised via CMS
--

Collateral Type	Balance	Instructions
-----------------	---------	--------------

Cash	By market / sub-account	By mnemonic
Securities	By market / sub-account	By market / sub-account

ANNEX 3: Collateral Instructions workflow

Workflow for security and cash instructions:

6 APPENDIX 6: DESCRIPTION OF THE CDSCLEAR PORTFOLIO MARGIN CALCULATION TOOL

6.1 GENERAL PRINCIPLES

- 6.1.1 The Portfolio Margin Calculation (PMC) tool sits with the LCH SA Portal (more information is provided in Appendix 11). Access to the Portal is provided by LCH SA to Users of LCH SA CDSClear service over secured Internet.
- 6.1.2 The Internet access to the PMC tool is managed via the Portal Access process. The access to PMC tool requires a specific User request.
- 6.1.3 The Users shall strictly comply with the terms of use of the Portal security policy, detailed in Schedule 1 of this Agreement and the associated Documentation.
- 6.1.4 Via the PMC tool, LCH SA provides the Users with margin calculation results as set out in section 6.3 Annex 2 "CDSClear Clearing Data to be accessed via LCH SA Portal".
- 6.1.5 Any anomaly encountered regarding the proper use of the PMC tool must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 6.1.6 Any changes requested by the Users from LCH SA regarding the PMC tool shall be notified by the Users to LCH SA by contacting the appropriate Super User, who would then complete the appropriate Request Form available from LCH SA.
- 6.1.7 There are no costs regarding the provision of this Service.

6.2 MANAGING PRINCIPLES

The CDSClear Portfolio Margin Calculator (PMC) allows Users of LCH SA CDSClear service to compute the margin requirements for a portfolio of CDS Indices and Single Names. The main capabilities are:

- Pre-trade estimation (for speed)
- Post-trade reconciliation (for accuracy)

Overnight all products are unit-priced using scenario data from the most recent end-of-day production margin run. Intraday this is used to allow PMC to calculate the margins for the portfolio quickly.

The portfolio selected in the PMC can be any of the following:

- the existing portfolio containing the current stock of trades;
- a synthetic portfolio containing new trades;
- a combination of current and new trades

The PMC allows new trades to be uploaded from a CSV file and to be entered manually.

The following browsers are supported:

- IE 7, 8, 9
- Firefox 19
- Chrome 15, 25
- Safari 5.1.7

7 APPENDIX 7: DESCRIPTION OF THE CDSCLEAR REPORTING APPLICATION

7.1 GENERAL PRINCIPLES

- 7.1.1 The CDSClear Reporting application is a User Interface which allows Users of LCH SA CDSClear service to gain access to a full suite of downloadable report files.
- 7.1.2 Users have the possibility to choose the family, the format and the date of reports they are interested in as set out in section 6.3 Annex 2 “CDSClear Clearing Data to be accessed via LCH SA Portal”.
- 7.1.3 The CDSClear Reporting application does not allow Users to automate the report and therefore is not fit for FTP usage.

7.2 MANAGING PRINCIPLES

- 7.2.1 The CDSClear Reporting application sits with the LCH SA Portal (more information in Appendix 11). Access to the LCH SA Portal is provided by LCH SA to Users of LCH SA CDSClear service over secured Internet.
- 7.2.2 The Internet access to the CDSClear Reporting application is managed via the LCH SA Portal Access process. The access to the CDSClear Reporting application requires a specific User request.
- 7.2.3 The Users shall strictly comply with the terms of use of the LCH SA Portal security policy, detailed in Schedule 1 of this Agreement and the associated Documentation.
- 7.2.4 Via the CDSClear Reporting application, LCH SA provides the Users of LCH SA CDSClear service with the suite of report files (Product, Trades, Risks, Margin & Collateral and Event report families) as set out in section 6.3 Annex 2 “CDSClear Clearing Data to be accessed via LCH SA Portal”.
- 7.2.5 Any anomaly encountered regarding the proper use of the CDSClear Reporting application must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 7.2.6 Any changes requested by the Users to LCH SA regarding the CDSClear Reporting application shall be notified by the Users to LCH SA by contacting the appropriate Super User, who shall then complete the appropriate Request Form available from LCH SA.
- 7.2.7 There are no costs regarding the provision of this Service.

