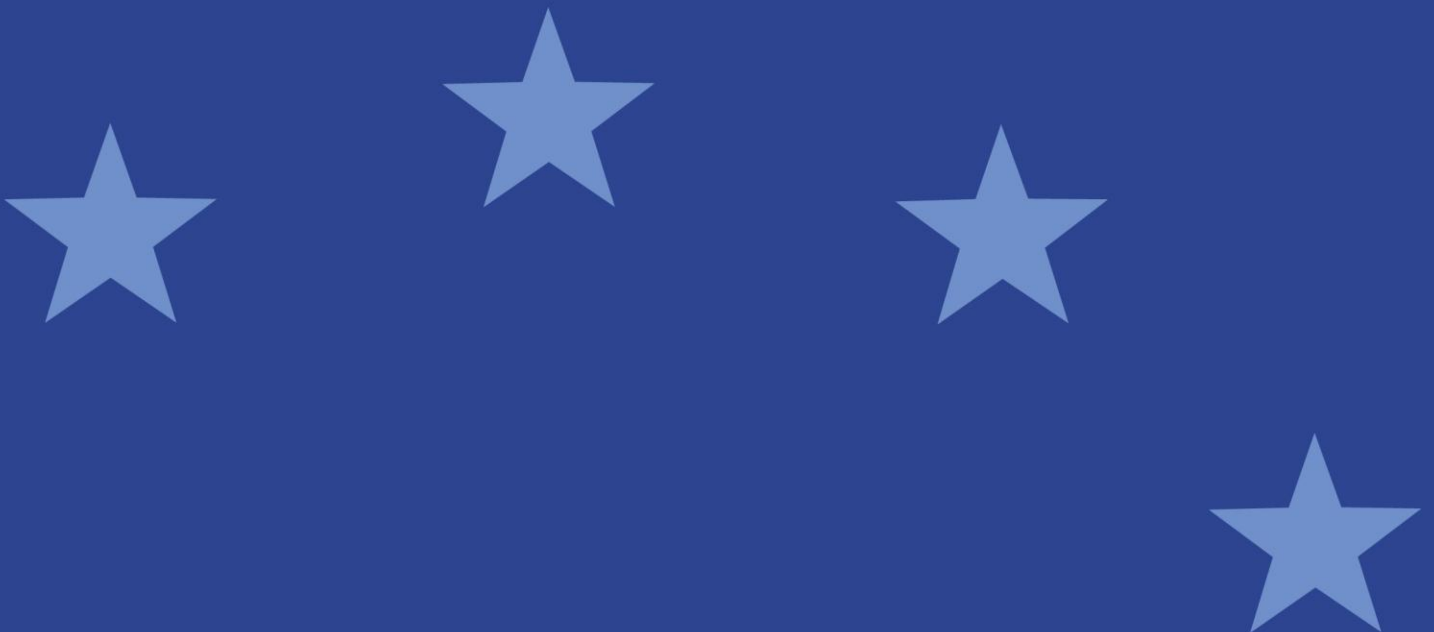
European Securities and Markets Authority

Impact Assesment

Annex VIII of the Final report on draft Regulatory and Implementing Technical Standards on Regulation (EU) 648/2012 on OTC derivatives, central counterparties and trade repositories



Date: 27 September 2012

ESMA/2012/600/Annex VIII

Table of Contents

OTC DERIVATIVES DRAFT RTS 4

INDIRECT CLEARING ARRANGEMENTS 4
DETAILS IN THE NOTIFICATION FROM THE COMPETENT AUTHORITY TO ESMA 5
CRITERIA TO BE ASSESSED BY ESMA 6
DETAILS TO BE INCLUDED IN THE PUBLIC REGISTER 7
RISKS DIRECTLY RELATED TO COMMERCIAL ACTIVITY OR TREASURY FINANCING ACTIVITY 10
CLEARING THESHOLD 11
TIMELY CONFIRMATION 23
PORTFOLIO RECONCILIATION 31
PORTFOLIO COMPRESSION 36
DISPUTE RESOLUTION 39
MARKET CONDITIONS PREVENTING MARKING-TO-MARKET AND CRITERIA FOR MARKING-TO-MODEL 40
ACCESS TO A TRADING VENUE 41

CCP REQUIREMENTS DRAFT RTS AND ITS 42

CCP COLLEGE 42
RECOGNITION OF THIRD COUNTRY CCPs 45
ORGANISATION REQUIREMENTS 47
RECORD KEEPING 53
BUSINESS CONTINUITY 65
MARGINS 68
DEFAULT FUND 88
LIQUIDITY RISK CONTROLS 91
DEFAULT WATERFALL 94
COLLATERAL 98
INVESTMENT POLICY 106
REVIEW OF MODELS STRESS TESTS AND BACK TESTS 116

TRADE REPOSITORIES DRAFT RTS AND ITS 118

DATA TO BE REPORTED TO A TR 118
REGISTRATION OF TRADE REPOSITORIES 148
PUBLIC DISCLOSURE 154

INTRODUCTION

In carrying out a cost benefit analysis on the draft regulatory technical standards, it should be noted that:

- The main policy decisions have already been taken under the primary legislation (EMIR) and the impact of such policy decisions have already been analysed and published by the European Commission;
- ESMA does not have the ability to deviate from its specific mandate set out in the primary legislation;
- ESMA policy choices should be of a pure technical nature and not contain issues of a political nature;
- In most circumstances, ESMA's options are limited to the approach it takes to drafting a particular regulatory technical standard (RTS) or implementing technical standard (ITS).

