



Due Diligence FREQUENTLY ASKED QUESTIONS

CC&G from time to time receives requests from their Clearing Members for information in order to fulfil their due diligence requirements. CC&G is pleased to inform that all the information related to the organization and management of the company are available in the website

<http://www.lseg.com/areas-expertise/post-trade-services/ccp-services/ccg>

CC&G has also completed on December 28th, 2016 the Disclosure Framework for Financial market Infrastructure in compliance with the “Principal for Financial Market Infrastructures and the Disclosure Framework and Assessment methodology” issued by CMPI-IOSCO. The document is available on the Company website at the following link:

http://www.lseg.com/sites/default/files/content/documents/CCandG/Disclosure_Framework/CCG_Disclosure_Framework_For_FMI.pdf?wb48617274=DDB65A7F

In order to assist clients for the completion of the Due Diligence, CC&G has produced this document in the form of FAQ. For a convenient consultation, the document is divided into the following sections:

1. CC&G IN A NUTSHELL.....	2
2. MEMBERSHIP	6
3. COMPLIANCE	8
4. AUDITS	9
5. CLEARING AND SETTLEMENT OPERATIONS.....	10
6. RISK MANAGEMENT	13
7. BUSINESS CONTINUITY AND DISASTER RECOVERY	22
8. MEASURES TO PREVENT CYBER ATTACK.....	25



1. CC&G in a nutshell

CC&G was founded in 1992 and offers Clearing and Central Counterparty services for a broad range of trading venues and asset classes including, Equity, Derivatives (on equity, energy and commodities), repos, bonds and Eurobonds. The services are mainly focused on Italian instruments.

Its counterparty risk is protected within a state of the art margin methodology specifically calibrated per asset classes with over € 15 billion margin managed as at February 2017

CC&G is part of the London Stock Exchange Group and it is supervised by the College of Regulators, Bank of Italy and Consob. CC&G does not have a banking licence. Bank of Italy has classified CC&G as critical FMI for the smooth functioning of Target2 (Ancillary System). CC&G is also member of the CODISE, the structure responsible for operational crisis management coordination in the Italian financial marketplace.

How many resources work for CC&G?

CC&G has over 60 resources focused on Client Management, Risk Management, IT, Product Development and Compliance. The management team is composed by senior resources with long standing experience in the industry gained also in international primary Financial Institutions.

The organization chart of the company is available at the following link:

<http://www.lseg.com/markets-products-and-services/post-trade-services/ccp-services/ccg/about-ccg-s-p/governance/organisational-chart?preferred-lang=set&wb48617274=C1435BC0>

Description of the Corporate Governance of CC&G

CC&G adopts the traditional system of administration and control, whereby corporate management is the responsibility of the Board of Directors and control functions are allocated to the Board of Statutory Auditors. CC&G's Corporate Governance system is based on the following:

- the central function of the Board of Directors, responsible for the strategic guidance and supervision of the Company's overall business activities, with policy-making powers in relation to the overall administration and the authority to intervene directly in a series of significant decisions necessary or useful to achieve the company purpose;
- the role of Independent Directors who are directly committed to task where there are potential conflict of interests, such as: risk management and remuneration of the board members and key staff involved on control functions;
- the Board of Statutory Auditors, which is composed by independent members directly appointed by Shareholders, which also acts as Audit Committee and, according to the Italian Corporate Law, is entrusted with the responsibility of supervising a wide set of aspects, ranging from the compliance with the law and the Company Bylaws, to the efficiency of the internal control system,



the internal audit system and the risk management system; statutory audit of the annual accounts; the independence of the statutory auditor or the statutory audit company;

- an external Risk Committee in line with the EMIR provisions,. It is an advisory committee to the Board, and it shall give to the Board of Directors its mandatory non-binding opinion on any arrangements that may impact its Risk Management. For the composition of the committee pls refer CC&G website at the following link: <http://www.lseg.com/node/14352>

A periodic auditing plan is scheduled for reviewing Information Security and Business Continuity. The plan is in compliance with the LSEG's policy and it is approved by the Board of Directors of CC&G.

For more information on the governance structure, please refer to CC&G's website at the following link: <http://www.lseg.com/node/14339>

Does CC&G has an Insurance coverage

CC&G has an LSEG insurance coverage for Primary Crime & Civil Liability Policy. The policy provides a level of cover, subject to the terms and conditions of the policy, for: Internal Fraud, Loss of Property, Damage to Offices and Contents Extortion, External Fraud (non-computer related), Computer and Telephonic Misuses, Electronic Assets Civil Liability.

Where is the latest Financial report available?

The latest financial report of CC&G is related to 2015 and available at the following link: <http://www.lseg.com/sites/default/files/content/documents/CCandG/CCG%20Financial%20Statement%20as%20of%2031122016.pdf>

What are the Financial Instruments and market cleared and guaranteed?

CC&G has expanded its services to cover a broad range of trading venues and asset classes:

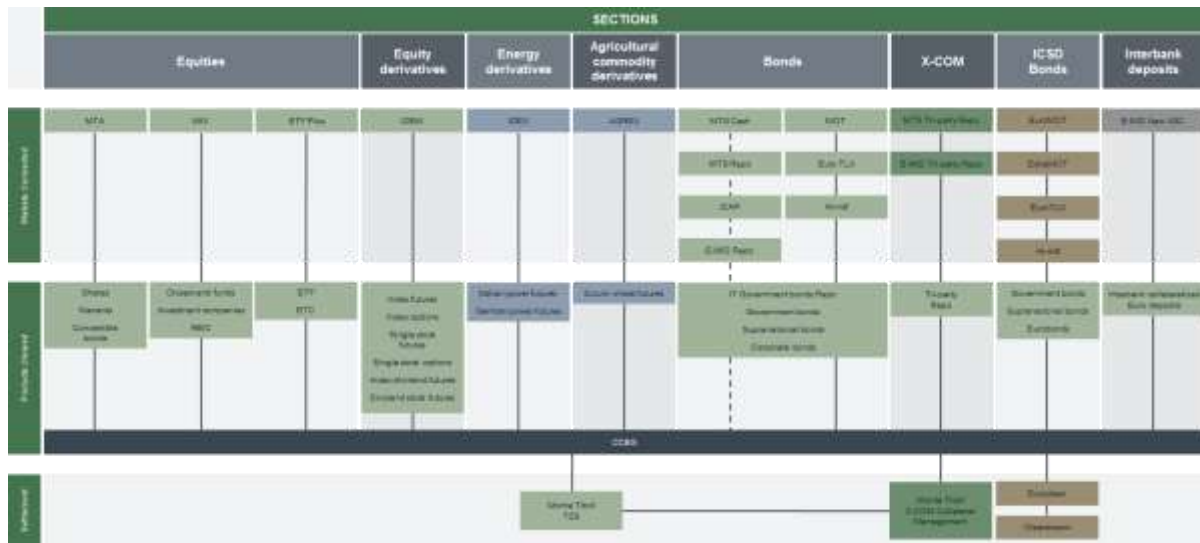
- shares, warrants and convertible bonds traded on MTA market; ETFs and ETCs traded on ETFPlus market; closed-end funds, investment companies and real estate investment companies traded on MIV market;
- index futures, index options, single stock futures and single stock options traded on IDEM market; energy futures traded on IDEX market; durum wheat futures traded on AGREX market;
- Italian Government bonds and Repo traded on MTS market, Euro MTS markets and BrokerTec market; tri-party Repo traded on MTS market and e-MID market;
- European and US Government bonds, corporate bonds traded on MOT market, EuroTLX market and Hi-MTF market.

CC&G has an interoperability agreement with LCH SA to clear jointly Italian government bonds, cash and Repo, traded on MTS, Euro MTS and BrokerTec.

CC&G also provides the guarantee service to MiC, the inter-banking collateralized money market traded on e-MID, where CC&G fulfil the final settlement of the contracts.



For lists of Financial Instruments and markets covered please refer to below chart:



How many clients CC&G has

As at 31 December 2016, 161 Financial Institutions from 10 countries are clients of which 75 are direct members (GCM and ICM). The full list of Direct and Indirect Members is available at the following link <http://www.lseg.com/node/5433>

CC&G Members as at 31 December 2016								
	Equity	Equity Derivatives	Energy Derivatives	Agricultural Commodity Derivatives	Bond	ICSD Bonds Section	XOM	New MIC
GCM	16	25	7	3	14	14	1	-
ICM	15	12	-	-	54	15	4	53
NCM	56	28	13	2	30	19	-	-
Tot	87	65	20	5	98	48	5	53

CC&G assigns each account to a Post Trade Relationship Manager plus a back-up who is responsible for all the relationship for the services offered by CC&G and Monte Titoli, the two Italian post trade infrastructures. The Post Trade RM team is composed by senior resources based in Milan and organises internal meetings to discuss the respective client requirements and new requests and perform regular on-site visit to clients for service reviews, roadmap of projects or any other matters that could be relevant and have an impact on clients.



Client's confidentiality is guaranteed by contractual arrangements with CC&G's employees and consultants and by the segregation of duties set up by the IT systems and by the internal operational procedures. Each employee attends regularly training sessions on the group policies relevant on the matter.

Where is the latest Fee Schedule of CC&G?

CC&G latest fee schedule is published at the following link:

<http://lseg.com/sites/default/files/content/CCP%20fee%20Schedule%20in%20force%20from%201%20January%202017.pdf>

Is CC&G involved in Industry bodies and initiatives?

CC&G is actively involved in industry initiatives: in the domestic market maintains a long established relationship with ABI (Italian banking association) and Assosim (Italian brokers association). At European level CC&G is member of EACH and FIA. CC&G is currently involved in the following main regulatory initiatives:

- Recovery and Resolution framework for CCPs published in November 2016 with EC Commission
- MiFIDII: CC&G (in the context of LSEG) has also provided a response to ESMA's consultation paper on MiFID II/ MiFIR draft RTS.
- EMIR review: engaged in discussions concerning a future consultation that will be launched regarding EMIR review



2. Membership

What are CC&G membership requirements for Direct and Indirect Clearing Members and how are they defined / controlled?

Membership is CC&G's first line level of protection, establishing which parties can be admitted to the system. CC&G selects its own Members on the basis of supervisory capital, technical and organizational criteria; Banks and Investment Firms authorized to provide Investment Services in Italy and those authorized to provide such Services subject to mutual recognition are accepted as Direct Member; other Members of markets guaranteed by CC&G who have signed the agreement with a GCM may become a Non Clearing Member. It is possible to subscribe to CC&G as:

- General Clearing Member
- Individual Clearing Member
- Non-Clearing Member

Only General Clearing Members and Individual Clearing Members participate in the system as counterparties of CC&G (Direct Members), while Non-Clearing Members participate in the system through a General Clearing Member. The General Clearing Member becomes a counterparty of CC&G for proprietary and/or client and/or Non-Clearing Members' transactions; Individual Clearing Members become counterparties of CC&G for proprietary and/or client transactions; Non-Clearing Members stipulate an agreement with a General Clearing Member so that the latter becomes counterparty of CC&G for the Non-Clearing Member's proprietary and/or client transactions. In the event of membership to more sections, it is possible to choose a different membership type for each section. Non-Clearing Members can select a different General Clearing Member for each section. In order to benefit from cross-margining on cash derivatives integrated portfolios, it is necessary to be General or Individual Clearing Members of both sections, or, if Non-Clearing Members, to use the same General Clearing Member for both sections. Membership criteria are defined in the Rulebook, and in the membership Terms and Conditions. Requirements are controlled and monitored via a web based application (Blit Club) though members can upload the requested documentation.

What are the Capital requirements?