7.3 ANNEX 2: CDSClear Clearing data to be accessed via LCH SA Portal

CDSCLEAR FILES	PRODUCTION	TEST
REPORTING		
Product Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Risk Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Collateral & Margin Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Event Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management		
Bilateral Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cleared Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Extract of the data in .csv format	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Compression Management		
Automatic Compression Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Adhoc Compression File	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Backloading		
Weekly Backloading Clearing Eligibility Report Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Portfolio Margin Calculator (PMC)		
Users of the PMC tool will gain access to their permissioned CDSClear Clearing Member trade portfolio, in order for them to run margin simulations against it.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

8 APPENDIX 8: DESCRIPTION OF THE CDSCLEAR TRADE MANAGEMENT

APPLICATION

8.1 GENERAL PRINCIPLES

- 8.1.1 The CDSClear Trade Management application is a User Interface which allows Users of LCH SA CDSClear service to gain access to real time information on their trade portfolios (bilateral and cleared trades).
- 8.1.2 The CDSClear Trade Management application allows the available data to be filtered using specific criteria.
- 8.1.3 The CDSClear Trade Management application allows Users to extract data if the number of lines to be displayed on the screens is too important. The format of the extracted file is .csv format.
- 8.1.4 The Reporting application does not allow Users to automate the data and therefore is not fit for FTP usage.

8.2 MANAGING PRINCIPLES

- 8.2.1 The CDSClear Trade Management application sits with the LCH SA Portal (more information is available in Appendix 11). Access to the LCH SA Portal is provided by LCH SA to Users of LCH SA CDSClear service over secured Internet.
- 8.2.2 The Internet access to the CDSClear Trade Management application is managed via the Portal Access process. The access to the CDSClear Trade Management application requires a specific User request.
- 8.2.3 The Users shall strictly comply with the terms of use of the LCH SA Portal security policy, detailed in Schedule 1 of this Agreement and the associated Documentation.
- 8.2.4 Via the CDSClear Trade Management application, LCH SA provides the Users of LCH SA CDSClear service with real time information on their trade portfolios (bilateral and cleared trades) and the possibility to extract data through .csv file download as set out in section 6.3 Annex 2 "CDSClear Clearing Data to be accessed via LCH SA Portal".
- 8.2.5 Any anomaly encountered regarding the proper use of the CDSClear Trade Management application must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 8.2.6 Any changes requested by the Users from LCH SA regarding the CDSClear Trade Management application shall be notified by the Users to LCH SA by contacting the appropriate Super User, who shall then complete the appropriate Request Form available from LCH SA.
- 8.2.7 There are no costs regarding the provision of this Service.

8.3 ANNEX 2: CDSClear Clearing data to be accessed via LCH SA Portal

CDSCLEAR FILES	PRODUCTION	TEST
REPORTING		
Product Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Risk Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Collateral & Margin Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Event Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management		
Bilateral Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cleared Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Extract of the data in .csv format	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Compression Management		
Automatic Compression Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Adhoc Compression File	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Backloading		
Weekly Backloading Clearing Eligibility Report Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Portfolio Margin Calculator (PMC)		
Users of the PMC tool will gain access to their permissioned CDSClear Clearing Member trade portfolio, in order for them to run margin simulations against it.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

9 APPENDIX 9: DESCRIPTION OF THE CDSCLEAR BACKLOADING APPLICATION

9.1 GENERAL PRINCIPLES

- 9.1.1 The CDSClear Backloading application is a User Interface which allows Users of LCH SA CDSClear service to have the ability to select and upload trades for clearing for the Weekly Backloading cycle.
- 9.1.2 To proceed with the above described process, Users need to upload a .csv file named Result Clearing Eligibility Report.
- 9.1.3 The CDSClear Reporting application does not allow Users to automate the data and therefore is not fit for FTP usage.

