

European Securities and Markets Authority
103 Rue de Grenelle
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France

Dear sirs,

This paper provides the response of the LCH.Clearnet Group ("LCH.Clearnet") to ESMA's Discussion Paper 2012/95 on Draft Technical Standards for the Regulation on OTC Derivatives, CCPs and Trade Repositories.

LCH.Clearnet is the world's leading clearing house group, serving major international exchanges and platforms, as well as a range of OTC markets. It clears a broad range of asset classes including: securities, exchange traded derivatives, commodities, energy, freight, interest rate swaps, credit default swaps and bonds and repos; and works closely with market participants and exchanges to identify and develop clearing services for new asset classes.

LCH.Clearnet, established in 1888, has unrivalled experience in clearing and particularly in the clearing of OTC derivatives, making it uniquely qualified to contribute to the regulatory process led by ESMA. Below we introduce LCH.Clearnet's OTC derivatives services before replying to ESMA's questions.

LCH.Clearnet's SwapClear service

LCH.Clearnet's SwapClear is the only truly global clearing service for interest rate swaps and currently clears more than 50% of the IR swap market, measured by notional principal. The over one million trades in SwapClear have an aggregate notional principal amount of over USD 283 trillion, with a further USD 110 trillion of cleared transactions removed through multilateral trade compression.

Launched in 1999, SwapClear initially cleared plain vanilla IR swaps in four major currencies. Today, it clears swaps in 17 currencies: USD, EUR, and GBP out to 50 years, AUD, CAD, CHF, SEK and JPY out to 30 years and the remaining nine currencies out to 10 years. The SwapClear service also clears overnight index swaps out to two years in USD, EUR, GBP, and CHF. Over the last 10 years, we have worked closely with market participants to build SwapClear into the leading OTC clearing service providing a range of benefits to the market.



LCH.Clearnet successfully closed out the Lehman Brothers International Europe IR swap portfolio that comprised USD 9 trillion of notional in 5 currencies out to 30 years maturity; this is testament to LCH.Clearnet's deep expertise, provenance and risk management practices in clearing OTC derivatives markets in both normal and default environments. More recently, SwapClear has implemented end-user client clearing in both Europe and the U.S..

LCH.Clearnet's CDSClear service

LCH.Clearnet's Eurozone CDS clearing offering was launched in response to regulator and market demand in order to offer greater choice to the market. LCH.Clearnet defined its model keeping in line with market practices, which have been standardised through the successive ISDA Small and Big Bang protocols.

Existing key providers which have been incorporated into the process are: the DTCC Matching Platform, DTCC's Trade Information Warehouse, Markit as the product and price provider, and ISDA for the contract characteristics and procedures. The business model provides added value to future participants through full STP multilateral clearing, guarantee and anonymity (including novation at T+1).

The offering encompasses the core requirements as determined by key industry and policy groups, including ISDA, CESR, the ECB and the European Commission. LCH.Clearnet provides participants with a backloading facility in order to upload portfolios of existing CDS contracts into clearing at the business start.

LCH.Clearnet's Enclear service

The Enclear service provides an independent clearing service for the registration of OTC Forward Freight Agreements (FFAs) as well as OTC commodity swaps in Coal, Iron Ore and Fertiliser. All of these swaps are cash settled on a monthly basis. Globally-based chartering companies, ship owners, producers, and trading companies are increasingly managing their risk through cleared products. Approved Brokers have open and equal access to the service and can register their OTC brokered trades with LCH.Clearnet through a clearing member.

LCH.Clearnet's ForexClear Service

ForexClear provides clearing for FX Non-Deliverable Forwards (NDFs) and was designed in close collaboration with our members. The service has launched with clearing between direct clearing members, whilst actively consulting with clients to deliver a full clearing service to other current and prospective clearing members, and their global clients in due course.

NDFs are cash settled products, actively traded in a range of high growth economy currencies. From launch the service clears NDFs in the following currencies – Brazilian Real, Chilean Peso, Chinese Yuan, Indian Rupee, Korean Won and Russian Ruble, all against the United States Dollar. Further currencies are being added to the service with the aim to provide 95% market coverage.

Our response to ESMA's Discussion Paper

LCH.Clearnet has been a major contributor to the regulatory dialogue relating to clearing and OTC derivatives over many years and is pleased to offer its comments. LCH.Clearnet's CCPs LCH.Clearnet Ltd and LCH.Clearnet SA are also members of EACH, the European Association of CCP clearing houses, and have contributed to its response.

We strongly support ESMA's goals in establishing European standards for safe and efficient clearing of all asset classes. We believe it is vital that CCPs across Europe and globally observe standards that are high and that support the continuing development of financial markets. We also support the work of the European Commission and ESMA in other fora such as CPSS-IOSCO in seeking global regulatory agreements in this and other areas.

We are therefore very pleased to make our contribution laid out below. In doing so however we would like to draw attention to the following areas of concern:

- a) We urge ESMA to allow sufficient time for the OTC derivatives industry to perform adequate analysis on indirect client requirements (i.e. to clients of clients of clearing members), so as to ensure that clearing services deliver their intended benefits to this tier in the OTC clearing hierarchy (Q3);
- b) We believe ESMA should consider phased implementations of the clearing obligations, by product type, type of participant, or both (Q8);
- c) We believe the record-keeping requirements as already defined pursuant to MiFID should be sufficient for CCPs (Q30);
- d) We urge greater consideration of both practicalities and international requirements regarding business continuity (Q33);
- e) Relating to the complex matter of margin levels, we believe strongly that a confidence level of 99.7% should be the general requirement, despite the figure of 99% already agreed in the Level 1 text, and global convergence on this level should be pursued strenuously (Q34);
- f) An emphasis on committed liquidity lines will increase costs while not necessarily improve funding concerns (and our experience is that the evolving regulatory environment/capital treatment effectively discourages banks from offering committed facilities); ESMA should also consider other sources of liquidity with equally a high assurance of availability (Q39);
- g) A CCP's "skin in the game" should be proportionate to the CCP's capital and not to its margin and default fund (Q42);
- h) We would highlight that the overall risk on collateral relates to both the quality and the applicable haircut (Q44) and in addition ESMA should evaluate the impact on the overall quality of the available collateral pool when including stress events in haircuts (Q47); and
- i) We support the rules on Treasury investments; however duration limits and whether or not a CCP uses derivatives should not be prescribed by ESMA (Q51 and Q53).

OTC Derivatives

Clearing Obligation (Article 3)

Q1: In your views, how should ESMA specify contracts that are considered to have a direct, substantial and foreseeable effect within the EU?

These would be contracts based on an underlying EU security, entity, index, currency or interest rate, where aggregate transaction volumes have attained a defined materiality threshold. Thresholds should be determined by consultation with industry users and clearing providers. Consideration could also be given to products which have a material impact on EU institutions and economies. However these will vary over time and any such determination must be under regular review.

However this provision which raises the same concerns which many have expressed over the basis of, for example, US extra-territorial application of US rules to non-US entities. We refer you to the IOSCO's recently-issued report on Requirements for Mandatory Clearing¹, and, in particular, Recommendation 15, which urges authorities to *"closely co-operate to identify overlaps, conflicts and gaps between regimes, with respect to cross-border application of the clearing obligation"* and Recommendation 16, which urges supervisory authorities to *"give due consideration to allowing the use of third-country CCPs to meet mandatory clearing obligations"*.

Q2: In your views, how should ESMA specify cases where it is necessary or appropriate to prevent the evasion of any provision of EMIR for contracts entered into between counterparties located in a third country?

Without clarity on how such an obligation would be enforced it is hard to provide comprehensive answers to these questions. The nature of the G20 commitment is key here: is it expected that other G20 members will neither a) take into consideration the effect within *other* jurisdictions of contracts entered into in *their* jurisdictions, nor b) require clearing at CCPs that respect CPSS-IOSCO Principles? Provisions could be based on pre-defined thresholds agreed with fellow G20 members. We would welcome information on discussions of these and related matters that have doubtless taken place in international fora such as the OTC Derivatives Regulators' Forum.

Types of indirect clearing arrangements

Q3: In your views, what should be the characteristics of these indirect contractual arrangements?

We assume that the reference to these indirect arrangements means those that enable counterparties to clear OTC derivatives by becoming (at least) a client of a client of a clearing member – i.e., (to use the language of EMIR), by having a contractual relationship with an

¹ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD374.pdf>

undertaking (the “client” as defined in EMIR) that itself has a contractual relationship with a clearing member. Such chains of contractual relationships may extend indefinitely. We see the nature of the clearing arrangements between “clients” and “clients of clients” to be private matters between them (and potentially the clearing member), while a CCP’s obligations should generally be limited to its clearing members.

Furthermore, much development in the industry is focused on streamlining CCP – clearing member – client processing and thus any mandatory requirement to extend the reach of CCP obligations beyond this last relationship may impose a material implementation burden – with respect to both legal and operational matters.