GCM: Bonds Wholesale Markets (Repos) € 400million (ml); All other Asset Classes depending on the number of NCMs cleared: up to 1 NCMs € 25ml, from 2 to 5 NCMs € 30ml, from 6 to 10 NCMs € 35ml more than 10 NCMs € 40ml

ICM: Bonds Wholesale Markets (Repos) € 100m; Shares € 3ml; All other Asset Classes € 10ml

The contractual documentation and membership Terms and Conditions are available at the following link:

<http://www.lseg.com/areas-expertise/post-trade-services/ccp-services/ccg/membership/membership-application?wb48617274=56B883B0>



How the on-boarding process and periodical controls are performed?

Potential Members are evaluated through a procedure aimed to verify the solidity of the Company. CC&G asks for Capital and Organizational Requirements. In addition potential Members must provide the organization structure, the countries where they operate, the activity they run, number of employees, their risk matrix, at least two referent with clearing operations competence (self assessed).

During the on-boarding phase, CC&G checks that all the participation requirements are met by the prospect Clearing Member. Direct Clearing Members must have supervisory capital requirements, depending on the Membership Profile. Each Member must also have an organizational structure and technological and information technology systems that guarantee the ordered, continuous, and efficient management of the activities and relations foreseen by CC&G Rules. CC&G requires also NCMs to sign an agreement as they have to perform on behalf of the GCM activities related to early exercise or expiration. Such functionality is used by the NCM directly via BCS (CC&G's GUI).

All the information are submitted to CC&G through a web based application, Bit Club. Once all the information are uploaded, CC&G perform a Membership Committee that evaluate the client to become a direct counterparty.

Membership periodically checks that all requirements are continuously met. Reports are given to CC&G's supervisory authorities and management.



3. COMPLIANCE

How CC&G monitoring changes in the regulation?

CC&G monitors any change through institutional channels of information about laws issued by Italian Parliament and Italian Government, such as the Italian Official Gazette (i.e. Gazzetta Ufficiale), and by compliance newsletters and legal advices provided by external consultants. Furthermore LSEG Regulation teams provides information on the changes of European regulation related to the industry. CC&G is compliant with CPMI IOSCO principles for Financial Market Infrastructures. The CPMI-IOSCO disclosures are published on CC&G company website at the following links:

- CPMI IOSCO Quantitative Disclosures: <http://www.lseg.com/markets-products-and-services/post-trade-services/ccp-services/ccg/statistics/iosco-quantitative-disclosure>; they are updated quarterly;
- CPMI IOSCO Disclosure Framework: <http://www.lseg.com/markets-products-and-services/post-trade-services/ccp-services/ccg/about-ccg-s-p/governance/disclosure-framework-fmi>; it is updated at least every two years or more often upon occurrence of any material changes.

What is the AML policy of CC&G?

A dedicated AML Officer is appointed by the Board of Directors of CC&G who is responsible for the implementation, monitoring, escalation, reporting and update of AML policies and procedures according to the Italian Law provisions and the Group policy. In addition, a Counter Terrorist Financing procedure and related controls have been duly implemented.

All staff members receive annual training on the AML relevant applicable matters according to the Italian Law..



4. AUDITS

How the Audit process is performed in CC&G?

The Head of Internal Audit reports directly to the Board of Directors with a secondary reporting line to the CEO. Functionally reports also to the Head of LSEG Internal Audit.

The Audit Plan is prepared and presented to the Board on a yearly basis. The one for the activities planned for 2017 was presented to the meeting of the Board in November 2016. All audit reports are presented to first Bod meeting following the issuing of that report. The follow-up results are consolidated at group level, presented to the Board of Directors and to group Audit Committee.

The overall plan for the Group includes thematic audits across multiple entities of the Group as well as separate plans for each of the entities globally. For regulated entities, the specific plans are presented at the Board of the regulated entity to be approved. The process is as follow:

- Update the existing audit universe with new entities/hierarchy changes and new risks
- Prioritize audits using the inherent risk and residual risk assessments
- Ensure that audit resources can support the plans
- Finalize the plans and obtain formal approval by the Audit Committee and the Board of Directors of the regulated companies

All Audit documents (Term of Reference, Audit Planning Memorandum, working papers, audit reports) are stored in Team Mate IT application and only authorized users can access the application with different level of permissions.

As for EMIR requirements Audit on remuneration practices, risk models, Treasury, BCP/DR and IT are performed on yearly basis. The audit on IT and BCP/DR are reported to the regulators External Audit is involved only in the certification of the financial statement

When were the latest external and internal audit performed?

The audits activity for the year 2016 was performed in line with the plan and the external one was done by an external Audit Company on March 24th 2016 on the company annual return: No material issues were raised from both of them.

No action has been enforced in the last 3 years by authorities. Furthermore other independent bodies have not applied any publicly disclosed warnings, sanctions, fines or penalties related to your Anti-Bribery and Corruption (ABC), Anti-Money Laundering (AML), Counter Terrorist Financing (CTF), Know Your Client (KYC), Politically Exposed Persons (PEP) or sanctions procedures.



5. CLEARING AND SETTLEMENT OPERATIONS

Description of the clearing flow

CC&G is connected to the trading venues via interfaces. In more details: derivatives contracts are submitted for clearing through a proprietary gateway; cash and repo trades through XTRM, a gateway provided by Monte Titoli. The STP process assures that contracts are registered in CC&G online soon after their execution.

Novation

In markets where the central counterparty service is operated by CC&G only, trades are novated at the very moment of their execution (i.e. open offer).

In markets where the central counterparty service is operated jointly by CC&G and other Central Counterparty, trades are novated from the time CC&G receives the contract (novation).

Clearing Section	
Share section	open offer
Equity Derivatives Section	open offer
Agricultural Commodity Derivatives Section	open offer
Energy Derivatives Section	open offer
Bond Section Markets: MTS Italy, EuroMTS, Broketec/ICAP	novation
Bond Section Markets: MOT, EuroTLX, repo eMID, XCOM	open offer
ICSD Bond Section	open offer

Trade registration and clearing positions

Upon receipt from the trading venue trades are registered in the member accounts and the net positions calculated on a real time basis.

Physical Settlement/Fail Management

Pre-settlement info are provided by CC&G for positions settling in the ICSDs and by XTRM of Monte Titoli for positions settling in T2S. Participation to XTRM is required to clearing member settling in the T2S.