Against this background and for many of the draft RTS and ITS, ESMA has considered whether it is more appropriate to adopt a criteria-based or a prescriptive approach to draft the technical standards. The approach taken differs depending on the RTS or ITS considered, but generally the approach followed by ESMA recognises that market participants (CCPs in particular) have the tools to manage the risk arising from their activities and to adapt to market changes. So unless the specific mandate assigned to ESMA specifies that a prescriptive approach should be introduced or the specific issues surrounding a particular technical standard require a more prescriptive approach, ESMA has followed a criteria-based approach. The justification for, and analysis of the cost and benefits of this choice are generally common to the different technical standards. For this reason, in the specific sections below, similar reasoning is given as to the choice between a criteria-based versus a prescriptive approach, but depending on the technical standard the outcome is not always the same.

With reference to the monetary value attached to the identified costs and benefits, it should be noted that in the consultation paper (CP), ESMA explicitly asked respondents to provide data to support this cost benefit analysis. Unfortunately, data was provided by just a few respondents but in most cases the data provided did not prove sufficient neither to gather quantitative evidence to judge some of the proposals contained in the CP, nor to perform a cost-benefit analysis of a quantitative nature. Where relevant, ESMA performed its own quantitative impact assessment, or justified some of its policy choices by elements of quantitative nature available to the public, such as academic research papers, or studies elaborated by well-established institutions (BIS, ISDA etc.) In particular, ESMA focused its quantitative analysis on the draft RTS that introduce prescriptive measures rather than a criteria based approach. ESMA has also relied partially on input by a consulting firm when gathering data and conducting some of the analysis below.

OTC DERIVATIVES DRAFT RTS

INDIRECT CLEARING ARRANGEMENTS

(a) What is the best approach to ensure that indirect clients benefits from protection equivalent to those of direct clients?

Specific objective	Ensuring that counterparties subject to the clearing obligation can access a CCP through indirect clearing arrangements benefiting from equivalent protection as a direct clearing arrangement.
Option 1	Indirect clients should have the same rights and the same degree of segregation up to the CCP as direct clients.
How would achieving the objective alleviate/eliminate the problem?	By replicating the CCP – clearing member – client structure one step below.
Option 2	Indirect clients should not have the same rights up to the CCP, but similar rights replicated one step below in the clearing chain, considering the indirect nature of the clearing arrangements.
How would achieving the objective alleviate/eliminate the problem?	Establishing obligations for clearing members and clients supporting indirect clearing arrangements.
Which option is the preferred one? Explain briefly.	Option 2, given the higher costs of option 1 and the fact that the indirect nature of the arrangement should be recognised.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Indirect clients should have the same rights and the same degree of segregation up to the CCP as direct clients.
Benefits	It will ensure the full protection of indirect clients from the default of: 1) the client providing indirect clearing services; 2) the clearing member; 3) other clients of the clearing member; 4) other indirect clients of the same client.
Regulator's costs	The costs for regulators will be similar under the two options. Enforcing such a requirement will not change significantly under the two options.
Compliance costs	The costs for CCPs, clearing members and clients will be much higher if the same structure and rights assigned to clients is replicated to up to the entire chain.
Indirect costs	The costs for indirect clients will be much higher, thus the end objective of indirect clearing arrangements (i.e. facilitating access to CCPs to small clients that the clearing members would not be interested to serve) might not be fulfilled.
Option 2	Indirect clients should not have the same rights up to the CCP, but similar rights replicated one step below in the clearing chain, considering the indi-

	rect nature of the clearing arrangements.
Benefits	It will ensure an equivalent level of protection to indirect clients and similar rights as direct clients, but replicated one step below in the clearing chain.
Regulator's costs	The costs for regulators will be similar under the two options. Enforcing such a requirement will not change significantly under the two options.
Compliance costs	This option would still imply certain costs for clients providing indirect clearing services and for clearing members, but these would be justified by ensuring that the indirect clients benefit from an equivalent level of protection as clients.
Indirect costs	The lower compliance costs will result in a lower indirect cost and overall, a greater benefit to society.

DETAILS IN THE NOTIFICATION FROM THE COMPETENT AUTHORITY TO ESMA

(a) What is the most appropriate way for ESMA to get the information to be included in the notification?

Specific objective	To ensure ESMA gets relevant updated data in order to assess whether a class of derivatives should be subject to the clearing obligation
Option 1	ESMA gets information from the competent authority.
How would achieving the objective alleviate/eliminate the problem?	The competent authority is authorising a CCP to clear a class of OTC derivatives and will obtain information for this purpose.
Option 2	The CCP provides the competent authority with the information and the competent authority provides ESMA with it.
How would achieving the objective alleviate/eliminate the problem?	The competent authority will be able to request information from CCP and complement it with other information. ESMA may complement the information with data it gets for example from TRs.
Which option is the preferred one? Explain briefly.	The second option is preferred as it allows ESMA to get the most relevant, updated and complete information
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	ESMA gets information from the competent authority.
Benefits	The competent authority has already obtained and analysed information when authorising the CCP to clear a class of OTC derivatives.
Disadvantages	The analysis of the competent authority has a different

	objective and scope than ESMA's analysis. Relevant information for ESMA may not have been transmitted by the CCP to the competent authority.
Regulator's costs	Communication means.
Compliance costs	Communication means.
Indirect costs	N/A
Option 2	The CCP provides the competent authority with the information and the competent authority provides ESMA with it.
Benefits	The information provided by the CCP is complemented by information gathered by the competent authority and ESMA.
Disadvantages	The CCP is requested to provide more information to the competent authorities.
Regulator's costs	Communication means.
Compliance costs	Communication means and analysis.
Indirect costs	N/A

CRITERIA TO BE ASSESSED BY ESMA

(a) What is the most appropriate way to assess volume and liquidity?