CCPs clearing OTC derivatives face a number of challenges specific to the relevant products. In many cases, these services have only recently been extended beyond the direct member community. In developing services for these wider audiences, CCPs and their members have committed time and resources to understanding clients’ requirements and resolving the great many complications that arise. We urge ESMA to allow sufficient time for the OTC derivatives industry to perform a similar analysis on indirect client requirements, so as to ensure that clearing services deliver their intended benefits to this additional tier in the OTC clearing hierarchy.

Specifically, we would highlight the following areas which require detailed consideration:

- a) We recommend that indirect clearing providers take on an equivalent set of services, responsibilities and obligations towards their clients as clearing members take on in respect of their clients. The means by which regulators, CCPs and clearing members can ensure the ongoing provision of these protections by indirect clearing providers needs careful consideration;
- b) We have encountered complications when seeking to ensure that a member operating in a foreign jurisdiction (to that of the CCP) can deliver enforceable protections to clients clearing OTC products into that CCP. The presence of a fourth party, the indirect clearing provider, only serves to complicate further this interplay between jurisdictions;
- c) A full specification of the degree of legal and/or operational segregation required for and available to these indirect clients can only successfully follow a full and unambiguous specification of what must be available to direct clients. The nature and success of portability arrangements depend heavily on these specifications;
- d) According to the nature of the contractual relationships between all parties, and the segregation and portability requirements, it will be necessary to consider the default management processes and protections that best support them;
- e) We would urge ESMA to co-ordinate closely with all major global regulators responsible for setting regulatory capital requirements for cleared OTC derivatives so as to ensure as integrated a framework as possible in which CCPs, clearing members, clients and indirect clients can operate; and
- f) The commercial objectives of participants must also be accommodated where possible, especially where new requirements are set to disrupt existing relationship hierarchies.

Clearing obligation procedure (Article 4)

Notification from the competent authority to ESMA

Q4: What are your views on the required information? Do you have specific recommendations of specific information useful for any of the criteria? Would you recommend considering other information?

In general we agree that it should be feasible to provide this information, which should be known or made available to competent authorities. However, we would advise ESMA to allow the competent authorities to submit data tailored to the specific characteristics of the market in question. For example, in the case of products that do not trade on organised venues, statistics such as “depth of orders” may not be pertinent or available. Data on liquidity is likely to be an inappropriate measure for many cleared *credit* instruments as liquidity is transferred into the “on the run” index and associated single name constituents each time the index is rebased. The new index series would have to be included but will not have any associated price history.

Broadly, we recommend consideration of two sets of factors: (i) those factors necessary for the relevant class of OTC derivatives to be suitable for clearing; and (ii) those factors that would make that class a materially greater systemic risk if not cleared.

It may be useful to consider the data proposed above relative to LCH.Clearnet’s current data requirements supporting an evaluation of extensions to product eligibility at its SwapClear OTC interest rate derivative clearing service. Although the data available are typically expressed as notional amounts, in which units the contracts are denominated, it is necessary to understand the underlying value at risk in trading the instruments. In the case of the interest rate contracts cleared at SwapClear, this is often closely correlated with the contractual maturity. We consider the following factors:

- a) Outstanding notional amount, by contract maturity and denomination currency;
- b) Number of participants with open positions (NB this and other data should be available from repositories), by contract maturity and denomination currency;
- c) Turnover notional amount, by contract maturity and denomination currency;
- d) Notional amount executable without causing the price to move unfavourably, by contract maturity;
- e) Number and type of potential direct clearing members that would be part of the mutualised default fund and default management process. Upon default of a member, these participants will support the CCP in hedging, auctioning, and absorbing the defaulter’s portfolio, and the CCP must be able to rely on a minimum number with minimum characteristics;
- f) Product messaging components and structure. It is essential that unambiguous commercial terms of individual IR swap contracts can be produced, transmitted, received and consumed by interested parties by electronic means with sufficient speed and accuracy to enable the rapid exchange of IR swap contract and portfolio

data. The definitions created and maintained under the auspices of ISDA, and industry initiatives such as FpML, are important in this respect;

- g) The capacity and performance of processing systems and platforms that will handle the proposed activity;
- h) The breadth and availability of reliable reference price data on a continuous basis for the OTC derivatives class in question;
- i) The availability and integrity of historical reference price data;
- j) The presence of stable and robust consensus valuation methodologies to convert current reference price data into individual contract values as part of regular intra-day revaluation cycles; and
- k) The availability of methodologies which quantify potential future adverse valuation changes over an assumed neutralisation and disposal horizon.

In the case of credit derivatives the outstanding amount would be by (a) index series and maturity and (b) index constituents. A general point for all derivatives entering clearing for the first time is the extent of operational standardisation and STP between participants in order to facilitate submission for clearing.

All of these factors are considered in both 'normal' and 'stressed' market conditions. LCH.Clearnet surveys all existing and potential clearing members on these factors ahead of prospective launch and on a periodic basis once live. Data from these surveys are filtered, consolidated and anonymised to allow participants and supervisors to develop and maintain their opinions of the clearing suitability of specific classes.

Twice a year, LCH.Clearnet performs a "firedrill" for its SwapClear service which tests default management procedures and readiness and involves all active members. Among other things, this presents an opportunity to further benchmark market liquidity and behaviour and for models and assumptions to be recalibrated based on practitioner input.

In response to the specific suggestions of required data, we make the following observations:

- a) The proposed requirement in 15(e) for evidence of the impact of the clearing obligation on availability to market participants of pricing information appears difficult to fulfil;
- b) The proposed requirement in 16(b) for information on whether other CCPs already clear the same class of OTC derivatives may be more appropriate for the competent authority to supply, lest competing commercial organisations be forced to venture opinions about their competitors' capabilities;
- c) The proposed requirement in 17(b) & (c) might best be limited to historical trends, to the extent that data is available, as distinct from any requirement to supply projections of future volumes;
- d) The proposed requirement in 17(d) to provide depth of orders including the average number of orders and of requests for quotes this data will not be available in markets which trade by non-electronic means;

- e) The proposed requirement in 17(f) to provide information on measures of liquidity under stressed market conditions is difficult to supply with any certainty.

Q5: For a reasonable assessment by ESMA on the basis of the information provided in the notification, what period of time should historical data cover?

We do not believe ESMA should require that historical data should cover any prescribed period. Evidence of a lengthy history of past volumes in a particular product is often a useful indicator of whether a product is suitable for clearing. However, volumes can grow and decline sharply in response to exogenous events, and the absence of historical data over a specific period is ultimately not a reliable guide in isolation as to whether a product could or should be cleared.

In the case of CDS indices, as index rolls exist, liquidity typically shifts to the most current series of a particular family of indices. The rules should thus be crafted to allow the effect of index “rolls” to be included.

Both the regulators & the CCP should be able to examine trading volumes on (e.g.) a weekly basis as data is published by the repositories.

Q6: What are your views on the review process following a negative assessment?

We think it is important to balance the ability of ESMA to respond quickly to changes in market conditions in a class of OTC derivatives with its ability to manage an unconstrained re-application process. With this in mind, we would suggest that re-application following a negative assessment can only be considered after a period of 6 months beyond the announcement of a negative assessment.

Criteria to be assessed by ESMA under the clearing obligation procedure

Q7: What are your views regarding the specifications for assessing standardisation, volume and liquidity, and availability of pricing information?

We refer ESMA to the detail provided in our answer to Q4. The specifications should be directed at enshrining the principle that positions in the class of OTC derivatives in question should be manageable by the CCP and its non-defaulting participants upon the default of one or more participants. We would augment our comments in response to Q4 as follows:

Individual OTC derivative contracts within a specific product class typically occupy a position on a spectrum. At one end of the spectrum is business that is unequivocally generic, and at the other is business that is heavily tailored for an individual user. ESMA will face unenviable implementation challenges in making hard delineations between products which are close relatives along this spectrum but which will come to fall either side of the mandate.

Standardisation in a bilateral environment may be adequately addressed via the work of trade associations in allowing efficient & unambiguous execution and communication of individual

transaction terms and conditions governed under sufficiently robust framework agreements. The ability to translate these arrangements into a cleared product equivalent is therefore paramount.

Volume, liquidity and the availability of pricing information are all integral parts of the assessments that are presented to CCP Risk committees. Reservations may be sufficient to cause outright rejection by an individual CCP's risk governance, but if not, may be adequately addressed via scope restrictions or via risk management tools such concentration multipliers, i.e. requirements for additional collateral.

In making mandatory clearing determinations, it is also important for ESMA to recognise that contracts executed as "on-the-run", and therefore reasonably liquid, business may well evolve over time to become "off-the-run". Where this growth in the population of apparently illiquid contracts introduces risks which are sufficiently well-correlated with prevailing "on-the-run" instruments to be manageable following a default, there is no reason to exempt or exclude such instruments from a clearing mandate, and to do so might cause an unwelcome oscillation for an individual contract between being subject to the clearing mandate and falling outside.