CC&G sends settlement instruction also on behalf of the client to the pertinent settlement systems on S/D -1.

Failed transactions are showed in Clearing Reports. A Buy in Notice is produced and sent automatically after a lapse of time that depends on the asset class (e.g. for shares at the end of S). If, despite the Buy in Notice, the settlement instruction is not settled a buy in process is activated and any resulting costs are debited to the part in malis.

Reporting



CC&G provides an exhaustive number of reports to its clients. A description of the main reports available is provided in the "Technical Manual" published on our website. Please refer to the following link: <http://www.lseg.com/node/14484>

How the users are authenticated in the clearing system?

The clearing system allows configuration of the users that can access to the system and what they can do (grant of authorization). Authentication confirms the identity of a user. Any action taken by the user is logged and stored. An ad hoc internal procedure has been set up in order to outline, inter alia, the users process, the asset owner for clearing application in charge of approving new users, login changes, permissions granted, etc. and defined the minimum criteria to be ensured. The same procedures are applied to contingent labour and third parties.

How can segregation of duties is guaranteed?

Segregation of duties is assured in the IT system through different configurations (grant of authorization). Any operation on clients' assets requires different level of action: input, verify and authorize.

How are daily margin call processed?

Daily Margin Cash call is at 9.30 a.m. CET (debit window between 9.00 and 9.30) and it is processed in Target2 through automatic credit and debit of Target2 PM accounts of the Clearing Members or its Payment Agents. The daily cash call includes initial margins, variation margins, premiums, fees, interest on cash deposited, buy in differences etc.

CC&G runs also intraday cash calls (usually one each day) in order to collect Margins from Clearing Members whose intraday exposition is deemed to be too high. The intraday cash call is communicated to the clearing member and its payment agent with a notice.

The adjustment of the Default Fund is processed in cash at 9.30 of the day indicated in a notice sent out. The adjustments of the Default fund is processed in Target2 through automatic credit and debit of Target2 PM accounts of Clearing Member or its Payment Agent. Usually the Default fund adjustment occurs in one of the first days of each month.

How collateral is managed?

Lodging of collateral in the clearing system is semiautomatic: when collateral is deposited into the CC&G security account dedicated to the clearing member held in the Italian CSD (Monte Titoli), it is automatically loaded by the operator and valorised in the clearing system. If automatic loading is not processed by the operator an alert is sent to the system operator.

Clearing Reports showing the assets of Clearing Members are produced and sent out daily. In case of discrepancies, the appropriate departments are involved in the investigation and if the difference is not solved by the end of the day, an internal escalation procedure is triggered and client informed.

How cash is managed?

CC&G manages cash in Central Bank Money (T2) and securities are held in Monte Titoli (CSD) or in Euroclear where CC&G hold security account for each client, therefore cash and securities transfer are made via SWIFT messages and, in some cases, the domestic Inter banking Network (RNI). In addition CC&G offers its own web based application (ICWS) that allow Clearing



Member to submit cash and securities withdrawals and transfer them from an account to an other.



6. Risk Management

What is the legal basis on which cash margin or securities margin provided by Direct Members is held by CC&G? Is there a client money or custody regime which applies to the holding of Direct Members cash or securities?

There is a segregation of CC&G assets from assets and positions of Clearing Members. Assets of CC&G are completely segregated from assets and positions of Clearing Members. Such segregation is assured by:

- separate registration in CC&G administration
- segregated accounts with custodians, dedicated to CC&G own assets
- segregated accounts in the settlement systems and target2 dedicated to CC&G investment activity
- segregation of positions and assets of a given Clearing Member from position and assets of other Clearing Members

Assets of each Clearing Member are segregated from assets of other Clearing Members. This is assured, in case of cash, by separate registration in CC&G administration; and, in case of financial instruments, by segregated accounts in the CSD, where Clearing Members are requested to open dedicated accounts. Segregation of positions and assets of

- clients of a Clearing Member from position and assets for house account of such CM
- individual segregated clients from position and assets for house account of such CM and from position and assets of other clients

Calculation of the entitlement which Direct Members has in relation to margin (IM vs VM)

CC&G's Rules clearly indicate that all sums and financial instruments deposited by clearing members as guarantee of their obligations are title transferred to CC&G pursuant and for the effect of the Legislative Decree 21 May 2004 no. 170 and its rights on such assets in the management of a default. As established by Article 79 – quinquies and subsequent of the Italian Consolidated Financial Law and Emir, the collateral acquired by CC&G in compliance with the requirements of EMIR cannot be subject to executive or precautionary actions on the part of the creditors of the single participants or of the subject which manages the central counterparty, also in the case of the opening of insolvency procedures.

Calculation of margin requirements and netting rules

The netting of margin requirement is allowed only among positions registered in the same account (eg: margins of house account cannot be net with margins of the client account). Direct Members have to post at least the margins required by CCG, regardless the obligation between Direct Members and their clients.

Segregation letter confirming that cash margin belongs to its clients, not to Direct Members,



From time to time CC&G was asked to sign such letter confirming that account structure of CC&G assures segregation of positions and assets of a given Clearing Member from position and assets of other Clearing Members. Assets of each Clearing Member are also segregated from assets of other Clearing Members. This is assured, in case of cash, by separate registration in CC&G administration; and, in case of financial instruments, by segregated accounts in the central depository management company, where Clearing Members are requested to open dedicated accounts.

What is Eligible Collateral and associated haircuts for Initial Margin, Variation Margin and Default Fund?

In order to cover Initial Margins, Clearing Members can deposit cash or bonds. In order to cover the Contribution Quota to the Default Fund only cash is admitted. Criteria on collateral eligibility and policies are defined by the Internal Risk Committee and they are reviewed at least annually. CC&G accepts as collateral Government bonds:

- from countries with low credit risk (evaluation based on an internal methodology – SRF – updated on an ongoing basis). The list of countries, reviewed regularly, is approved by the Internal Risk Committee;
- traded on MTS wholesale markets and BTPItalia (Italian Government Bond linked to Italian inflation) traded on markets other than MTS.