9.2 MANAGING PRINCIPLES

- 9.2.1 The CDSClear Backloading application sits with the LCH SA Portal (more information is available in Appendix 11). Access to the Portal is provided by LCH SA to Users of LCH SA CDSClear service over secured Internet.
- 9.2.2 The Internet access to the CDSClear Backloading application is managed via the LCH SA Portal Access process. The access to the CDSClear Backloading application requires a specific User request.
- 9.2.3 The Users shall strictly comply with the terms of use of the LCH SA Portal security policy, detailed in Schedule 1 of this Agreement and the associated Documentation.
- 9.2.4 Via the CDSClear Backloading application, LCH SA provides the Users of LCH SA CDSClear service with the ability to select and upload trades for clearing via the weekly backloading cycle using the CER Result File as set out in section 6.3 Annex 2 "CDSClear Clearing Data to be accessed via LCH SA Portal".
- 9.2.5 Any anomaly encountered regarding the proper use of the Backloading application must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 9.2.6 Any changes requested by the Users from LCH SA regarding the CDSClear Backloading application shall be notified by the Users to LCH SA by contacting the appropriate Super User, who shall then complete the appropriate Request Form available from LCH SA.
- 9.2.7 There are no costs regarding the provision of this Service.

9.3 ANNEX 2: CDSClear Clearing data to be accessed via LCH SA Portal

CDSCLEAR FILES	PRODUCTION	TEST
REPORTING		
Product Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Risk Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Collateral & Margin Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Event Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management		
Bilateral Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cleared Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Extract of the data in .csv format	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Compression Management		
Automatic Compression Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Adhoc Compression File	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Backloading		
Weekly Backloading Clearing Eligibility Report Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Portfolio Margin Calculator (PMC)		
Users of the PMC tool will gain access to their permissioned CDSClear Clearing Member trade portfolio, in order for them to run margin simulations against it.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

10 APPENDIX 10: DESCRIPTION OF THE CDSCLEAR COMPRESSION APPLICATION

10.1 GENERAL PRINCIPLES

- 10.1.1 The CDSClear Compression application is a User Interface which allows Users of LCH SA CDSClear service to configure their compression settings on their portfolios. Users have several options of compression frequency (daily or weekly) and the possibility to compress their trades at deskID level.
- 10.1.2 The CDSClear Compression application also allows Users to upload a .csv file for ad-hoc compression.
- 10.1.3 The CDSClear Compression application does not allow Users to automate the data and therefore is not fit for FTP usage.

10.2 MANAGING PRINCIPLES

- 10.2.1 The CDSClear Compression application sits with the LCH SA Portal (more information in Appendix 11). Access to the LCH SA Portal is provided by LCH SA to Users of LCH SA CDSClear service over secured Internet.
- 10.2.2 The Internet access to the CDSClear Compression application is managed via the LCH SA Portal Access process. The access to the CDSClear Compression application requires a specific User request.
- 10.2.3 The Users shall strictly comply with the terms of use of the LCH SA Portal security policy, detailed in Schedule 1 of this Agreement and the associated Documentation.
- 10.2.4 Via the CDSClear Compression application, LCH SA provides the Users of LCH SA CDSClear service with the ability to configure their compression settings and to upload ad-hoc compression files as set out in section 6.3 Annex 2 "CDSClear Clearing Data to be accessed via LCH SA Portal".
- 10.2.5 Any anomaly encountered regarding the proper use of the CDSClear Compression application must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 10.2.6 Any changes requested by the Users from LCH SA regarding the Trade CDSClear Compression application shall be notified by the Users to LCH SA by contacting the appropriate Super User, who shall then complete the appropriate Request Form available from LCH SA.
- 10.2.7 There are no costs regarding the provision of this Service.