As liquidity fluctuates in OTC derivative products, CCPs must constantly monitor and respond to changes in the factors listed in response to Q4; and must simultaneously monitor and risk-manage the positions of each individual client and clearing member. The goal of this monitoring is to ensure there is no gradual or sudden build up of a position that would prove challenging to close out in a default within liquidity and margining assumptions, and stress testing models. In our case LCH.Clearnet tests liquidity assumptions not only from the outset but regularly as participants and market liquidity change.

[Public register available on ESMA website](#)

Q8: What are your views, regarding the details to be included in ESMA register of classes of derivatives subject to the clearing obligation?

We agree that criteria in 24 a) to f) and i) above should be appropriate to cover potential OTC 'look-alikes' in relation to instruments traded in regulated markets. We have provided highly detailed responses with respect to impending clearing obligations in other jurisdictions, and will be happy to work with ESMA at a greater level of detail at the appropriate time.

In general, we would draw the following points to ESMA's attention:

- a) Phasing by product type. Preparations for submission of individual product types within broader derivatives classes will require independent and specific pieces of work to be performed by market participants and infrastructures. With this in mind, it is likely to be appropriate to phase the obligation to clear by product type. For example, it may be appropriate to mandate the clearing of EUR products of a certain class ahead of other currencies. This phasing should be communicated to the market with as much notice as is possible. There are a number of variables relevant to any determination of phasing.

- b) Phasing by participant type. It may well be appropriate to phase the introduction of the clearing obligation by counterparty type, given the different volumes, profiles and risks posed by different types of users.
- c) It will be important to strike the correct balance between (i) the ability to identify without ambiguity those transactions subject to a clearing obligation; and (ii) the creation of incentives and opportunities to avoid the clearing obligation.

Q9: Do you consider that the data above sufficiently identify a class of derivatives subject to the clearing obligation and the CCPs authorised or recognised to clear the classes of derivatives subject to the clearing obligation?

Since no list can be exhaustive given the inherent flexibility of OTC Derivative products, ESMA needs to allow for all materially price-forming data to be required. We suggest ESMA adds a further clause “24(j) Any other characteristic required to accurately value the contract”.

Non-financial counterparties (Article 5/7)

Q10: In your view, does the above definition appropriately capture the derivative contracts that are objectively measurable as reducing risk directly related to the commercial or treasury financing activity?

[We do not answer this question]

Clearing Threshold

Q11: In your views, do the above considerations allow an appropriate setting of the clearing threshold or should other criteria be considered? In particular, do you agree that the broad definition of the activity directly reducing commercial risks or treasury financing activity balances a clearing threshold set at a low level?

Although the contracts in question are likely to be denominated in terms of their notional amount, we recommend that ESMA consider allowing measures of value at risk, which may only be indirectly connected to notional amount, to be relevant alternative measures when setting a clearing threshold. The dangers of using notional amounts as an indication of risk, particularly in the case of interest rate derivatives, are becoming well known since the Basel Committee’s proposals to use a method based on notional amounts as the basis for determining capital requirements for exposures to CCPs. We believe this to be especially relevant given ESMA’s proposal to use a threshold across asset classes. As an example, even within interest rate derivatives, the value sensitivity of a 50yr EUR swap is almost thirty times that for 1yr EUR swap *per unit of notional*.

Each asset class will have its own measure of this value at risk. The present value change induced by a one basis point change in the underlying interest rate curve is one standard measure for interest rate derivatives.

A further measure, which might serve to unify potentially disparate units from different asset classes could be “hypothetical initial margin requirement”, since this is a true risk-based measure which, were thresholds to be breached within a cleared environment, would lead to risk-mitigating sanctions. We do however see practical difficulties in imposing such a measure.

However, we recognise that a significant drawback of these approaches is the relative opacity of “value-at-risk” and certainly the fact that it is neither a contractual feature nor a constant figure.

Risk mitigation for non-CCP cleared contracts (Article 6/8)

[We do not answer this section]

II CCP Requirements

Access to a venue of execution (Article 8a)

Q23: What are your views on the notion of liquidity fragmentation?

Fragmentation is a pejorative term: by definition, a fragmented market relates to a more coherent alternative. To address this subject with less charged language, we need to consider market participants wishing to manage or take on risk through the exchange of financial products, and the legitimate grounds on which they might expect prices in these products to differ. To do so, we recommend that ESMA considers markets in terms of the frictional costs that are associated with trading in them.

Consider an integrated market, in which the integration in question relates to embedded pre- and post-trade processing components over which a market user has no choice of service provider. This may be less efficient than a set of markets (and prices) which allow a user to unbundle the otherwise embedded providers and their costs, and to trade at differentiated prices which reflect alternative providers of bundled services. We encourage ESMA to create an RTS framework in which the emergence of differentiated prices (where prices were previously undifferentiated) is not prevented. A market price might become differentiated in response to the expression by market users of preferences for previously inaccessible processing and risk management freedoms.

There are many efficient markets, of which the market in foreign exchange is a prime example, in which liquidity is under many definitions fragmented but which bear this fragmentation lightly. We emphasise that the Level 1 text does not indicate that liquidity fragmentation per se is a bad thing but only if it threatens “the smooth and orderly functioning of markets”.

Recognition of a CCP (Article 23)

Organisational Requirements (Article 24)

Q24: What are your views on the possible requirements that CCP governance arrangements should specify? In particular, what is your view on the need to clearly name a chief risk officer, a chief technology officer and a chief compliance officer?

Q25: Are potential conflicts of interests inherent to the organisation of CCPs appropriately addressed?

We believe these proposals are appropriate. However in addition we recommend that each CCP should maintain a Conflicts of Interest Policy on which the chief Compliance officer should report to the Board.

Q26: Do the reporting lines – as required – appropriately complement the organisation of the CCP so as to promote its sound and prudent management?

LCH.Clearnet fully supports the maintenance of an independent function which promotes sound and prudent risk management. LCH.Clearnet operates an internal Risk Committee which is chaired by the Chief Risk Officer. Any policy changes or proposals to clear new products which have novel risk features are reported to the external Risk Committee (which has member participation) and approved by the Board. LCH.Clearnet in this way creates a reporting line between the risk management function and the Board.

Q27: Do the criteria to be applied in the CCP remuneration policy promote sound and prudent risk management? Which additional criteria should be applied, in particular for risk managers, senior management and board members?

We agree that these criteria could serve to promote sound and prudent risk management. In our case staff engaged in risk management, compliance and internal audit:

- a) are compensated on their individual performance;
- b) the assessment of their performance is based on a rating of their competencies and the extent to which their objectives have been achieved;
- c) their objectives include helping the business lines to reduce risk and to strengthen the overall robustness of the CCP.

The LCH.Clearnet Group Board has established a Remuneration Committee which approves the remuneration policy and reviews management's compensation annually. As this consists of non-executive directors we do not see the need for an additional independent audit. CCPs could however for example provide a specific report on the remuneration proposals for staff in these areas to the Committee in order for it to determine that the correct principles are being respected.

Q28: What are your views on the possible organisational requirements described above? What are the potential costs involved for implementing such requirements?

In relation to outsourcing we agree in particular that "When outsourcing its information technology system or parts of it to another entity or to a third party service provider, the CCP should ensure that this entity or service provider meets the same standards the CCP would need to meet when using in-house systems".

We welcome that 75 f. allows for disclosure to be limited should it place the CCP at a competitive disadvantage, and suggest that a similar accommodation should be allowed under 75 g. In general, we do not believe it is appropriate to be required to disclose to clients – even if limited to the EMIR definition of clients – beyond what is disclosed publicly. In most cases communication with and disclosure to clients should be the responsibility of clearing members.

Q29: Should a principle of full disclosure to the public of all information necessary to be able to understand whether and how the CCP meets its legal obligations be included in the RTS? If yes, which should be the exceptions of such disclosure requirements? Has the information CCP should disclose to clearing members been appropriately identified? Should clients, when known by the CCP, receive the same level of information?

It is not clear what is contemplated here, though it appears to be the information listed under 75 f. Exceptions must be granted in the case of commercially sensitive information. Again it should be the responsibility of clearing members to disclose to clients: for our part we would consider entering into confidentiality agreements with members to facilitate this.

Record keeping (Article 27)

Q30: What are your views on the possible records CCPs might be required to maintain?

We are, of course, fully in favour of reusing EU standards where possible. As you will know, CESR helpfully produced a list of minimum records for article 51(3) of the MiFID Implementing Directive².

To avoid confusion for the industry we would suggest that the transaction, position and organisation record standards which you have helpfully outlined in paragraphs 78-80 be integrated with the minimum record list for MiFID.