These features guarantees a low riskiness of securities accepted as collateral, as long as the countries' list is continuously monitored and reviewed on the basis of a consolidated methodology.

In order to guarantee collateral diversification, CC&G sets two different concentration limits:

- the ratio between securities deposited as collateral from a single Clearing Member and its Initial Margins, has to be smaller or equal than 50% (type of asset diversification);
- the ratio between the value of securities issued by a distinct country deposited from a single Clearing Member and its Initial Margins has to be smaller or equal than 45% (issuer diversification). The limit of 45% is set as ratio between bonds issued by a single country versus the total Initial Margin requested to the Clearing Member rather than versus the total bond deposited in order give the possibility to use cash in case bonds of different countries are not available to the clearing member

For more information on the procedure for deposit, valorisation and withdrawal of guarantees, please refer to CC&G's website at the following link:

- http://www.lseg.com/sites/default/files/content/Procedures%20for%20Deposit%20and%20Withdrawal%20Guarantees%20V.%206.0_0.pdf
- <http://lseg.com/node/14491>

How is the collateral requirement calculated? What model is used to calculate IM (e.g. SPAN, VAR)?

Margin Methodology applied: Positions, at the time of registration in each of the accounts or any sub-accounts are netted with the Positions already registered in the same accounts or sub-accounts. Accordingly to that rule, the system prevents netting of positions held in a given account



(subaccounts) with positions held in other account (subaccounts). Margins are calculated using efficient, reliable and accurate systems: the MARS methodology for equity cash products and Equity Derivatives products, the MVP methodology (Method for Portfolio Valuation) for Bonds, the MMEL methodology (Margins Methodology for Electric Market) for Energy Derivatives and the MMEG methodology (Margins Methodology for Agricultural Derivatives) for Agricultural Derivatives. Details of each margin methodology are published in CC&G web site.

For Margin Interval calculation CC&G adopts a confidence level of at least 99.50% for the minimum holding period (2 days) and minimum look back period (1 year) required. CC&G calculate margin Intervals over different look back periods ranging from 6 months to 10 years, plus one for the whole time series starting from 1991 (where available). It is therefore embedded in the adopted methodology that the CC&G's margin requirements are not lower than those that would be calculated using a confidence interval of 99% and a volatility estimated over 1 year historical look-back period.

How is variation margin calculated (e.g. member's curves, house curve)?

CC&G calculates variation margins on the basis of daily settlement prices. Please refer to the "Annexes to the Instructions" available on CC&G's website.

Are there any other margin types (e.g. buffer)?

In calculating initial margins, as per specified in EMIR Regulation, CC&G applies a required buffer of 25% only to those instruments whose time series, used in margins computation, are shorter than 10 years.

Are there any intra-day calculations and if so is this called for?

CC&G routinely calculates intra-day margins, based on real-time positions and real-time prices at least once during the trading day, using the same margining methodologies and parameters as for the overnight calculations. In case of significant uncovered exposures (stemming from large price variations and/or large variation of the net positions), intraday margins are collected in order to reduce the exposure of the Participants vis-à-vis CC&G.

Are there any offsets against other products (e.g. OTC and Listed)?

Margining methodologies support the offsetting for integrated portfolios having different though significantly correlated underlying assets (so-called "Product Group"). Currently, no offset is applied on the Equity and Equity Derivatives Sections. However, the cash positions and derivatives on the same.

Offset parameters are applied to Bond Section, being subject to the same risk factor.

A portfolio margining, that comprises all futures belonging the two or more Classes Groups for which CC&G has verified significantly correlated price trends, is applied to Energy Derivatives Section underlying.

What is the client margining model for IM? Gross or Net?



The margining model for Initial Margins of clients may be net or gross, depending on the set-up opted by the Clearing Member under EMIR regulation. Initial margins for Individual Segregated Clients are held in the Individual Segregated Client Account (i.e. assets of the segregated clients will be completely segregated from the assets of the clearing members and from the assets of the other clients of the clearing member). Initial margins for Additional Omnibus accounts are held separated in the Additional Omnibus accounts. All other initial margin related to clients will be held in the clearing members client omnibus account. Please note that in case of the clearing member default, the assets of the Individual segregated clients are ported or, if porting is not possible, given back to the client; assets of the additional omnibus accounts are ported or, if porting is not possible, used together with the assets held in the clearing member client omnibus account to close the positions of the non individually segregated clients.

Initial margins are calculated with a proprietary platform and then approved by the risk committee and uploaded to the clearing system. Initial margin are calculated as a process of the overnight batch processing as well as the daily cash call that are reconciled in the morning via a dedicated procedure.

How does the Stress Fund works?

The Default Fund framework considers extreme but plausible variations of the risk factors, larger than those covered by the initial margining system, but reasonably possible because based on historical scenarios or potential future scenarios founded on assumptions regarding market trend.

Stress Scenarios adopted provide for the shocking of risk factors varying according to the different Sections cleared.

The framework identifies all market risks to which CC&G would be exposed following the default of one or more clearing member, i.e.:

- Price risk for the following financial instruments: Equities, Equities Derivatives, Energy Derivatives and Agricultural Commodities Derivatives;
- Interest rate risk and credit spread risk for bonds.

The above scenarios are applied both to products guaranteed and the collateral. The framework includes very strict scenarios, based on events occurred in the whole time horizon available. Therefore, the effect of reduced market liquidity of the products is already implicitly included in historically observed market movements. In addition, for derivatives and bonds the liquidation period is higher than the minimum required under Article 53 of Regulation 153/2013.

The Stress Testing includes the losses arising from the default of entities belonging to the same Group of the defaulter, nonetheless the effects of the default of a Member issuing financial instruments cleared by the CCP.

The set of historical or hypothetical scenarios applied in stress test program leads to the determination of a Default Fund for each Section. CC&G has set it (in a conservative way) equals to the Non-Collateralized Exposure of at least the first two most exposed Clearing Members. As a matter of fact, the number of “covered” Clearing Members, beyond the two largest ones, depends on current market and economic conditions, and usually the amount of Defaults Funds is set at a higher and more conservative level (in order to cover at least the default of the four largest banking groups on fixed income and the three largest banking groups on the other sections).