10.3 ANNEX 2: CDSClear Clearing data to be accessed via LCH SA Portal

CDSCLEAR FILES	PRODUCTION	TEST
REPORTING		
Product Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Risk Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Collateral & Margin Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Event Management reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trade Management		
Bilateral Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cleared Trades Management User Interface	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Extract of the data in .csv format	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Compression Management		
Automatic Compression Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Adhoc Compression File	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Backloading		
Weekly Backloading Clearing Eligibility Report Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Portfolio Margin Calculator (PMC)		
Users of the PMC tool will gain access to their permissioned CDSClear Clearing Member trade portfolio, in order for them to run margin simulations against it.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

11 APPENDIX 11: DESCRIPTION OF THE LCH SA PORTAL

11.1 GENERAL PRINCIPLES

- 11.1.1 Portal is a single sign-on solution for various LCH SA applications.
- 11.1.2 Once logged onto the LCH SA Portal, Users will have access to a set of parameterised applications without logging in again.
- 11.1.3 The available set of applications is defined at User level - based on permissions applied to that user.

11.2 MANAGING PRINCIPLES

The managing principles for the LCH SA Portal access are detailed hereafter:

- 11.2.1 In order to be granted access to the LCH SA Portal, the Users shall request LCH SA to provide the appropriate Request Form. Once this form is duly completed and signed by the Users, LCH SA takes the necessary actions to give the Users LCH SA Portal access in coordination with Portal team.
- 11.2.2 To be granted access to the LCH SA Portal is typically done via the Super User facility, excluding CMS ONLY which is done via an online request form directly available to members upon acceding to the LCH SA Portal Link.
- 11.2.3 For all applications (except CMS), users gain access to portal via the Super User facility, which is a delegated responsibility given to 1 or 2 people within that User institution for each line of business and possibly for each application.
- 11.2.4 In order for a Clearing Member to have access as a Super User, such Clearing Member needs to request the appropriate form from LCH SA, have it signed by an authorised signatory for that bank and then return it to LCH SA. Once returned, LCH SA creates this User as a Super User with delegated authority to create access for others within their own institution.
- 11.2.5 The Users shall comply with the instructions provided by LCH SA in the relevant documentation in order to activate their login.
- 11.2.6 The following events shall be immediately communicated to LCH SA in order to update Users' accesses:
 - leavers (eg. resignation, dismissal, any cause of leaving)
 - change of function
- 11.2.7 Inactivate accounts: note that the LCH SA Portal Security policy states that all accounts that are not used for a 3 month period will automatically become inactive. In order for the user to start using the account again, they will need to contact LCH SA for re-activation. If the period of inactivity continues for up to 6 months, accounts will then be automatically deleted. This is a measure that will be taken to as strictly as possible, for security to mitigate the possibility of any breaches.

12 APPENDIX 12: DESCRIPTION OF WEB EGCP

12.1 GENERAL PRINCIPLES

- 12.1.1 Web EGCP is an electronic Clearing Access Solution provided by LCH SA for its Users trading on the €GCPlus market cleared by LCH SA.
- 12.1.2 Web EGCP grants Users secured access to view and download the data set out in Annex 2 of this Appendix.

12.2 MANAGING PRINCIPLES

- 12.2.1 The access to the Web EGCP is delivered by LCH SA, after the Users have duly filled in and signed the LCH SA adequate Request Form
- 12.2.2 This Request Form shall be duly completed and signed by the Users and sent by registered letter to the appropriate LCH SA interlocutor as set out on the Request Form.
- 12.2.3 The access to the Web EGCP is managed via a Secure Access Card. The Users shall strictly comply with the terms of use of the Secure Access Card as those terms are set out in clause 2.2 of this appendix, security measures set out in Schedule 1 of this Agreement and the associated Documentation.
- 12.2.4 The access to the Web EGCP can also be managed via the implementation of a push or pull solution (hereafter “Push/Pull Solution”), on request of the Users. Either the Users connect to the Appropriate Network and pull the Web EGCP files onto its information system; or LCH SA pushes the Web EGCP files on to the Clearing Member’s information system via internet.
- 12.2.5 LCH SA offers to its Users two technical solutions to get access to the Push / Pull Solution:
- either a PGP solution (encrypted), or
 - a public solution (non encrypted solution).