Though it was clarified at the hearing that you see the political intent of EMIR to be different from MiFID's, we can see no reason why the existing standards cannot form the core of what is acceptable for Europe. For example, you will note that the list of minimum records already addresses issues of client management (para 78), reporting (para 79) and complaint handling (para 80). Though the business of a CCP is different from that of a MiFID-scope financial institution, we firmly believe that at the end of the day, a complaint is a complaint and the records for how it is managed should be managed in a similar way.

For example, the CFTC Swap data record keeping and reporting requirements 17 CFR part 45³ state:

"The Commission does not believe that it should further define or reduce the records required to be kept. The Commission's existing recordkeeping regulations in the futures context call for maintenance of 'full and complete records.'"

They go on to clarify that in their experience with recordkeeping requirements that they have found market participants are able to retain such records and that they **do not believe it is appropriate to delineate the meaning of "all pertinent data and memoranda"**.

² http://www.esma.europa.eu/system/files/06_552c.pdf

³ <http://www.cftc.gov/ucm/groups/public/@lrfederalregister/documents/file/2011-33199a.pdf>

We fully support the findings of the CFTC and believe that the detailed technical standards in this regard are unnecessary and the benefit of defining and implementing them is outweighed by the absence of clear evidence that they are required.

We can see other challenges within Europe for the current proposal as well. The recent proposal for a Regulation on EU Central Securities Depositories⁴ indicates that records should be kept for 5 years as opposed to EMIR's 10. Perhaps even more importantly, we believe the data privacy issues raised by the European Data Protection Supervisor (EDPS) regarding MiFID and MAD record keeping standards⁵ should give ESMA cause for consideration of the broader policy aims of EMIR record keeping. Though the political will was to implement a 10 year requirement, the EDPS has very clearly challenged the appropriateness of longer retention periods which can contain personal data.

For the avoidance of doubt, there will likely be much CCP data that can be considered personal in the same way as a MiFID scope firm or a CSD would have personal data. Therefore, we would advise that the EDPS warning that the **5 year MiFID record retention period be considered a maximum** as opposed to the minimum should be paid particular heed.

However, should ESMA proceed in defining these standards, it would be most helpful were it, as part of its work program, able to make a statement about how global counterparties should interpret the fact that EU standards will be gold plating those in other jurisdictions. Clearly, as we would be in a situation where it would be impossible to comply with the different regimes, firms and non-financial counterparties will rightfully be confused about what they are required to store and retrieve for global transactions.

However standards are defined, it is imperative that the ICT infrastructure providers that CCPs rely on become part of the standards-setting discussion so that they can deliver solutions which are "fit for purpose" and can be delivered on time.

Q31: What are your view on the modality for maintaining and making available the above records? How does the modality of maintaining and making available the records impact the costs of record keeping?

Whilst modality is a factor in the cost of keeping the records (i.e., storage is expensive), it is by no means the largest cost. The requirement for "comprehensive and accurate reconstruction" of position and transaction information could require "near-time" retrieval of disparate transactional and unstructured data sources based on named attributes.

This could mean extensive system changes to allow the information to be correctly indexed, searched, maintained, retrieved and destroyed. Whether the information is stored in paper or electronic form is a key consideration. However, the definition of the regulatory "use case" that helps Europe align on the objective of an inquiry, the speed with which the objective needs to be met and what "good looks like" is of higher order importance. We would much rather have a

⁴ http://ec.europa.eu/internal_market/financial-markets/docs/COM_2012_73_en.pdf

⁵ <http://www.edps.europa.eu/EDPSWEB/edps/cache/off/Consultation/OpinionsC/OC2012>

discussion of what it means to “retrieve a complaint” and level-set that understanding of how many business days that can take than specify the form in which complaint information needs to be stored.

We found the CFTC helpful in their 17 CFR part 45 guidance⁶ where they indicate:

“...counterparties may keep records in either electronic or paper form, so long as they are retrievable, and information in them is reportable, as required ...”

Acquiring, deploying, testing and maintaining new record keeping systems is not an insignificant or cheap task. Depending on the size and complexity of the project it can take years to complete and cost millions of Euro over the lifetime of the system.

Good use cases will help to mitigate the need for unnecessary work required to re-architect the systems.

Business continuity (Article 32)

Q32: What are your views on the possible requirements for the business continuity and disaster recovery plan and in particular on the requirements for the secondary site? Would it be appropriate to mandate the establishment of a third processing site, at least when the conditions described above apply? What are the potential costs and time necessary for the establishment of a third processing site and for immediate access to a secondary business site?

The ability of CCPs to cope with the limits of technology and new operational risk from EMIR implementation needs to be considered in adopting appropriate timescales for the phasing in of these requirements.

In an ideal world, a CCP’s physical architecture would be completely distributed and, like an intelligent network, be capable of routing financial transactions to the safest point for processing at any time. Unfortunately, the industry is, and will continue to be, constrained by real technology limits.

Recent technical advances have of late made it more feasible to move data centres farther apart and thereby reduce some risks. The industry currently enjoys a distance of less than 80 km as the upper limit for synchronous processing (i.e., the ability of processing across the network to happen at the same time). If data centres are moved farther apart than this, more risk is introduced. As an example of how quickly technology is evolving, our current “dark fibre” limit is a bit less than three times the physical limit of 10 years ago.

However, even with this advance we are very a long way away from being able to designate a CCP’s architecture as completely “safe”. In the event of a premeditated attack, it would be

⁶ <http://www.cftc.gov/ucm/groups/public/@lrfederalregister/documents/file/2011-33199a.pdf>

optimistic to assume that the attackers would be unable to overcome the obstacles posed by a mere hour's drive between data centres.

Paragraph 88 suggests that a “third processing site” should be considered if the risk profiles of the primary and secondary sites does not provide sufficient confidence that the CCP's business continuity objectives will be met “in all scenarios”. As highlighted in the previous paragraph, it is quite possible to construct a scenario for any major financial centre in Europe that envisages a blast zone or targeted attack (similar to the four September 11 attacks in Washington and New York – 328 km apart) that could fail to meet the gold standard which ESMA is suggesting.

As highlighted in the US post September 11 interagency paper⁷, the recovery of clearing and settlement activities within target times requires an “appropriate level of geographic diversity between primary and back-up sites for back-office operations and data centers.”

The agencies go on to explicitly state that they “**do not believe it is necessary or appropriate to prescribe specific mileage requirements for geographically dispersed back-up sites. It is important for firms to retain** flexibility in considering various approaches to establishing back-up arrangements that could be effective given a firm's particular risk profile.”

We agree with this principle and urge ESMA to adopt it. As evidenced by the fact that in the last 9 years very little additional insight has been added to the debate on geographic data centre risk mitigation, we feel that there is little that can be usefully added by further work on technical standards in this space.

We do, of course, support ESMA's desire for technical standards for BCP. However, as CCPs buy technology and services from hundreds of suppliers, we must also involve the ICT infrastructure supply chain. Without them, we will not define appropriate or achievable standards. The process of getting to these standards will be quite complicated and involve many different types of hardware, network, communications, and database and security products. We estimate that developing the appropriate standards will require extensive consultation with precious technical experts and could well take over a year.

Furthermore, without these technical standards fully defined and understood by the full supply chain we fear that the risk profile will actually be raised. By asking CCPs to implement to undefined standards, important management bandwidth will be consumed by issues which will not be soluble until the supply chain has time to develop new products and services that are “fit for purpose.”

Acquiring, or building new, data centres, and adding them to a CCP's infrastructure is not an insignificant or low cost task. Depending on the size and complexity of the project it can take up to many months to complete and cost millions of euros over the lifetime of the data centre's operation.

⁷ <http://www.sec.gov/news/studies/34-47638.htm>

Finally, it is important to keep in mind that the BCP requirement is being revisited in a period of unprecedented change for CCPs. Transparency and control are core policy objectives for EMIR and both of these are very large drivers of new information exchange and volume requirements. The pressure on technology and operations to deliver these changes on time will be immense and may impact CCPs' ability to deliver other critical changes.

Q33: Is the 2 hours maximum recovery time for critical functions a proportionate requirement? What are the potential costs associated with that requirement?

As highlighted in the abovementioned interagency paper, CCPs “must recover and resume their **critical functions in order for other market participants to process pending transactions** and complete large-value payments”. We agree with the principle of focusing efforts to recover quickly in the areas that are of the highest value and largest impact.

Consequently, we were surprised by the focus of the ESMA guidance in paragraph 88 in which it has stated that the maximum recovery time for the CCP's critical functions should be 2 hours. As stated by the interagency paper:

“Recovery-time objectives provide concrete goals to plan for and test against. **They should not be regarded as hard and fast deadlines that must be met in every emergency situation.** Indeed, the agencies recognize that various external factors surrounding a disruption such as time of day, scope of disruption, and status of critical infrastructure — particularly telecommunications — can affect actual recovery times. **Furthermore, recovery time objectives might not be achievable following a late-day disruption** without an extension of normal business hours.”

Whilst we agree in principle with ESMA's proposal for a time limit, we believe these time limits should be considered goals, rather than hard and fast rules. Furthermore, the time limits should be agreed with a common understanding of what a critical function is, in the context of the business needs.