The Total Amount of the Default Fund has to be allotted among all participants; for this reason a Contribution Quota is calculated for each participant, based on the average of the Initial Margins deposited, for each Section, in a certain former period, usually equals to one month. Minimum adjustment threshold are set to avoid petty cash movements. A minimum Contribution Quota to each Default Fund is also set. The Contribution Quota must be deposited in cash (Euro). Minimum contribution quota and total amount of DF to be allotted are published on CC&G's website.

For more information on the stress test procedure please refer to CC&G's website at the following link:

<http://lseq.com/sites/default/files/content/documents/Metodologia%20Stress%20Test%2010.0%20%28US%29.pdf>

How the C Factor is managed and communicated by CC&G?

C Factor calculation process follows the rules defined by the Basel Committee for CCPs. The C Factor can be computed by Clearing Members through a set of parameters, Basel III figures, tested under Bank of Italy supervision and approved by the Chief Risk Officer.

Basel III figures are available through the ICWS GUI (Reports and Data Files: RP-MB01, RP-MB02, RP-MB03 and RP-MB04).

Basel III figures are also periodically shared with CMs' Authorities, in accordance with the Basel III Interim Rules (cf Article 308 of Regulation (EU) No 575/2013).

How Default Waterfall works?

With respect to the resources used to manage a default occurred to a clearing member, CC&G's Default Management Process allows the allocation of the losses and costs sustained by CC&G by the following waterfall resources, which are set out in CC&G's Rulebook (Article B.6.2.3):

- a) to the initial margin of the defaulting clearing member;
- b) to the contribution to the related default fund section of the defaulting member;
- c) to CC&G own resources, up to the amount published on CC&G's internet site (www.lseq.com/ccg)("CC&G's first skin in the game");
- d) to the contributions to the default fund of the other clearing members of the section concerned, pro rata to the payments made and limited to the losses and costs incurred in relation exclusively to the contractual positions of the section concerned
- e) to CC&G's additional voluntary capital buffer ("CC&G's second skin in the game");
- f) to the additional resources paid by the Clearing Members pursuant to Article B.4.2.5 pro rata to their contribution to the Default Fund of the Section concerned.

Any remaining losses following the actions set out under the preceding points will be allocated by CC&G pro rata to the Clearing Members to the Section concerned up to a maximum amount equal to 50% of the contribution to Default Fund under Article B.6.2.3 letter f).

CC&G shall allocate the losses and costs sustained for management of default procedures of a Clearing Member to the contributions to the Default fund of the other Clearing Members of the Section concerned, with these clear limits:



- pro rata to the payments made and
- limited to the losses and costs incurred
- in relation exclusively to the Contractual Positions of the Section concerned Portability

Therefore it is the law itself that establishes that in case of insolvency, the Clearing Member's assets held by CC&G, cannot be taken back by the creditors of participants or creditors of CC&G but these assets shall be used for the management of the default. I.e. These assets can be ported together with positions to another Clearing Member if pertinent to clients and relevant portability agreements are in place or used for the close out of positions that are not ported. The assets remaining after the close out of the positions are paid back to:

- the client if related to individually segregated clients;
- the administrator of the defaulting procedure if pertinent to omnibus accounts' costumers, indicating that they refer to third parties (omnibus accounts' costumers)
- the administrator of the defaulting procedure if pertinent to property of the defaulting member.

On the insolvency of a Clearing member CC&G collects the margins in accordance with the Consolidated Law on Finance (article 79-quinquies and subsequent). More in detail, margins are provided to CC&G under a title transfer collateral arrangement.

What is the nature of Clearing member claim against the CCP in respect of margin attributed to client transactions?

CC&G Rules (see Article B.4.3.2) provide for the following level of segregation in respect of margin posted by a participant and attributable to client transactions:

- on an "omnibus third parties" account, as guarantee of the contractual positions of its clients or of the indirect clearing members registered therein and originating from transactions executed by the direct clearing member on their account;
- on one or more third parties "individual account(s)" - as many accounts as the relevant clients - the contractual positions of each client of the direct clearing member registered therein and originating from transactions executed by the direct clearing member on the account that client.

The first form of segregations is defined as "omnibus client segregation", which enables direct clearing members to distinguish their own assets and positions from those of their clients as a whole. Therefore, the assets and positions of each direct clearing member can be identified at any time and are segregated from those held for the account of the clients, as a whole, of the same direct clearing member.

The second form of segregation is defined as "individual client segregation", which enables a more complex segregation among positions and assets pertaining to different entities, allowing direct clearing members to distinguish the assets and positions of each client from those of other clients. This form of segregation can be defined "proper segregation" because it attains a separation at an individual level and makes it possible to identify at any time the assets and positions of each client.

In accordance with article 39 (9) of EMIR, each of the two forms of segregation must comply with the following requirements: (i) the assets and positions are recorded on separate accounts; (ii) the netting of positions recorded on different accounts is prevented; (iii) the assets covering the positions recorded in an account are not exposed to losses connected to positions recorded in another account.



The segregation serves therefore the purpose of identifying without delay the owners of assets and positions allowing, thereby, to ensure the insulation of the positions registered on one segregated account from the others.

Since the two forms of segregation must achieve the effects outlined in (i) to (iii) above, any differences in the level of protection afforded by each form of segregation emerge when considering their effects in an insolvency scenario.

The aforesaid forms of segregation aims to ensuring that the accounts structure of CC&G complies with the requirements of the EMIR Regulation.

Based on the foregoing, under an operational standpoint, the requirement to distinguish assets and positions in accounts with a CCP can be deemed to be complied through the keeping of “records” by the CCP which are compliant with the requirements (i.e., a different level of detail) provided under article 39. Therefore, the “accounts” that CC&G opens to hold the cash and securities are different from records that CC&G must offer to its clearing members, in compliance with article 39 of EMIR Regulation, with a view to enabling them to distinguish their own assets and positions from the assets and positions of their clients (as a whole) or from those of individual clients.