The choice between these two solutions remains under the sole responsibility of the Users. Each User declares that he has the accurate knowledge to assess the consequences each solution may generate. In this context, the Users acknowledge and agree that LCH SA would not suffer any liability regarding the consequences associated with the choice described above and notably where the Users opt for the public solution.

Further to clause 13 of the Access Agreement and notwithstanding anything to the contrary, in no circumstances whatsoever will LCH SA be liable for any direct or indirect loss or damage including without limitation, loss of data or loss of profits arising out of, or in connection with, the use of the public solution. Any reliance the User places on information received through the public solution is therefore at its own risk.

- 12.2.6 Via the Web EGCP, LCH SA provides the Users with the appropriate clearing data (files) as set out in Annex 2 “Clearing Data to be accessed via Web EGCP “.

12.2.7 The following events shall be immediately communicated to LCH SA Account Managers by the Users Web €GCPlus administrator (MSA) in order to update the Users' accesses to the Web EGCP :

- leavers (eg.resignation, dismissal, any cause of leaving);
- change of function;
- re-assignment of Secure Access Card;
- loss of Secure Access Card or activation of Secure Access Card following the synchronisation or loss of PIN code.

12.2.8 Any Anomaly encountered regarding the proper use of the Web EGCP must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.

12.2.9 Any Changes required by the Users to LCH SA regarding the Web EGCP shall be notified by the Users to LCH. SA by filling in the adequate Request Form "Web EGCP Change Request Form" attached in Annex 1 of this Appendix.

12.3 ANNEX 1 : Secure Access Card Management

12.4 General Principles

12.4.1 A token, hereafter referred as "Secure Access Card" aims at delivering to the Users a secured electronic access to the Web EGCP Clearing Access Solutions.

12.4.2 The "Secure Access Card" is automatically provided by LCH. SA as soon as the Users request to be granted access to Web EGCP.

12.5 Managing principles

12.5.1 The Secure Access Card enables access to the Web EGCP production interface.

12.5.2 The Secure Access Card is provided to the Users when they issue a request to LCH SA CTH in order to be granted access to the Web EGCP platform via Internet.

12.5.3 The Users may also wish to be granted access to the Web EGCP files via a "push or pull" solution, which consists in granting access to EGCP files via FTP network.

12.5.4 The Users shall specify in the Request Form which Clearing Access Solution they require and also give details on the Users:

- Names
- Address (site, country)
- E-mail address
- Phone number
- Fax number

12.5.5 LCH SA CTH is in charge of providing the Users with the following relevant and sufficient information to have access to the Web EGCP production interface:

- Pin code
- Password
- Instructions for use.

- 12.5.6 The Users shall comply with the instructions provided by LCH SA in the relevant documentation.
- 12.5.7 Secure Access Cards operate for a limited period of time (3 years in average). It will therefore be replaced at LCH SA initiative in due course.
- 12.5.8 Any Anomaly or problem encountered by the Users regarding the Web EGCP access via the Secure Access Card shall be raised to LCH SA CTH.
- 12.5.9 The costs regarding the Web EGCP Clearing Access Solution are the ones set out in the effective LCH SA fee grid.