For example, some markets do not operate in “real time”, rather they operate batch cycles which run once or perhaps twice a day. In the event of an afternoon disruption event, it might be possible simply to defer the batch run to the following day. In a similar manner, the requirement to run intraday risk margining for a batch market may be considered not to be business critical. Certainly, this would not be the case in the fast-moving equities markets. We do, of course, support ESMA's desire for technical standards in this space as it can only help to provide certainty to the European marketplace if all providers treat BCP to an equal standard.

However, as noted in our response to question 32, CCPs buy technology and services from hundreds of ICT infrastructure suppliers. Without them, we will not define appropriate or achievable standards.

Margins (Article 39)

Q34: Are the criteria outlined above appropriate to ensure that the adequate percentage above 99 per cent is applied in CCP's margin models? Should a criteria based approach be complemented by an approach based on fixed percentages? If so, which percentages should be mandated and for which instruments?

Some of the arguments outlined by ESMA are non-risk arguments and are arguably disputable: an obligatory clearing obligation will by definition lead to lower trading activity regardless of the level of confidence interval used and a better capital treatment should not be the reason for applying a specific confidence interval. A short observation period can also be overcome by using proxy data of comparable products and translate these (in a conservative) manner to the new product.

However, LCH.Clearnet supports the arguments relating to portability and procyclicality. If there are shocks in the market at the time of a member default this could result in an erosion of margin held by the CCP making it more difficult to transfer client positions. The usage of a higher confidence interval would create an additional buffer for price change and therefore increase the possibility of enabling client transfers. Additionally, a higher confidence interval (and at the same time a considerable data history) will result in higher margin requirements in less volatile times, avoiding excessive trading at low costs during less volatile periods.

Other elements worthy of further discussion are the effects on mutualisation between participants in the system and the related systemic risks:

- a) The level of confidence interval is an important element in defining the level of default fund vs. margin coverage and the definition of a system as “defaulter pays” (higher margins) or “survivor pays” (higher default fund). We note the preference for “defaulter pays” mechanisms cited in the ESAs’ consultation on **“Risk mitigation techniques for OTC derivatives not cleared by a CCP”⁸**.
- b) In a “survivor pays” system there is more reliance on the default fund and therefore liabilities of clearing members. Potentially this may have systemic risk concerns as the default losses are covered by the clearing member base. However, we recognise that if a system is “defaulter pays” only or it may not have sufficient incentives for risk management by clearing members through the Risk Committee and result in a less efficient coverage of risk.
- c) A right balance should be struck between the liabilities of clearing members & potential systemic risk concerns on the one hand and risk management incentives and efficiency on the other hand.

A 99.7% percent confidence generally strikes the right balance as a considerable range of market movements is covered in the margin requirements, while the relevant default fund would be required for tail risks. LCH.Clearnet uses this general confidence interval across the markets, this provides clarity to market participants and would recommend ESMA to adopt the same

⁸ http://www.esma.europa.eu/system/files/jc_dp_2012_01.pdf, para. 23

approach as to assure a level playing field. We recognise that the Level 1 text, in defining 99% as the minimum, follows prevailing (CPSS-IOSCO, ESCB-CESR) standards. However we view this as being the bare minimum below which margin levels must not fall rather than being the best practice, and that CCPs globally should observe a higher standard. The 99.7% level has been proven to be robust in the management of recent defaults.

ESMA uses several arguments for a criteria-based approach, which appear to indicate that markets with a higher risk should be covered by a higher confidence interval. Additional risk measures may be necessary for these markets but these do not necessarily relate to the applied confidence interval, such as:

- a) Where pricing is particularly complex there should be greater obligations on members to provide pricing data
- b) Specific risk characteristics (e.g. jump to default risk and wrong way risk) can be addressed by specific margin measures which address these additional risks
- c) In certain cases it may be appropriate to delay novation of contracts until collateral is received
- d) If positions held are of a significant size relating to the market, or the financial strength of the member, this should be addressed by additional “concentration risk” margin.

We argue that for all types of markets both a high confidence interval and strict stress testing resulting in a conservative coverage of the default fund are necessary.

Q35: Taking into account both the avoidance of procyclicality effects and the need to ensure a balance distribution of the financial resources at the CCP disposal, what it is in your view the preferred option for the calculation of the lookback period.

The desire to avoid the adverse effects of procyclicality and requirements of regulators for more stable and predictable margin requirements are understandable.

It is evident that the avoidance of procyclicality has some link with a longer look back period. A short look back period could provide incentives for higher trading behaviour in less volatile periods which may be unsustainable in high volatility periods. However, the confidence interval should be viewed alongside the look back period. A 99% confidence interval in combination with a long history of data including less volatile period actually excludes the most important market movements.

The reactive nature of the margin requirements set in this way is also important, as the aim of margin is to cover potential *future* price movements. The best forecast for future price movements are the recent history and/or the current volatility. If a margin requirement is not reactive to current market movements, it could lead to more significant draws on the Default fund and related losses for non-defaulting members.

Procyclicality should be considered in a wider context, namely the identification of relevant future events which may increase the underlying risk of a product and related coverage, and the definition of a transparent and appropriate framework, methodology or distribution which makes it possible for clearing members to forecast the margin requirements of the CCP under different sets of circumstance and events.

It is not clear that the solutions described by ESMA will bring at the same time more stable and predictable margin levels while also allowing the CCP to adequately react to current market conditions. More study would be needed by the industry and discussions need to be held with regulators as to find an appropriate solution for this important subject, and LCH.Clearnet is very willing to participate further in such discussions.

Q36: Is in your view the approach described above for the calculation of the liquidation period the appropriate one? Should a table with the exact number of days be included in the technical standards? Should other criteria for determining the liquidation period be considered?

Q37: Is procyclicality duly taken into account in the definition of the margin requirements?

We agree that the elements mentioned under a) and b) are important elements for the definition of a holding period. However, it should be remembered that a holding period is a function of:

- the default management approach of a CCP
- the market or product cleared, and
- the specific position to be liquidated.

A minimum liquidation period based upon an average across all CCPs would either lead to (if too low) an insufficient liquidation time for complex positions resulting in uncovered losses or (if too high) insufficient incentives to make default management processes more efficient and reduce the liquidation period.

In view of the above we would therefore not be in favour of a specific table with minimum liquidation periods to be applied but a specific holding period should be set by each CCP for each market. Management of the risk of potential extended holding periods for particular positions can best be covered by concentration risk margins over and above regular initial margins.

It is understood that regulators intend to compare the risk models employed by CCPs. A minimum liquidation period for all CCPs is not however necessary for this purpose as CCPs could perform simulations and testing based upon several liquidation period assumptions, which testing could be harmonised across the industry.

We refer to earlier comments regarding procyclicality.

With reference to portfolio margining, this can be applied across multiple products, however the following points must be taken into consideration:

- a) The instruments included in the same portfolio margin algorithm should be covered by the same default fund
- b) The same risk factors are applicable (i.e. where offsets are assumed, relevant instruments will change value due to the same reasons)
- c) If specific correlation factors are used, correlation should be statistically proven and based upon economic fundamentals, and
- d) The default management process should be aligned, so as to liquidate the covered instruments as one portfolio.

We have a general point covering questions 34 to 37: while the confidence interval, look back period and liquidation period are together the most important parameters to include in a CCP's margin model, a CCP should always be able to set margins in a more prudent manner via an additional qualitative element. Such discretion must be available to the CCP and be applied where the model produces margin levels inconsistent with expectations of future price movements, influenced for example by heightening economic or political crises.

Default fund (Article 40)

Q38: What is your view of the elements to be included in the framework for the definition of extreme but plausible market conditions?

We do not agree that the following elements are suitable to be included in a stress testing framework:

- e. Both macroeconomic (systemic) and specific risk factors and the corresponding trigger events
- f. Market conditions which include at least the identification of key risk drivers influencing the development and forecast of an event
- g. Identification of the degrees of severity and frequency of occurrence of the identified market conditions

To include these elements would require CCPs to forecast the occurrence and timing of stress events. The purpose of a default fund is to have at all times sufficient financial resources for possible stress event independent of current market conditions. The forecast of specific stress events is therefore not useful and moreover no reliable tools to perform such forecasts are available. A CCP should look at plausibility of stress testing scenarios and not at the probability of such scenarios.

We agree with the implication of the word "including" in paragraph 104 as signifying that stress testing should evaluate all main relevant risk factors which may influence the relevant market risk of the product and not be limited to this list provided in this article.

Concentration risk results from the behaviour of an individual member and related additional close out costs of a large, complex portfolio. It seems therefore more appropriate to take these into account through the collection of additional margin from the clearing member holding the concentrated position rather than including this in a stress testing calculation.