The records kept by CCC&G permit to have in place the various form of segregation provided by EMIR with the different level of protection attached thereto.

As anticipated, even if the various forms of segregation offered by CC&G satisfy the requirements set out in article 39 (9) of EMIR, the implications of the different levels of segregation and therefore the varying degree of protection attaching to each of them can be appreciated when considering the different effects that would arise in the case of an insolvency of CC&G.

In particular, without prejudice to the fact that the assets and position of each direct clearing member can be immediately identified - being registered on the record concerning that clearing member -, the level of protection attaching to the different forms of segregation of the assets and positions of the clients (of the direct clearing members) varies depending on whether those assets are registered together with the assets of other clients in an omnibus account (a “third party omnibus” account, in the terminology of the CC&G’s Rules) or in an account specifically maintained for a single client (defined in the CC&G’s Rules as a “third party segregated” account).

In an insolvency scenario, the liquidator would be in a position to immediately and exactly identify the assets and positions registered on a “third party segregated” account because that account only contains assets and positions of a single client. In a different fashion, owing to the fact that “third party omnibus” accounts contain (by definition) the assets and positions of a variety of clients, the identification of the assets and positions of a specific client would require additional activities. Under a legal standpoint, this distinction results in the client having: (a) in the first case (i.e., proper segregation) a right of restitution of the assets and positions registered on the account of the client; and (b) in the second case, only a pro-rata credit right on the assets and positions shown on the omnibus account.

Without prejudice to the foregoing, the direct clearing member is entitled to require, as agent of the clients that have opted for the omnibus segregation, the transfer of the assets and positions



registered on the “third party segregated” account. In turn, each client will be entitled to receive from the direct clearing member the assets and positions belonging to any such client because the direct clearing member (in a different fashion from CC&G and, therefore, from the liquidator) is in a position to identify - based on its own records - the assets of individual clients within the omnibus account (“third party segregated”).

Finally payments/deliveries made by clearing member to fulfil margins requirements cannot be subject to executive or precautionary actions on the part of the creditors of the single participants also in the case of the opening of insolvency procedures according to art. 79-quinquies and subsequent of Consolidated law on finance.

What protections (if any) apply in respect of margin attributable to client transactions; i.e. how will such entitlement be treated/dealt with under your rules, or applicable regulatory or statutory rules?

Please distinguish between margin payments/deliveries made to Direct Members prior to the date of insolvency and payments/deliveries made on or after the date of insolvency.

CC&G’s Rules clearly indicate that all sums and financial instruments deposited by clearing members as guarantee of their obligations are title transferred to CC&G pursuant and for the effect of the Legislative Decree 21 May 2004 no. 170 and its rights on such assets in the management of a default.

Is it likely that Direct Members’ entitlement will be prevented, reduced or delayed as part of an insolvency process or pursuant to your rules?

As established by Article 79 – quinquies and subsequent of the Italian Consolidated Financial Law and Emir, the collateral acquired by CC&G in compliance with the requirements of EMIR cannot be subject to executive or precautionary actions on the part of the creditors of the single participants or of the subject which manages the central counterparty, also in the case of the opening of insolvency procedures.

Does the CCP have the ability, right or obligation to transfer trades from Direct Members to another solvent member of the CCP (who will assume Direct Members’s rights and obligations in respect of those trades) keeping such trades on foot after transfer?

Yes, in the event of default of a Clearing Member, as indicated in Article B.6.2.1 of the Rules, CC&G:

- shall transfer to the Designated Clearing Member the Contractual Positions and collateral recorded in the “segregated client” accounts for which portability documentation has been transmitted to CC&G;
- shall transfer to the Designated Clearing Member the Contractual Positions and collateral recorded in the “client omnibus” accounts, for which portability documentation has been transmitted to CC&G;
- shall request to the Clients that they transmit the portability documentation, for the “segregated client” accounts, other than those indicated in the above letter a), within 5 CC&G open days.



Moreover, in the event of default of a Clearing Member, Article B.6.2.3 paragraph 3, of the Rules provides that:

- the assets held in the “omnibus client” and “segregated client” accounts in the “client account” shall not be used to close the “house” account and any existing sub-accounts;
- the assets held in the “house account” shall be used, where they occur, for the closure of the Contractual Positions registered in the “omnibus client” and “segregated client” accounts in the “client” account and any existing sub-accounts;
- the assets deposited in the “omnibus client” account for which documentation for portability to another clearing member was not transmitted, shall be used to cover the other “omnibus client” accounts for which the same documentation was not transmitted.

How does CC&G provide details on the process and frequency of stressing the General Default fund stress, and how often clearing member’s contributions are evaluated / changed (if different from the periodicity of the stress test)?

Stress test is performed on a daily basis. The contribution Quota to the Default Fund of each Member is calculated on a monthly basis or, if necessary, more frequently. The date of calculation is communicated time-by-time to Participants, whose accounts are usually debited and credited the day following the calculation.

For more information on the calculation of Contribution Quota to the Default Fund please refer to CC&G’s website at the following link: <http://www.lseg.com/areas-expertise/post-trade-services/ccp-services/ccg/risk-management>

Are there rules in respect of CCP default?

In the event that a CCP enters resolution and has exhausted its financial resources under its rules, the Consolidated Law on Finance entrusts the resolution authority to exercise all the powers needed to ensure service continuity and an orderly wind down.

CC&G rules have been modified to introduce a further own resources commitment (in addition to the required skin in the game) as well as capped liabilities of non defaulting Members to ensure ex ante clarity in addressing recovery scenario.

Moreover, from October 2007 CC&G became part of the LSEG which is a diversified international exchange Group listed on the UK Main Market in 2001.

Please describe whether cash collateral, posted by clearing members, is ring fenced from the CCPs balance sheet?

Assets of CC&G are completely segregated from assets and positions of CMs. Such segregation is assured by separate registration in CC&G administration, segregated accounts with custodians and in the settlement systems and Target2.