Specific objective	To ensure volume and liquidity are adequately assessed.
Option 1	To assess volume and liquidity through the number and value of transactions.
How would achieving the objective alleviate/eliminate the problem?	Data on the number of transaction per time period, and the value of those OTC derivatives transactions provide information on the extent to which the contracts are traded, and therefore on their suitability for central clearing.
Option 2	To assess volume and liquidity through the number and value of transactions, the proportionality of the margins and other financial requirements of the CCP to the risks they intend to mitigate, the stability of the market size and depth through time, the expected market dispersion in case of default of a clearing member.
How would achieving the objective alleviate/eliminate the problem?	Given than (a) ESMA's assessment is not on the overall liquidity and (b) CCPs might also be able to clear illiquid products, additional elements are necessary to assess whether liquidity is appropriate to determine a clearing obligation.
Which option is the preferred one? Explain briefly.	The second option is preferred as it takes into consideration a number of factors that are all relevant in the determination of liquidity and volume of a class of OTC derivatives.
Is the policy chosen within the sole responsibility of ESMA? If not, what other	The option is the sole responsibility of ESMA.

body is concerned / needs to be informed or consulted?	

Impacts of the proposed policies:

Option 1	To assess volume and liquidity through the number and value of transactions.
Benefits	The approach is simple to implement.
Disadvantages	It does not give a dynamic view on liquidity and volume of a class of OTC derivatives.
Regulator's costs	N/A
Compliance costs	The number of transactions and the average size of those transactions are basic information that CCPs already gather and in some cases, publish on their website in aggregate form. Compliance costs are minimal.
Indirect costs	N/A
Option 2	To assess volume and liquidity through the number and value of transactions, the proportionality of the margins and other financial requirements of the CCP to the risks they intend to mitigate, the stability of the market size and depth through time, the expected market dispersion in case of default of a clearing member.
Benefits	The approach allows: (a) checking that CCPs will apply margins which are proportionate to the risks they intend to mitigate; (b) assessing the evolution of the liquidity conditions through time; (c) estimating that in the case of a member's default, the CCPs will be able to liquidate the positions of the defaulter without causing major disruptions to the market.
Disadvantages	More data needs to be gathered and analysed.
Regulator's costs	N/A
Compliance costs	Registration of data.
Indirect costs	N/A

DETAILS TO BE INCLUDED IN THE PUBLIC REGISTER

(a) What is the most appropriate way to identify the classes of derivatives in the public register?

Specific objective	To ensure the class of OTC derivatives subject to the clearing obligation is unequivocally identified in the public register.
Option 1	To identify the class of OTC derivatives by reference to the asset-class of derivatives, the type of derivative contract and the underlying.
How would achieving the objective allevi-	The asset-class of OTC derivatives, the type of derivative

ate/eliminate the problem?	contract and the underlying information are key information to identify a class of OTC derivatives.
Option 2	To identify the class of OTC derivatives by reference to the asset-class of OTC derivatives, the type of derivative contract, the underlying, the currencies, the range of maturities, the settlement conditions, the payment frequency and the product identifier.
How would achieving the objective alleviate/eliminate the problem?	The information under Option 2 provides a granular definition of a class of OTC derivatives and therefore a clearer identification.
Which option is the preferred one? Explain briefly.	The second option is preferred as it strikes an appropriate balance between over-specification, which could lead to evasion, and under-specification, which could inadvertently capture products for which the clearing obligation is inappropriate.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To identify the class of OTC derivatives by reference to the asset-class of derivatives, the type of derivative contract and the underlying.
Benefits	The identification is based on simple criteria and is easy to implement.
Disadvantages	The criteria may not be sufficiently granular to distinguish between the classes of OTC derivatives which are subject to the clearing obligation and those which are not. This approach would not support, for example, a situation in which an OTC derivative contract with a 10 year tenor is sufficiently liquid and standardised to be eligible for central clearing, but the same contract with a 30 year tenor is not.
Regulator's costs	Set up of the register.
Compliance costs	N/A
Indirect costs	Market participants might not be able to distinguish between the classes of OTC derivatives which are subject to the clearing obligation and those which are not. This could lead to unintended non-compliance issues.
Option 2	To identify the class of OTC derivatives by reference to the asset-class of OTC derivatives, the type of derivative contract, the underlying, the currencies, the range of maturities, the settlement conditions, the payment frequency and the product identifier.
Benefits	The identification of classes of OTC derivatives is based on

	a high number of information which distinguishes between the classes of OTC derivatives with a higher level of granularity.
Disadvantages	More data needs to be included in the register.
Regulator's costs	Set up of the register. The set-up costs would be higher than with option 1, however the differences would be minimal.
Compliance costs	N/A
Indirect costs	N/A

(b) What is the most appropriate way to identify a CCP in ESMA Register?

Specific objective	To ensure identification of the CCP.
Option 1	To identify the CCP by its name and country of establishment.
How would achieving the objective alleviate/eliminate the problem?	The name and country of establishment will identify the relevant CCPs.
Option 2	To identify the CCP by its identification code, name, country of establishment, and the relevant competent authority.
How would achieving the objective alleviate/eliminate the problem?	The information under option 2 provides a granular identification of a CCP.
Which option is the preferred one? Explain briefly.	The second option is preferred as it takes into consideration unique criteria to identify the CCP.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To identify the CCP by its name and country of establishment.
Benefits	The identification is based on simple criteria which is easy to implement.
Disadvantages	The criteria may not be sufficiently granular to distinguish between the CCP and may not fit the identification criteria used by the market.
Regulator's costs	Set up of the register.
Compliance costs	N/A
Indirect costs	N/A
Option 2	To identify the CCP by its identification code, name, country of establishment, and the relevant competent authority.
Benefits	The use of several criteria including the identifier code allows a clearer identification and may better fit with current market practice.