We also propose that the definition of coverage in EMIR (“the default of the clearing member to which it has the largest exposures or of the second and third largest clearing members” – assumed to mean the clearing members to which it has the second and third largest exposures) is taken to include exposures of affiliated clearing members, as suggested in the recent CPSS-IOSCO consultation on Principles for Financial Market Infrastructures.

Liquidity risk controls (Article 41a)

Q39: Do you believe that the elements outlined above would rightly outline the framework for managing CCPs’ liquidity risk?

LCH.Clearnet believes that a strong liquidity framework should be in place for CCPs, as to meet their obligations under stress events. Establishing and maintaining an appropriate liquidity funding plan, which outlines the actions and procedures to activate liquid resources, is essential for the appropriate functioning of a CCP and markets during an event of default. In line with draft CPSS-IOSCO Principles for FMIs, a CCP should first use liquid resources and financing through the market place and not rely on central bank funding, as this is not available to all CCPs and to assume so would result in a non level playing field.

An essential element in the consultation is the definition of committed lines and available liquid resources. For the sake of clarity we assume that the reverse repo facilities mentioned in paragraph 112 are not to be classified as a ‘credit line’ requiring committed arrangements as described later in the paragraph. Our belief is that banks would be very unwilling to provide such commitments (of any kind) when a CCP and the market is experiencing distress and, even if legally committed, there is no guarantee of performance on a timely basis. Moreover a high and unreasonable cost is attached to these “committed” credit lines, and our experience is that the evolving regulatory environment/capital treatment effectively discourages banks from offering committed facilities in any case. Other sources of liquidity could be available which have at least an equally high assurance of availability, namely:

- a) Return of daily investments – A CCP should hold a considerable part of its investments in secured overnight investments on an overnight basis (or short maturity) and receive back the available funds as to finance liquidity needs
- b) Reverse repo facilities (of collateral obtained from a defaulting member or deposited via title transfer) – repo markets have remained functioning during the past defaults and stress events
- c) Credit lines with ICSDs have proved to be a very useful and reliable source of funding during a default event.

We recommend that ESMA explicitly considers these elements in the proposed rules.

We propose that it should be for each CCP to determine “low credit risk” subject to the approval of its supervisors.

Q40: Do you consider that the liquid financial resources have been rightly identified? Should ESMA consider other type of assets, such as time deposits or money market funds? If so, please provide evidences of their liquidity and minimum market and credit risk.

It should be clear that time deposits should not be included; and money market funds should be added provided they are accessible on the same day and are not subject to redemption caps.

Q41: Should the CCP maintain a minimum amount of liquid assets in cash? If so, how this minimum should be calculated?

We do not believe this question is expressed correctly – the aim cannot be to deposit a minimum amount of cash in unsecured current account (which would transgress investment standards under EMIR and CPSS-IOSCO, and common sense) – the question should ask whether there should be a minimum amount of securely invested but available overnight (next morning) liquidity. The answer to this is that there should not be fixed amount or percentage, but an amount determined by each CCP by regular monitoring as the amount required to meet daily operational requirements will vary – and liquidity needs arising from a member default requirements should be covered by additional liquidity facilities.

Default waterfall (Article 42)

Q42: What is your preferred option for the determination of the quantum of dedicated own resources of CCPs in the default waterfall? What is the appropriate percentage for the chosen option? Should in option a, the margins or the default fund have a different weight, if so how? Should different criteria or a combination of the above criteria be considered?

The main purpose of a CCP putting capital in the waterfall is to provide an incentive to the CCP for appropriate risk management by setting conservative margin requirements and in this way protecting the default fund and losses for members, as well as its own capital. When defining the capital at risk it should be remembered that an important consideration for a CCP is reputational risk. The quality of default management performed and the potential usage of the default fund would have an impact on the reputation of a CCP and therefore its ability to continue its business or capture new business. The capital in the waterfall would only be an additional incentive as to assure appropriate attention to risk management.

In general LCH.Clearnet supports the inclusion of capital to the waterfall but the amount of this capital should be constrained.

Of the two options defined to determine the amount of CCP capital to include in the waterfall, LCH.Clearnet does not support option a) on the grounds that:

- Both margin and default fund are used as the basis, as the contribution of the CCP is used after the defaulting member's margin and before the default fund contributions of other members. Normally higher margin coverage should tend to lead to less exposure to the CCP (and its members), while under this mechanism it could actually result in a much higher capital contribution by the CCP. The default fund is designed to cover the default of any (two) members) while margin covers only the default of the member itself, so a decrease in margin does not necessarily result in the same increase in the default fund. The best way under this option for a CCP to reduce its capital at risk would be to request the lowest amount of initial margin possible; and
- As this capital must be separate from capital required to cover other business risks, it would result in volatile capital requirements, running the risk of capital deficiencies and attendant issues.

We support option (b) on the grounds that:

- CCP "skin in the game" would be less volatile, and to subject to change caused by movements in market activity and volatility (something beyond the control of the CCP); and
- CCP capital will, under the current EBA consultation, be set according to prevailing capital adequacy standards. When using option b) the capital at stake would be linked and integrated with this overall capital framework.

Q43: What should be the appropriate frequency of calculation and adaptation of the skin in the game?

The amount should be recalibrated on any change in the CCP's capital or annually following release of audited accounts whichever is the shorter interval.

Collateral requirements (Article 43)

Q44: Do you consider that financial instruments which are highly liquid have been rightly identified? Should ESMA consider other elements in defining highly liquid collateral in respect of cash of financial instruments? Do you consider that the bank guarantees or gold which is highly liquid has been rightly identified? Should ESMA consider other elements in defining highly liquid collateral in respect of bank guarantees or gold?

LCH.Clearnet welcomes the reference in the Discussion Paper to "financial instruments" which implies the inclusion of equities as collateral but notes that the EMIR Level 1 text defines acceptable collateral as having to be "highly liquid with minimal credit and market risk" and does

not limit it to *financial* instruments. We believe that commodities other than gold should also be acceptable collateral provided they fulfil similar relevant conditions to those outlined in paragraph 120. Such commodities include but should not be limited to base metals.

Apart from that, we generally agree with the proposal. However, instead of a list of collateral, it would have been preferable if ESMA had been able to base its proposals more on criteria than specific collateral types, but we accept that this is defined in the Level 1 text.

In addition to the criteria listed, important are:

- the CCP's ability to access the market for each type of collateral accepted (not just that the market be there); and
- The CCP's ability to hold collateral in a secure fashion (i.e. that there be a framework for ensuring appropriate custodians, CSDs, ICSDs etc.).

In addition to the asset having an active outright sale or repurchase agreement market at all times including a diverse group of buyers and sellers (120(2)(iv)), the CCP must have access to such markets and experience of trading.

As noted under Q39, our assumption is that it will be for each CCP to determine "low credit risk" subject to the approval of its supervisors.

While we accept the emphasis on the quality of the collateral, the overall risk of accepting a specific form of collateral also depends on the haircut that is applied. In particular adjustment of haircuts may be a more appropriate response to a decline in quality rather than a precipitate rejection of collateral with the attendant procyclical effects.

In relation to commercial bank guarantees needing to be fully backed by collateral (presumably placed by the clearing member with the issuing bank), it is not clear how this can be enforced by the CCP; and if such collateral should follow the same acceptability criteria as for direct provision to the CCP, there seems little advantage in such an arrangement over direct lodgement by the member with the CCP.

As part of the introduction of CCP clearing to a wider range of instruments, and the development of client clearing, it will be essential for CCPs to adapt the range of accepted collateral – and the ability to do so should depend upon a criteria-based rather than a prescriptive approach. Other types of collateral could be important to improve the possibility of these parties to participate in CCP clearing provided the specified criteria are met.

Q45: In respect of the proposed criteria regarding a CCP not accepting as collateral financial instruments issued by the clearing member seeking to lodge those financial instruments, is it appropriate to accept covered bonds as collateral issued by the clearing member?

A CCP should strictly manage its wrong way risk for collateral. Provided such risks are adequately managed, covered bonds could also be considered as acceptable collateral.

Q46: Do you consider that the proposed criteria regarding the currency of cash, financial instruments or bank guarantees accepted by a CCP have been rightly identified in the context of defining highly liquid collateral? Should ESMA consider other elements in defining the currency of cash, financial instruments or bank guarantees accepted by a CCP as collateral? Please justify your answer.

We would like clarification that, in (ii), “State” does not mean “Member State” as it is vital that CCPs are able to accept collateral denominated in the US Dollar and other global currencies. We also note that criterion (iii) only applies to currencies for which the CCP cannot “demonstrate with a high level of confidence that it is able to manage the risks on the currency” and agree that in those circumstances the amount accepted should be limited.

We also support the practice of CCPs applying an FX haircut to mitigate the risk arising from accepting collateral in a different currency to the exposure.

Q47: Do you consider that the elements outlined above would rightly outline the framework for determining haircuts? Should ESMA consider other elements?