7. BUSINESS CONTINUITY AND DISASTER RECOVERY

How is structured CC&G Business Continuity Management (BCM) organisation?

CC&G's organizational and information technology structures are subject to verification by the Authorities, pursuant to the Regulations of the Governor of the Bank of Italy of 24 January 2002. CC&G is an ancillary system of the European payment system Target 2. Guarantee services and margins calls of CC&G are classified "very critical" by Bank of Italy and European Central Bank. In view of the importance of the activities it performs, CC&G has been invited to participate in the Contingency Working Group coordinated by the Bank of Italy where guidelines and policies are established for the management of contingency risk at a national level. Among the members of this WG are lead Italian banks, Consob, SIA, MT, Borsa Italiana, the Italian Banking Association.

Has CC&G a BCM programme office in place providing governance/BCM methodology?

CC&G uses a specific tool to manage Business Continuity activities. All the BIA, operatives plan, and risks assessment are stored into a SQL database. The tool provides reports, graphs, and test minutes.

Has CC&G a Crisis Management Team (CMT) established?

The Crisis Team consists of BCM, CEO and business units managers. CMT process is exercised at least twice a year.

Has CC&G a recovery plans for each department?

The key resources can operate from the secondary recovery site located at 10 km from the primary one, where all the critical processes can be performed as usual. There is a plan that involves each department.

Does CC&G recovery plans cover systems, processes and people?

The production systems are 'real time' synchronized via Global Mirror technologies (ancillary and payment), and The High Availability software (clearing) ensure maximum back-up of all production data at both operating locations. In the event of a disaster, CC&G staff can operate from the disaster recovery operating site. Each manager selects the business resources to appoint to manage the emergency. Both application development and systems management staff can work on a mobile basis with suitable security and encryption procedures for technical, application, and "production support" interventions. For this purpose, the staff work on a 24/7 basis, receiving automatic reports when central systems detect a level of severity exceeding a set threshold.

What is the CC&G recovery site capacity compared to your normal production site?



Primary site = 60 - Secondary site = 20 (ICT team gives support via laptop or remotely).
Recovery site can operate up to 4 weeks with secondary backup site throughput 100% -
Disaster recovery site 100%

How quickly could CC&G return to 100% of normal throughput if CC&G were forced to work from your recovery site for an extended period?

The throughput is not affected when the system works from the recovery site even for long period

What is the distance between CC&G prime (production) site and recovery site?

CC&G system architecture is based on an 'any to any' connection among four sites relying on a high speed network, connected with two different carriers. Operative site (A) is in Rome, where business is daily performed. The secondary site (B) is located around 10 km from the primary (A); the secondary site hosts desks for continuity purposes. Another IT datacentre (C) is in Milan, more than 500 km far from (B). Moreover, CC&G staff relies on a dedicated area inside Borsa Italiana offices in Milan (D); the Client Service team operates from Borsa Italiana premises, the resources are periodically trained to perform critical activities in case of disaster in both Rome sites. Furthermore CC&G can operate from an alternative location in Milan.

Is CC&G recovery data centre Hot Standby – fully synchronized and available on-line. Usually processing production volumes shared with Prime; Warm Standby – As above but with the requirement to failover to the recovery site; Cold Standby – Where data would need to be loaded before failover could take place?

Warm Standby: user's workstations need to route their access point. MQ channels must be switched. Network routes could be flushed.

What is CC&G Recovery Time Objective (RTO) – time between point of failure and recovery?

CC&G is complying with EMIR regulation in terms of RTO

If separate from the production site, what is the distance between your prime and back-up data centres?

The distance between datacentres is more than 500 km

How frequently do CC&G exercise recovery plans (BCP)?

At least twice a year. Recovery arrangements for applications/systems is done at least once a year

Has CC&G a BCM awareness programme?



Each business area appointed key people that at least once a year review the BIA and contingency plans. After each periodic test, documentation is produced and possible issues are discussed in order to increase efficiency. A member of the technical division works in the secondary operating site (B) at least one day a month to test the equipment functionality and the connections status. A check of the installations is also possible, at any time, from the headquarters through network software control and video monitors



8. Measures to prevent cyber attack

Has CC&G measures to prevent the introductions of unauthorized programs such as computer viruses? Has CC&G systemic plans to quickly discover and eliminate these programs in the event of penetration?

CC&G has a centralized antivirus server to protect servers. Moreover, core business runs on IBM platform so the risk of virus and intrusions is very low.

Has CC&G a network points where viruses can be identified (e.g. inbound email, browser based scanning, server scanning, desktop scanning) ?

Exchange server is managed by LSEG and emails are filtered by MessageLab. Internet access is limited via specific appliances.

Has CC&G a backup and recovery procedures in place for a cyber attack event like a computer virus/worm?

All the Clearing procedures runs on IBM Power System I/OS, the risk of virus affection is very low on such systems. The desktops and client applications are delivered remotely via Citrix. A further contingency measure is available on all desktops, all of them are equipped also with operating system that can be activated in case of any problem with the primary operative system.



This document contains text, data, graphics, photographs, illustrations, artwork, names, logos, trade marks, service marks and information (“Information”) connected with CC&G S.p.A. (“CC&G” or “The Company”). CC&G attempts to ensure Information is accurate, however Information is provided “AS IS” and on an “AS AVAILABLE” basis and may not be accurate or up to date. Information in this document/etc. may or may not have been prepared by CC&G but is made available without responsibility on the part of CC&G. The Company does not guarantee the accuracy, timeliness, completeness, performance or fitness for a particular purpose of the presentation or any of the Information. No responsibility is accepted by or on behalf of CC&G for any errors, omissions, or inaccurate Information in this document.

No action should be taken or omitted to be taken in reliance upon Information in this document. We accept no liability for the results of any action taken on the basis of the Information.

The Company promotes and offers the post-trading services in an equitable, transparent and non-discriminatory manner and on the basis of criteria and procedure aimed at assuring interoperability, security and equal treatment among market infrastructures, to all subjects who so request and are qualified in accordance with national and community legislation, applicable rules and decisions of the competent Authorities.