Disadvantages	More data needs to be included in the register.
Regulator's costs	Set up of the register. The set-up costs would be higher than with option 1, however the differences would be minimal.
Compliance costs	N/A
Indirect costs	N/A

RISKS DIRECTLY RELATED TO COMMERCIAL ACTIVITY OR TREASURY FINANCING ACTIVITY

(a) What is the most appropriate way to specify OTC derivative contracts that reduce risks related to commercial activity or treasury financing activity?

Specific objective	To specify in the most appropriate way the OTC derivative contracts which reduce risks related to commercial activity or treasury financing activity.
Option 1	Set general criteria related to the risk which contracts should meet in order for the OTC derivatives to be considered in the definition.
How would achieving the objective alleviate/eliminate the problem?	Counterparties assess their OTC derivative contracts against general criteria set in the draft RTS to determine whether they reduce risks related to commercial activity or treasury financing activity.
Option 2	Set specific criteria related to the risk which the OTC derivative contracts should cover in order for the derivatives to be considered in the definition.
How would achieving the objective alleviate/eliminate the problem?	Counterparties assess their OTC derivative contracts against specific criteria set in the draft RTS to determine whether they reduce risks related to commercial activity or treasury financing activity.
Which option is the preferred one? Explain briefly.	The second option is preferred as specific criteria allow a more accurate assessment.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Set general criteria related to the risk which contracts should meet in order for the OTC derivatives to be considered in the definition.
Benefits	An approach based on general criteria allows flexibility for counterparties to assess whether the OTC derivative contracts would be considered as reducing risks directly related to the commercial or treasury activity.

Disadvantages	It may give room for different interpretations by counterparties of whether the OTC derivative contracts would be considered as reducing risks directly related to the commercial or treasury financing activity.
Regulator's costs	N/A
Compliance costs	Processing the assessment.
Indirect costs	N/A
Option 2	Set specific criteria related to the risk which the OTC derivative contracts should cover in order for the derivatives to be considered in the definition.
Benefits	An approach based on specific criteria provides a clear basis for counterparties to process the assessment.
Disadvantages	It allows less flexibility for the counterparties in their assessment.
Regulator's costs	N/A
Compliance costs	Processing the assessment.
Indirect costs	N/A

CLEARING THESHOLD

(a) What is the most appropriate measure for setting the value of the clearing thresholds?

(a) 1. Notional value versus market value

Specific objective	Appropriate measure for the denomination of the clearing threshold.
Option 1	To denominate the clearing thresholds in notional value.
How would achieving the objective alleviate/eliminate the problem?	The notional value allows a straightforward measure of the size of OTC derivative contracts.
Option 2	To denominate the clearing threshold in market value.
How would achieving the objective alleviate/eliminate the problem?	The market value allows a measure of the risks resulting from OTC derivatives which is regularly updated.
Which option is the preferred one? Explain briefly.	The first option is preferred as it is simple and not subject to dispute.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To denominate the clearing threshold in notional value
Benefits	Notional amounts are easy to implement and cannot be disputed. This approach also ensures international con-

	sistency.
Disadvantages	It does not reflect the market risks resulting from OTC derivative contracts.
Regulator's costs	N/A
Compliance costs	The development of systems to register the notional value of the OTC derivative contracts. However, it is unlikely that counterparties would need costly system developments to calculate this amount.
Indirect costs	N/A
Option 2	To denominate the clearing thresholds in market value.
Benefits	The market value of the OTC derivative contracts is regularly updated and this figure reflects the market risks of the contracts.
Disadvantages	The market valuation may be disputed and may be more complex to use for some NFCs. FCs and NFCs above the clearing threshold, on the one side, and NFCs below the clearing threshold, on the other side, are not required to update mark-to-market valuations of their contracts at the same frequency.
Regulator's costs	N/A
Compliance costs	The development of systems to register the market values of the OTC derivative contracts.
Indirect costs	N/A

(a) 2. Gross versus net notional values

Specific objective	Appropriate measures for the denomination of the clearing threshold.
Option 1	Set the clearing threshold on a gross basis (sum of all gross notional values) with higher thresholds than option 2.
How would achieving the objective alleviate/eliminate the problem?	Gross notional values reflect the size of OTC derivative portfolios.
Option 2	Set the clearing threshold on a net basis: netting per counterparties and per asset-class. All these netted positions would then be added. The values of the clearing thresholds would be lower than with option 1.
How would achieving the objective alleviate/eliminate the problem?	Net notional values also reflect the size of OTC derivative portfolios but allow the offsetting of trades to a certain extent.
Option 3	Set the clearing threshold on a net basis, across counterparties and across asset-classes. The values of the clearing thresholds would be lower than with option 2.
How would achieving the objective alleviate/eliminate the problem?	This option is in contradiction with the EMIR provision which states that the values of the clearing thresholds should be determined taking into account the systemic rele-