An approach with higher haircuts, taking into account more data history and stressed market event may appear to be sound practice but it is important to note that there is a shortage of high-quality collateral. If CCPs set haircuts that are too high for the highest-quality collateral, it will not be attractive for clearing members to deposit this with a CCP and instead would use this collateral for other purposes. Clearing members will find the cheapest collateral to deliver to the CCP. *It is important to that a CCP receives the highest quality collateral as this actually tends to increase in value in case of stressed market conditions.* An approach should be followed whereby conservative haircuts are applied but still sufficient incentives are created to deliver the best quality collateral to CCPs.

Note re para 128: the level of the haircut does not determine whether collateral can be liquidated without significant market impact in stressed market conditions, but whether they are sufficient to ensure that the CCP can realise sufficient value from the collateral to cover a defaulting member’s liabilities.

Q48: Do you believe that the elements outlined above would rightly outline the framework for assessing the adequacy of its haircuts? Should ESMA consider other elements?

The most important element for setting an adequate haircut is that the methodology and models are relevant for the instruments accepted for collateral. LCH.Clearnet supports the avoidance of procyclicality where possible but one should be careful to not to reduce the reactivity of the risk measures and also consider transparency and predictability of the relevant risk measure, i.e. that the methods and principles are known to the clearing members but that the CCP also has the power to increase haircuts when market conditions so determine.

Q49: Do you consider that the elements outlined above would rightly outline the framework for determining concentration limits? Should ESMA consider other elements?

The main element for determining the need for concentration risk limits is that the normal risk measures applied by the CCP are not sufficient to cover the relevant risk, for example due to a liquidation requirement in excess of the capacity of market liquidity or a decline in credit quality of the issuer. A concentration risk measure like a limit, increased haircut or additional or alternative margin should only be considered if the normal risk measures are not sufficient.

The monitoring of increased exposures as a result of different activities performed by the same clearing member is an essential element of concentration risk management. This does not however imply that all exposures can be definitively quantified or can be simply aggregated. The risks arising from exposures to issuers of financial instruments and bank guarantees are not the same and should not, as ESMA recognises, be exacerbated upon the default of the clearing member depositing the collateral.

In relation to limits to all forms of collateral, we suggest the lower of an absolute value or a proportion of a member's margin liability, to be determined by each CCP and validated by its supervisor.

Q50: Should a CCP require that a minimum percentage of collateral received from a clearing member is provided in the form of cash? If yes, what factors should ESMA take into account in defining that minimum percentage? What would be the potential costs of that requirement?

LCH.Clearnet agrees with the suggestion of a minimum cash balance when this is necessary to maintain sufficient liquidity in the CCP (but see our response to Q41). However no standard minimum cash limit should be set by ESMA as liquidity requirements differs between CCPs depending on their activity and default management processes. The costs are dependent on several factors which cannot be forecasted in advance.

Investment policy (Article 44)

Q51: Do you consider that financial instruments and cash equivalent financial instruments which are highly liquid with minimal market and credit risk have been rightly identified? Should ESMA consider other elements in defining highly liquid financial instruments with minimal market and credit risk? What should be the timeframe for the maximum average duration of debt instrument investments?

We agree with the criteria based approach described. The relative restrictiveness of criteria should differentiate between direct purchase and reverse repo – as assets reversed in via repo agreements can have haircuts/concentrations applied in the same way as margin collateral can. However a distinction should be made between duration and tenor – again, it should be for the CCP's Risk Committee/Board to assess appropriateness, particularly incorporating liquidity requirements and the liquidity of the assets.

As noted in earlier answers above the CCP must be able to determine what is “low risk” and have access to such markets and experience of trading.

CCPs must only invest in very high quality sovereign (or guaranteed) issuers or secured lending arrangements supported by high quality collateral. In addition investments should have a high level of liquidity. Under the condition that treasury investments meet the above requirement there should be no strict limits on the duration of the investment.

Q52: Do you think there should be limits on the amount of cash placed on an unsecured basis?

Yes. The limits for unsecured cash with commercial counterparties should be kept to a strict low limit, based upon the capital of the CCP; as such, a CCP should never invest more than its capital with one banking institution on an unsecured basis.

Q53: Do you consider that CCP should be allowed to invest in derivatives for hedging purposes? If so, under which conditions and limitations.

Derivatives provide valuable risk management capability – however strong governance should be in place as to use, limits, disclosure etc. CCPs should never use derivatives for speculative purposes, however when used only for the purpose of reducing risk such as FX or interest rate risk these can be important to reducing the risk profile of a CCP.

The argument of complexity alone is not sufficient to prevent use of derivatives if this practice can be performed with limited risk for the CCP and by extension the market. The CCP should have appropriate access and trading experience of derivatives markets; and be able to measure and monitor the risk appropriately.

Q54: Do you consider that the proposed criteria regarding the currency of financial instruments in which a CCP invests has been rightly identified in the context of defining highly liquid financial instruments with minimal market and credit risk? Should ESMA consider other elements in defining the currency of highly liquid financial instruments with minimal market and credit risk? Please justify your answer.

We refer you to our answer to Q46 regarding the meaning of “State”, and note that there is no obvious connection between the liquidity of a security and whether its issuer is in the same jurisdiction of the CCP.

Q55: Do you consider that the elements outlined above would rightly outline the framework for determining the highly secured arrangements in respect of which financial instruments lodged by clearing members should be deposited? Should ESMA consider other elements? Please justify your answer.

We agree that this seems an appropriate framework. Again we note that it should be for a CCP and its supervisor to determine what is meant by “low risk”.

Q56: Do you consider that the elements outlined above would rightly outline the appropriate framework for determining concentration limits? Should ESMA consider other elements? Please justify your answer.

As stated in our answer to Q49, the monitoring of increased exposures as a result of different activities performed by the same clearing member is an essential element of concentration risk management. This does not however imply that all exposures can be definitively quantified or can be simply aggregated.

Review of models, stress testing and back testing (Article 46)

Q57: What are your views on the definitions of back and stress testing?

We agree these are appropriate definitions. However, it is important to identify separately the back test itself – the comparison of model outputs to actual value changes – and test statistics derived from the test results, which taken together validate the adequacy of the selected risk measures.

Model Validation

Q58: What are your views on the possible requirements for a CCP’s validation process?

As noted above, back testing should be coupled with analysis of adequate test statistics. Should this test statistic analysis indicate that the risk measure is inadequate, a systematic review of the risk measure and its parameters should be undertaken. This could ultimately result in a review of margin parameters, which would, in turn, have to be back tested again.

Back tests

Q59: What are your views on the possible back testing requirements?

We have the following comments in response to this question:

- a) Market Data: a considerable series of historical data should be considered. If a sufficient length of price history is not available for all contracts then an adequate proxy would be required e.g. a contract similar in nature but with a longer price history.
- b) Test statistics: specific and adequate test statistics derived from the results of the back testing process in order to validate risk measures.
- c) Validation process: a clear process should be in place to test and review risk measures i.e. margin. A combination of the back test itself and interpretation of test statistics will be its foundation.

- d) Frequency: the validation processes for all instruments cleared should be reviewed regularly.

Q60: Would it be appropriate to mandate the disclosure of back testing results and analysis to clients if they request to see such information?

If in paragraph 152 “client” means “clearing member”, we have no objection to member specific disclosure, though are not sure why the suggestion is to restrict analysis to a number of “representative” clearing members, particularly when all might request our analysis.

Q61: Should the time horizons for back tests specified under 144(e) be more granular? If so, what should the minimum time horizon be? Should this be different for different classes of financial instruments?

In order to performed appropriate back testing (especially for products which have fat-tailed price distributions), a relatively long period of pricing data is necessary so as to verify its appropriateness. LCH.Clearnet would recommend that sufficient price data is used to back test new cleared products covering a period or periods having different characteristics (low vs. high volatility and upward trending vs. falling or “crash” markets). If not enough price information is available to make an appropriate judgement, CCPs should use proxy or theoretical data to make up for the shortage of available historical data. For a current product range a short data history can be sufficient as the CCP would have experience with the functioning of the model.

Stress tests:

Q62: What are your views on the possible stress testing requirements?

Concentration risk (and in many cases wrong way risk) is member-specific and should therefore not be considered in the generic stress-testing scenarios. An assessment for each clearing member should be performed and if necessary addressed using additional margin.

Q63: Would it be appropriate to mandate the disclosure of stress testing results and analysis to clients if they request to see such information?

It is appropriate for CCPs to disclose to members only their own stress testing results, and not to members’ clients.

Q64: What are your views on the possible requirements for reverse stress tests? And what impact do you think such requirements would have on industry?

Reverse stress testing can be used to verify the sensitivity of financial resources to severe shocks. However the impact of a technical failure of settlement banks or simultaneous pressures on different markets is very difficult to estimate without any historical precedent. The plausibility and quality of the underlying scenario becomes doubtful and runs the risk of the

testing actually losing its purpose. Instead, infrastructure stresses can be managed through concentration risk management and operational liquidity stress testing.