12.6 ANNEX 2: Clearing data to be accessed via Web EGCP
--

12.6.1 The Web EGCP solution gives access to the Users to the following data:

- in real-time :
 - daily operations (validated and refused) recorded by LCH SA during the day
- at the end of day :
 - recap of all trades registered during the day
 - report on Net Position Exposure calculation (also updated once intra day)
- 08.00 next morning (Paris time) :
 - financial report (also updated for intraday position)
- monthly :
 - invoicing details

12.6.2 Hereunder is the list of files provided via the Web EGCP Clearing Access Solution:

Report Name	Technical Name	Production Description	Test Description
Real time trade report (for €GCPlus)	CBPTRAD	xxxPRYYYYMMDDCBPTRAD_HHMM.NET	xxxTSYYYYMMDDCBPTRAD_HHMM.NET
Regularisation (for €GCPlus)	CBPREGU	xxxPRYYYYMMDDCBPREGU.TXT	xxxTSYYYYMMDDCBPREGU.TXT
Trades of the day (for €GCPlus)	CBPDTRD	xxxPRYYYYMMDDCBPDTRD.TXT	xxxTSYYYYMMDDCBPDTRD.TXT
Forward Repos (for €GCPlus)	CBPFORW	xxxPRYYYYMMDDCBPFORW.TXT	xxxTSYYYYMMDDCBPFORW.TXT
Detail of Net Instructions (same day)	CBPNPE1	xxxPRYYYYMMDDCBPNPE1.TXT	xxxTSYYYYMMDDCBPNPE1.TXT
Detail of Net Instructions (tomorrow)	CBPNPE2	xxxPRYYYYMMDDCBPNPE2.TXT	xxxTSYYYYMMDDCBPNPE2.TXT
Euro Financial Statement	CBPSFEU	xxxPRYYYYMMDDCBPSFEU.TXT	xxxTSYYYYMMDDCBPSFEU.TXT
Intra-day Euro Financial Statement	CBPSFE1	xxxPRYYYYMMDDCBPSFE1.TXT	xxxTSYYYYMMDDCBPSFE1.TXT

LCH SA

Settlement related costs	CBPNETT	xxxPRYYYYMMDDCBPNETT.TXT	xxxTSYYYYMMDDCBPNETT.TXT
Fees amounts	CBPREPO	xxxPRYYYYMMDDCBPREPO.TXT	xxxTSYYYYMMDDCBPREPO.TXT
Intra Day Market data	CBPMKDTITD	xxxPRYYYYMMDDCBPMKDTITD.TXT	xxxTSYYYYMMDDCBPMKDTITD.TXT
Market data	CBPMKDRTH	xxxPRYYYYMMDDCBPMKDRTH.TXT	xxxTSYYYYMMDDCBPMKDRTH.TXT
Intra Day Risk Report	CBPRISKITD	xxxPRYYYYMMDDCBPRISKITD.TXT	xxxTSYYYYMMDDCBPRISKITD.TXT
Risk Report	CBPRISKRTH	xxxPRYYYYMMDDCBPRISKRTH.TXT	xxxTSYYYYMMDDCBPRISKRTH.TXT

13 APPENDIX 13: DESCRIPTION OF THE CDSCLEAR REPORTING SFTP SOLUTION

13.1 GENERAL PRINCIPLES

The CDSClear Reporting SFTP solution is a non-browser based, Secure FTP (File Transfer Protocol) interface used by Users of the LCH SA CDSClear service for the scripted, bulk retrieval of reports on a scheduled basis. Users connect on a frequent, automatic schedule and retrieve reports, often across multiple business line, in bulk - for later processing.

This is a non-user interactive interface.

Access to the CDSClear Reporting SFTP solution is made through Internet or BT Radianz connection.

13.2 COMPOSITION OF THE CDSCLEAR REPORTING SFTP SOLUTION

The CDSClear Reporting SFTP solution supplies the Users of the LCH SA CDSClear service with a Secure FTP service by restricting accounts by IP addresses enabling the management of incoming and outgoing files flows.

The CDSClear Reporting SFTP solution handles the certification and storage of data interchanged between tUsers and LCH SA.