	vance of the sum of the net positions and exposures "per counterparties and per class of OTC derivatives".[1]
Which option is the preferred one? Explain briefly.	Option 1, because it is simple and easy to implement.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Set the clearing threshold on a gross basis (sum of all gross notional values) with higher thresholds than option 2.
Benefits	The approach is simple and easier for NFC to implement. It also facilitates enforceability. It may be a good proxy of the sum of the net figures by counterparty (netting exposure among counterparties would not reflect NFC counterparty credit risk). Although there is not yet evidence to prove it, and no robust data was provided to ESMA, it is probable that for most NFCs, the sum of nets by counterparty and the total gross are not too different. NFCs, as opposed to dealers, tend to have directional positions (different from zero) precisely because they are hedging underlying risks.
Disadvantages	Net exposures are more representative of the actual directional risk carried by firms. A counterparty holding two offsetting trades with the same counterparty would have the two notional amounts added together. There is a higher risk, for a given activity level, of hitting the clearing thresholds.
Regulator's costs	N/A
Compliance costs	Very low explicit compliance costs, since gross notional is a more immediate and available figure and no systems are necessary to conduct the netting by counterparty and aggregation.
Indirect costs	N/A
Option 2	Set the clearing threshold on a net basis: netting per counterparties and per asset-class. All these netted positions would then be added together. The values of the clearing thresholds would be lower than with option 1.
Benefits	This approach better reflects actual directional risk carried by firms.
Disadvantages	This option would require ESMA to calibrate the thresholds,

[1] This option is mentioned only because it was suggested by a significant number of respondents to the CP

	towards lower values, to make them compatible with the ones set under the gross option.
Regulator's costs	N/A
Compliance costs	This is the more complex and expensive than option 1, as it requires developing and maintaining tools to monitor on a regular basis the net OTC derivative positions per counterparties and per asset-class and add them together.
Indirect costs	

(b) Clearing thresholds: should there be a unique clearing threshold across asset-classes, or several clearing thresholds?

Specific objective	To ensure that the clearing thresholds definition adequately reflects the systemic relevance of NFCs.
Option 1	One clearing threshold across all OTC derivatives asset-classes
How would achieving the objective alleviate/eliminate the problem?	The clearing threshold would capture the systemic relevance of NFCs regardless of the allocation of their portfolios of OTC derivatives contracts among asset-classes.
Option 2	One threshold per asset-class i.e.: • OTC credit derivatives • OTC equity derivatives • OTC interest rate derivatives • OTC foreign exchange derivatives • OTC commodity derivatives
How would achieving the objective alleviate/eliminate the problem?	The clearing threshold would capture the systemic relevance of NFCs taking into account the allocation of their portfolios of OTC derivatives contracts among asset-classes. The approach allows the thresholds to be adapted to the specificities of each asset-class.
Which option is the preferred one? Explain briefly.	Option 2, because it reflects the different risk profiles of each asset-class.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	One clearing threshold across all OTC derivatives asset-classes.
Benefits	The approach is simple to implement for NFCs.
Disadvantages	It overlooks the different sizes and systemic significance of players in different asset classes of OTC derivatives, which is not constant across asset classes (i.e. a given position in asset-class A might be, proportionally, less significant that

	an equal position in asset-class B).
Regulator's costs	N/A
Compliance costs	Lower than the alternative option. Requires developing and maintaining tools to monitor on a regular basis the OTC derivative portfolio as a whole.
Indirect costs	N/A
Option 2	One threshold per asset-class i.e.: • OTC credit derivatives • OTC equity derivatives • OTC interest rate derivatives • OTC foreign exchange derivatives • OTC commodity derivatives
Benefits	The approach is more flexible. It allows to reflect the different risk profiles of each asset-class.
Disadvantages	The approach is more complex and costly to implement.
Regulator's costs	N/A
Compliance costs	Higher than option 1. Develop and maintain tools to monitor on a regular basis the OTC derivative portfolios per asset-class.
Indirect costs	N/A

(c) Trigger mechanism for the clearing obligation

Specific objective	Ensure that the clearing threshold is triggered when appropriate in view of the systemic relevance of NFCs and produces coherent results.
Option 1	The clearing threshold is triggered for all classes of OTC derivatives when the counterparty has breached one threshold.
How would achieving the objective alleviate/eliminate the problem?	This would ensure that the systemic relevance is applied to all counterparties.
Option 2	The clearing threshold is triggered asset class by asset class i.e. the consequence of breaching a clearing threshold would only apply to that asset-class of OTC derivatives.
How would achieving the objective alleviate/eliminate the problem?	This would assess the systemic relevance of the activity of a counterparty on a specific asset-class.
Which option is the preferred one? Explain briefly.	Option 1, because it considers the global systemic relevance of NFCs.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	The clearing threshold is triggered for all classes of OTC derivatives when the counterparty has breached one threshold.
Benefits	This option captures all NFCs which are systemically relevant. It is the most consistent approach with the investing or speculative nature of positions exceeding the threshold, since it considers that, once a firm is investing or speculating above a particular amount, it should be considered as a financial investor (not as a corporate) as a whole, and would be subject to the corresponding obligations for all its activity. It is in line with the EMIR provision which considers the sum of net positions and exposure per counterparty and per class.
Disadvantages	A counterparty which exceeds the clearing threshold for asset-class A, but which has only a limited activity in asset-class B, would need to clear all its OTC derivatives contracts even though the counterparty would be a very small market participant in those other markets.
Regulator's costs	N/A
Compliance costs	Set-up cost to monitor the clearing threshold for all asset classes.
Indirect costs	N/A
Option 2	The clearing threshold is triggered asset class by asset class i.e. the consequence of breaching a clearing threshold would only apply to that asset-class of OTC derivatives.
Benefits	Limit the scope of application of the clearing obligation to the relevant asset-class.
Disadvantages	The main risks that EMIR intends to mitigate are counterparty credit risks, which are not asset-class specific. If the activities of a NFC are significant in a specific asset-class, this NFC becomes significant for its entire portfolio, because in the event of a default, all asset-classes will be concerned. It may impact the risk mitigation requirements, since it distinguishes which asset-classes the risk mitigation techniques should apply to, depending on which threshold was crossed. It does not reflect the EMIR provision which considers the sum of net positions and exposures per counterparty and per class.
Regulator's costs	N/A
Compliance costs	Set-up cost to monitor the clearing threshold asset class