Testing results & involvement of parties in tests

Q65: Should there be any other parties involved in the definition and review of tests? Please justify your answer and explain the extent to which suggested parties should be involved?

All scenarios and stress tests should be reviewed by the Risk Committee – as this will include member representatives this will ensure member involvement in the definition of the stress tests. However, the CCP will perform these stress tests on a daily basis and should not be required to publish the outcomes of all the stress tests.

Members who are requested to submit additional margins or to reduce their exposures as a result of extreme outputs from stress testing should be made aware of the detail and outcome of the stress tests performed on their own positions.

Testing of default procedures:

Q66: Should the testing of default procedures involve a simulation process?

It is inevitable that the testing of default management processes will require the CCP to make simulations, for example of:

- the identity of the defaulting member and their position; and
- the circumstances surrounding the default (timings and market conditions).

Based upon these simulations, the response of the CCP and the adequacy of the default procedure can be assessed.

When performing a default management test it is also important to specify the scope and purpose. It is not always possible or feasible to perform all planned actions in case of a default (like closing of trading or settlement): in practice a simulation would then be required using for example a test platform.

Frequencies of tests

Q67: Are the frequencies specified above appropriate? If no, please justify your answer.

The requirements for testing include too high a frequency, whereby it appears that more emphasis is put on the ex-ante testing than the procedures and risk management skills of CCPs to proactively manage their risks.

CCPs should be more reactive on potential new risks in case of stressed market condition and prevent risky situations for its clearing members, so it would not be sensible to put more

resources on formal stress testing during these type of market conditions but on active risk management, for example monitoring of market and member positions, and potentially increasing general or specific margin requirements so as to avoid potentially using the default fund.

Information to be publicly disclosed:

Q68: In your view what key information regarding CCP risk management models and assumptions adopted to perform stress tests should be publicly disclosed?

Some details of risk management models including stress-testing are not disclosed as potentially amounting to intellectual property. As noted under Q29 disclosure should be limited to clearing members who should have the responsibility to disclose to clients.

III Trade Repositories

In relation to trade repositories our general position is that the fewer there are the better. Operators of repositories should be independent from dominant providers of trade execution or clearing providers in the same asset class.

Reporting obligation (Article 6/7)

Q69: What is your view on the need to ensure consistency between different transaction reporting mechanisms and the best ways to address it, having in mind any specific items to be reported where particular challenges could be anticipated?

We recommend that to ensure consistency in reporting, parties to a transaction should, where possible, report it once only. This can be achieved by the use of global repositories which are accessed by multiple authorities according to their needs. It will allow market participants to manage the cost of such activity, and will allow minimise the opportunity for double counting and for data integrity.

Q70: Are the possible fields included in the attached table, under Parties to the Contract, sufficient to accurately identify counterparties for the purposes listed above? What other fields or formats could be considered?

We encourage the use of industry standard LEIs to simplify identification of counterparties globally

Beneficiaries

Q71: How should beneficiaries be identified for the purpose of reporting to a TR, notably in the case of long chains of beneficiaries?

Given the complexities identified above in the relationship between the legal counterparty to a trade and its economic beneficiary, and the role taken by clearing members when introducing customer business to a CCP, we recommend that the CCP only have responsibility to report the registered counterparty on a cleared transaction to the TR

Coding

Q72: What are the main challenges and possible solutions associated to counterparty codes? Do you consider that a better identifier than a client code could be used for the purpose of identifying individuals?

[We do not answer this question]

Q73: What taxonomy and codes should be used for identifying derivatives products when reporting to TRs, particularly as regards commodities or other assets for which ISIN cannot be used? In which circumstances should baskets be flagged as such, or should their composition be identified as well and how? Is there any particular aspect to be considered as regards a possible UPI?

LCH.Clearnet currently uses industry standard messaging protocols (e.g. FpML for interest rate derivatives registered into our SwapClear service) to transmit the economic details of transactions being sent for clearing. Where the industry is able to define taxonomies or Unique Product Identifiers (“UPIs”) that can be used to reduce message length and simplify message structure we would support the adoption of these identifiers in order to bring efficiency to our communicate processes. However we would stress that ESMA needs to provide direction to the industry on what a UPI or taxonomy is intended to achieve so that it is clear what its purpose is and how it can best be leveraged into the flow of information within the industry. Without this guidance it is likely that initiatives to develop taxonomies or UPIs may fail to deliver their expected benefits.

Details on the transaction

Trade Identification

Q74: How complex would be for counterparties to agree on a trade ID to be communicated to the TR for bilaterally executed transactions? If such a procedure is unfeasible, what would the best solution be to generate the trade ID?

All the transactions we receive into SwapClear include trade IDs that are unique to the trade source. Additionally we frequently receive trade IDs generated by each counterparty. It should not be difficult for counterparties to agree on a common reference. Moreover, in parallel with CFTC requirements for the creation of a Unique Swap Identifier (“USI”), we would recommend that European regulators seek to adopt equivalent if not identical standards so that the industry has a single global system of trade identifiers.

Pricing and fees

Q75: Would information about fees incorporated into pricing of trades be feasible to extract, in your view?

In our opinion, the items listed appear appropriate.

Risk mitigation and clearing

Q76: What is your view of the granularity level of the information to be requested under these fields and in particular the format as suggested in the attached table?

All of these fields are appropriate and in line with other regulatory regimes.

Specific asset classes

Q77: Are the elements in the attached table appropriate in number and scope for each of these classes? Would there be any additional class-specific elements that should be considered, particularly as regards credit, equity and commodity derivatives? As regards format, comments are welcome on the possible codes listed in the table.

The fields listed are not exhaustive when compared to those that we currently receive today for transactions registering at our SwapClear service. As such they are unlikely to provide a full representation of the trade economics and may not therefore enable a regulator to correctly analyse the exposure that the trade represents. For example, specific details such business day conventions, business centres are not listed but are necessary to correctly model and value a swap transaction. Significant work has been undertaken by the industry to specify all the relevant fields required to 'confirm' a swap transaction for trade repositories. LCH.Clearnet would suggest that this work is used as a baseline for EMIR requirements, with additions/changes being made as appropriate.

Additional points

Data on exposures

Q78: Given that daily mark-to-market valuations are required to be calculated by counterparties under [Article 6/8] of EMIR, how complex would it be to report data on exposures and how could this be made possible, particularly in the case of bilateral trades, and in which implementation timeline? Would the same arguments also apply to the reporting of collateral?

LCH.Clearnet calculates closing prices for each trade as a part of our daily variation margin process. These end of day valuations can be provided to the TR and we are already co-operating with other regimes regarding the provision of this information. The communication of margin data is more complex as it requires the TR to understand the account structure in place at the CCP. In other words, the TR would need to maintain the mapping of the trade to the account at the CCP that the trade is registered under. Effectively this means that the TR would have to replicate each CCP's static data model. For cleared trades, under current SwapClear risk policy, it can be assumed that sufficient margin cover is in place; if not, the CCP would call additional margin and were that not to be received, we could potentially call the counterparty into default.

Reporting by third parties

Q79: Do you agree with this proposed approach? What are in your view the main challenges in third party reporting and the best ways to address them?

We have no objections to this approach.

Application for Registration (Article 52)

Q80: Do you envisage any issues in providing the information/documentation as outlined above? In particular:

Although we do not have strong views on this issue, we ask ESMA to consider that the horizon for which a TR must have sufficient financial resources should reflect the implementation period that the industry would need to switch from one TR to another. Realistically, to design, build and migrate data out of an existing into a new TR is likely to take the industry a period measured in years.

Q81: What is your view on these concerns and the ways proposed to address them? Would there be any other concerns to be addressed under the application for registration and tools that could be used?

[We do not answer this question]

Transparency and data availability (Article 67)

Q82: What level of aggregation should be considered for data being disclosed to the public?

Q83: What should the frequency of public disclosure be (weekly? monthly?); and should it vary depending on the class of derivatives or liquidity impact concerns; if yes, how?

In answer to questions 82 and 83, the key issue is the extent to which public disclosure interacts with the ability to manage risk. There is no doubt that the speed and details with which transaction and counterparty data is made available will alter the appetite of market participants to conduct business. OTC markets typically operate with transaction sizes above those in other markets, and market-makers may become less willing to commit capital to the execution of large orders faced with the prospect of immediate market-wide knowledge of these transactions.

We also recommend that the level of aggregation and frequency should reflect the purpose of public disclosure. Different objectives for disclosure will lead to different responses.

We would also ask for specific consideration of public disclosure requirements immediately following the default of a CCP member. We are concerned that a CCP's default management process could be compromised if too great a degree of transparency is given to the actions of a CCP in a stressed market environment. Public disclosure of a defaulting member's positions may move the market against the CCP, as might premature disclosure of individual trade details within a broader risk neutralisation programme. It is important that the CCP, at a time of default, is able to operate without the risk of its actions being open to market manipulation.