13.3 MANAGING PRINCIPLES

- 13.3.1 The CDSClear Reporting SFTP solution has been built using the LCH SA Portal security model.
- 13.3.2 Whenever Users require to be given access to the CDSClear Reporting SFTP Solution, the appropriate Request Form, available from the LCH SA Portal, shall be duly completed and signed by the Users and sent by registered letter to the appropriate LCH SA interlocutor as set out on the Request Form.
- 13.3.3 Any Anomaly encountered regarding the proper use of the CDSClear Reporting SFTP solution must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 13.3.4 Any changes requested by the Users from LCH SA regarding the CDSClear Reporting SFTP solution shall be notified by the Users to LCH SA by contacting the appropriate Super User, who would then complete the appropriate Request Form available from LCH SA.
- 13.3.5 There are no costs regarding the provision of this Service.

14 APPENDIX 14: DESCRIPTION OF THE CDSCLEAR REPORTING APPLICATION PROGRAMMING INTERFACE

14.1 GENERAL PRINCIPLES

The CDSClear Reporting API solution provides a programmatic interface where Users of the LCH SA CDSClear service can use scripts to access and download individual reports.

Access to the CDSClear Reporting API solution is made through Internet.

14.2 COMPOSITION OF THE CDSCLEAR REPORTING API SOLUTION

CDSClear Reporting API solution supplies the Users with the ability to run a script in order to retrieve reports on an ad-hoc or small-scale basis – the new API interface provides a secure mechanism in which to do so.

Members need to register for a new Portal API account and password.

The CDSClear Reporting API solution handles the certification and storage of data interchanged between the Users and LCH SA.

14.3 MANAGING PRINCIPLES

- 14.3.1 The CDSClear Reporting API solution has been built using the LCH SA Portal security model.
- 14.3.2 Whenever Users require to be given access to the CDSClear Reporting API Solution, the appropriate Request Form, available from the LCH SA Portal, shall be duly completed and signed by the Users and sent by registered letter to the appropriate LCH SA interlocutor as set out on the Request Form.
- 14.3.3 Any Anomaly encountered regarding the proper use of the CDSClear Reporting API solution must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.
- 14.3.4 Any Changes required by the Users to LCH SA regarding the CDSClear Reporting API solution shall be notified by the Users to LCH SA by contacting the appropriate Super User, who would then complete the appropriate Request Form available from LCH SA.
- 14.3.5 There are no costs regarding the provision of this Service.

15 APPENDIX 15: DESCRIPTION OF THE CDSCLEAR PORTFOLIO MARGIN CALCULATION

APPLICATION PROGRAMMING INTERFACE

15.1 GENERAL PRINCIPLES

The CDSClear PMC API provides a programmatic interface where Users of the LCH SA CDSClear service can use scripts to access and download individual margin results.

Access to the CDSClear PMC API solution is made through Internet.

15.2 COMPOSITION OF THE CDSCLEAR PMC API

CDSClear PMC API solution supplies the Users with the ability to run a script in order to calculate margin on an ad-hoc or small-scale basis – the API interface provides a secure mechanism in which to do so.

Members need to register for a new Portal API account and password.

The CDSClear PMC API solution handles the certification and storage of data interchanged between the Users and LCH SA.

15.3 MANAGING PRINCIPLES

15.3.1 The PMC API solution has been built using the LCH SA Portal security model.

15.3.2 Whenever Users require to be given access to the CDSClear PMC API, the appropriate Request Form, available from the LCH SA Portal, shall be duly completed and signed by the Users and sent by registered letter to the appropriate LCH SA interlocutor as set out on the Request Form.

15.3.3 Any Anomaly encountered regarding the proper use of the CDSClear PMC API must be raised to LCH SA Customer Technical Helpdesk (CTH) in compliance with the terms set out in Schedule 3 of this Agreement.

15.3.4 Any Changes required by the Users to LCH SA regarding the CDSClear PMC API solution shall be notified by the Users to LCH SA by contacting the appropriate Super User, who would then complete the appropriate Request Form available from LCH SA.

15.3.5 There are no costs regarding the provision of this Service.