	per asset class.
Indirect costs	N/A

Preliminary statement

In the following paragraphs, we have studied the annual reports and other publicly available statements of a number of companies. However the names of the companies have been removed.

Non-financial counterparty activity in OTC derivative markets

A number of NFCs make substantial use of OTC derivatives markets. Data from BIS[2] show that the outstanding notional amounts of OTC derivative contracts for NFCs is significant, although well below FCs.

As shown in the table below, NFCs account for 15% of the OTC derivatives FX market. In absolute term, they participate mostly in the the interest-rate OTC derivatives market, with more than $37,000 bn outstanding in gross notional value.

	Foreign exchange	Interest rate	Equity-linked	Commodity	Credit
Non-financial institutions	9,480	37,406	733	N/A	197
Total	63,349	504,098	5,982	3,091	28,632
Share of non-financial	15.0%	7.4%	12.3%	N/A	0.7%

Table 1 : OTC derivatives amounts outstanding (2011 notional values, $ billion)

In order to assess the impact of the proposed RTS related to both the hedging definition and the clearing thresholds on NFCs, we have considered a sample of 168 European-headquartered firms captured within ISDA's 2009 Derivatives Usage survey[3].

NFCs use of OTC derivatives

Clearly a large part of OTC derivatives positions entered into by NFCs is understood to be for hedging purposes. A number of the firms that we examined explicitly stated that derivative contracts are solely used for risk management purpose.

A more in-depth examination by Bartram (2012) and Bartram et al (2011) of over 6,000 NFCs finds compelling evidence that the use of derivatives by NFCs reduces risk; the results of their statistical analysis

[2] BIS Semiannual OTC derivatives statistics at end-December 2011

[3] ISDA's Derivatives Usage Survey (2009) lists the Global Fortune 500 companies and their usage of derivatives. The survey results list the company names, industry sectors, revenues, and whether they use a range of asset class derivatives. We have focused upon the NFCs in this list headquartered in Europe.

Summary of the survey available at: http://www.isda.org/researchnotes/pdf/ISDA-Research-Notes2.pdf.

Data of the survey available at: http://www.isda.org/statistics/stat_nav.html

are consistent with genuine hedging behaviour and not with speculative behaviour.[4] However, this does not mean that no NFCs are speculating. Indeed, several of them are explicitly affirming that they speculate.

Hedging definition

The impact of the draft RTS on the hedging definition should be measured against a counterfactual where EMIR is perfectly implemented. This would mean that the criteria set for establishing whether a contract mitigates risks related to commercial or treasury financing activities would capture all such contracts and nothing else.

There are two main impacts that the draft RTS may have compared to the counterfactual situation:

- The criteria establishing the nature of OTC derivative contracts may result in contracts which are concluded for genuine hedging of risks related to commercial or treasury financing activity being included in the calculation of NFC's positions in relation to the threshold, thus moving NFCs more quickly to the clearing threshold.
- The criteria establishing the nature of OTC derivative contracts may result in contracts that are *not* for genuine hedging of risks related to commercial or treasury financing activity being excluded from the calculations of NFC's positions, thus moving NFCs too slowly towards the clearing threshold (or enabling them to miss it altogether).

As NFCs are likely to require hedges to very specific risks, it is likely that their OTC derivative contracts will be more bespoke and may not be eligible for CCP clearing anyway. However, the impacts for a NFC to be above or below the clearing thresholds are not limited to the clearing obligation. The draft RTS on risk mitigation techniques also sets out more stringent requirements for NFCs above the clearing thresholds, than for those below this clearing threshold. EMIR Art(11) also states that FCs and NFCs above the clearing threshold shall mark-to-market their outstanding contracts on a daily basis.

NFCs may enter into derivative contracts for different reasons. For example, an energy firm notes in its annual report that it enters into contracts for *"Price risk management, optimisation of power stations, load equalisation and optimisation of margins"*.

For this company, we would expect that OTC derivatives covering the risk of price fluctuation of coal, oil, gas and emission allowances be covered by the hedging definition. Derivatives entered into for the other reasons expressed given by that company are less clear-cut. In essence, It is required to consider the relation between optimisation of a power station and a "potential change in value of assets, services, inputs, products, commodities or liabilities" and whether it is clear enough to deliver the preferred treatment. This company recognises that some own account trading takes places, albeit within prescribed limits.

Costs of monitoring the threshold, costs of clearing and regulatory costs

Considering a clearing threshold set at €1 billion in notional value for credit and equity derivative contracts and at €3 billion for other instruments, many NFCs would not exceed the clearing threshold. We used our

[4] Bartram (2012) 'Corporate Hedging and Speculation with Derivatives' and Bartram, Brown and Conrad (2011) 'The Effects of Derivatives on Firm Risk and Value', Journal of Financial and Quantitative Analysis Vol. 46, No. 4, Aug. 2011, pp. 967–999

sample of NFCs as described above to estimate the number of firms that might be affected.[5] However, this was complicated as:

- IRFS 9 (which replaced IAS 39) requires the reporting of derivative contracts in fair value. Thus the majority of firms do not report the notional amount of outstanding contracts. For those that report both, the ratio of fair value to notional value varies widely and is entirely idiosyncratic to the nature of the contract. Whilst one can use market-wide ratios of market value to notional value from BIS data to estimate the approximate notional amounts outstanding, this must be viewed as a very rough estimation.

USD billion	Foreign exchange	Interest rate	Equity-linked	Commodity	Credit	Unallocated
A. Notional amounts	63,349	504,098	5,982	3,091	28,633	42,609
% of total	9.8%	77.8%	0.9%	0.5%	4.4%	6.6%
B. Gross Market Value	2,555	20,000	679	487	1,586	1,977
% of total	9.4%	73.3%	2.5%	1.8%	5.8%	7.2%
Multiple (A divided by B)	25	25	9	6	18	22

Table 2: Notional amounts outstanding versus Gross Market values[6]

- Further, when firms do report notional values, these are almost always net across counterparties and asset classes (i.e. contracts operating in the opposite direction are offset against each other). Thus the amounts recorded are likely to be significantly greater in gross notional terms.
- All firms designate derivatives to hedging and non-hedging according to IAS 39 (replaced by IFRS 9). As explained in the financial statements, this is for practical reasons only and does not represent true hedging strategy. Indeed, some firms explicitly state that they only trade derivatives to hedge risks, and yet they still have non-designated contracts.
- As an increment to current practice, the clearing obligation relates only to OTC derivatives but firms do not disclose the proportion of derivative trades undertaken over the counter.

Therefore, arriving at a robust estimate of the number of firms whose non-hedging OTC derivative activity might breach the thresholds, so making them subject to the clearing obligation, is not a simple task.

The firms with the lowest revenues in our sample tended to have derivative positions below €1 billion in any types of derivative — and for *any* purpose. With the proposed level of the clearing thresholds, those firms would not bear the costs of having to assess whether or not their OTC derivative contracts qualify as hedges against the definition of the draft RTS.

For example, *company A* had foreign currency contracts with a notional value of $726 million (about €561 million) as of 31 December 2011; the notional value of outstanding commodity positions was lower than this.

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[5] ISDA's Derivative Use Survey (2009) lists the Global Fortune 500 companies and their usage of derivatives. The survey results list the company names, industry sectors, revenues, and whether they use a range of asset class derivatives. We have focused upon the NFCs in this list headquartered in Europe.

Summary of the survey available at: http://www.isda.org/researchnotes/pdf/ISDA-Research-Notes2.pdf.

Data of the survey available at: http://www.isda.org/statistics/stat_nav.html

[6] BIS Semi-annual OTC derivatives statistics at end-December 2011

However, there are exceptions, such as *company B*. Although this company stands in the bottom of our sample with revenues of just under $18 billion, it is still a very large firm, and the notional value of its interest rate derivatives is just below €5 billion. In the sample, many of the firms with higher revenues have much more significant positions, such as *company C* with approximately €190 billion notional value of all outstanding derivatives. In addition, certain types of firms (e.g. energy firms) appear to participate particularly actively in the derivatives market and so have positions out of proportion to their size.

Energy firms[7] appear the likeliest to undertake explicit trading in derivatives (as stated in their annual reports) and have relatively large derivative positions in general. For example, we have identified a relatively small utility company (revenue $21billion) and its non-designated derivative contracts might be above the threshold. On the other hand a large company with higher revenue ($90 billion) has a far lower level of derivative contracts in notional amount.

Our examination of the financial statements of the European energy firms in the ISDA survey list shows that derivative usage appears to have a relationship with revenue. Of the 35 European energy firms in the survey, even one of the smallest would breach the threshold if the IFRS 9 hedge accounting distinction was the only criterion used. It is thus likely that at least 30 energy firms from this list, and quite possibly others not included on the list, would need systems in place to monitor their non-hedge accounting designated trades to ensure they did not breach the threshold or to justify them as genuine hedges when they did. Judging solely from the ISDA survey sample, it appears that the energy sector would be more comprehensively affected by the clearing thresholds than other sectors.

The number of non-energy firms that would have to monitor the clearing threshold as they could become subject to the clearing obligation is harder to judge. We note however that our examination of financial statements did not reveal the same relationship between derivative usage and revenue as with energy companies — likely because we were considering NFCs from various sectors rather than simply one. From our limited sample, the bottom 40 of the 102 non-energy NFCs on the ISDA survey list appear unlikely to be caught by the thresholds, on the basis of IFRS rules only, suggesting a less comprehensive impact than on the energy sector.

We have assumed that firms close to or above the clearing thresholds would wish to put in place some monitoring system capable of identifying whether a trade was a hedge or not, capturing the associated justification and flagging any non-hedging trades (whether under the IFRS 9 or any other criteria) to some centralised unit within the firm that would be able to assess the proximity to the threshold.[8]

Based upon the analysis above, we have adopted a population estimate of 100–150 or so firms would need to consider whether or not they were compliant with the criteria set out by the draft RTS.[9]

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[7] We include the following industries, as used in the ISDA survey, in this definition: energy, metals, mining, petroleum refining, and utilities.

[8] Qualification as a hedging contract under IFRS is available as a short-cut. However, it is unlikely that this qualification will be used in isolation without prior decisions about the nature of the contract being taken by risk managers (i.e. a contract is first determined as hedging by the risk manager and then processed under the IFRS hedging qualification).

[9] That said, it is possible that the gross notional values of these firms may be relatively high and close to the thresholds. Examination of firms' accounts does not reveal much information, as recorded information relates almost entirely to net notional and fair value amounts.

(a) Costs of monitoring trades

This may require some investment in the internal governance structure (e.g. measuring or keeping track of the types of OTC derivatives and positions) although since we are likely considering large and relatively sophisticated firms, this may not be particularly significant and can be at least partly attributable to EMIR. Monitoring actions are likely to be more straightforward if trading and treasury arms of an NFC are separately constituted (which appears to be the norm). For NFCs with many legal entities, ensuring that none of them is conducting non-hedging activities at or above the threshold in real-time may be difficult, especially where these entities are based in multiple jurisdictions.

Using cost data derived from rules-based trade reporting under MiFID, we estimate that to create a monitoring tool to flag derivatives trades and monitor the threshold exceeded the threshold would entail extensions to the IT trading systems (approximately six month's work by an IT specialist with costs estimated at €50,000) and the employment of a person qualified to judge the level of the positions reported (between half and a quarter full-time equivalent, with more time required for the very largest firms) with costs estimated at €40,000.

Using our rough estimates of 100–150 firms that might need to monitor their trades, this equates to between approximately €5 million and €7.5 million one-off costs and between €4 million and €6 million in on-going costs[10].

(b) Costs of clearing

Where NFCs do exceed the threshold on contracts that are not for hedging purposes and become subject to the clearing obligation then more substantial expenditure is likely.

Provided they are subject to the clearing obligation, a NFC exceeding the clearing threshold would incur the costs of clearing, such as providing highly liquid securities or cash for the margins and default or guarantee funds required by CCPs. They would also incur transactions costs directly payable to the clearing houses. As it is not possible to estimate the number of firms who might breach the thresholds in reality (and not just according the hedge accounting rules) we present three examples based on a large energy firm, a small energy firm and a large non-energy corporation.

However, please note that these estimates are a very extreme scenario and should be taken as an absolute cap for these types of costs because of the three following reasons:

- The incremental impact of contributing to CCP margins will depend on the amount of collateral NFCs currently need to raise for bilateral OTC derivative contracts. NFCs tend to post less collateral than FCs but they are indeed required to do so by their FCs.11 In any event where NFCs have typically traded OTC derivatives without collateral (given existing capital reserves and low systemic risk), it is likely that — at least in some circumstances — dealers have incorporated the costs of their credit exposures to end-users into the prices they charge for uncollateralized derivatives positions. These

[10] In general, one-off costs include non-recurring costs such as building systems, raising capital etc. while on-going costs include training, maintaining systems, costs of capital remuneration etc. On-going costs are expressed on a yearly basis.

[11] ISDA Margin Survey 2012.

NFCs may therefore not have fully avoided the costs associated with the collateralization of their positions and the true incremental costs of having to clear contacts may therefore be much lower.

- The analysis of marginal collateral should be done taking into account that CCP clearing will recognize the netting of partially offsetting trades, which might reduce the requirement for extra collateral compared with the overly conservative calculation below.
- EMIR does not require clearing of the outstanding contracts but of the future activity of NFCs that exceed the clearing threshold. The key measure for ongoing annual costs would be the turnover (flow) of new derivatives traded per year by those corporates captured by the clearing obligation. On the contrary, due to the lack of data available, we will be calculating the cost with the outstanding volume of derivatives, which is quite an upper estimate of the annual activity.

With these caveats, the three examples would be as follows:

Our first example, Company X, is a large non-energy corporation that explicitly states that it uses derivatives solely to hedge risks through its treasury function. It was selected as one of the largest NFCs to report notional values as well as fair values.

Its foreign exchange derivative contracts that are not designated as hedges under IFRS 9 exceed the threshold by a long way (€11 billion notional outstanding at end 2011). If this company was required to clear its future derivative contracts, this would mean at least €63 billion in notional value would need to be cleared (this is the year end value outstanding: the value traded within the year may exceed this figure).

Using average ratios of margins to notional amounts, and a WACC of 6.6% ,[12] the on-going cost of the additional capital for the clearing margins would be nearly €4 million.[13] Transactions costs payable to CCPs might be in the region of €750,000.[14] These costs as a proportion of the company's annual profit is relatively small (0.06%). However, regardless of the magnitude of the additional cost, if the company derivative activity is largely for hedging purposes and it breaches the thresholds due to an inaccuracy in the definition or a too low threshold, then this is a cost that would otherwise not be incurred.

In this case it appears unlikely that the clearing obligation, raising collateral and margins required for clearing would have any effect on the ability to finance other investments, such as physical and operational expansions.

Our second example, Company Y, is a large petroleum refining firm, with total revenue in 2011 of around €110 billion. This company reports derivative contracts in notional as well as fair value and differentiates between those designated as hedges and those not so designated. It states that some of these contracts are for trading purposes. Company Y would breach the threshold under IFRS 9 accounting definitions, with over €6 billion non-designated currency derivative contracts outstanding and over €11 billion in commodity derivatives. If Company Y was required to clear its future derivatives this would total around €24 billion in

[12] Weighted average cost of capital for the automotive industry of 6.56%. See NYU Stern data page http://pages.stern.nyu.edu/~adamodar/New_Home_Page/data.html. EU-wide WACC estimates not available

[13] Ratio of notional values of OTC derivatives to clearing margins: 1/5000 for IRS and 1/1000 for FX and commodities. See Singh (2009) 'Collateral, Netting and Systemic Risk in the OTC Derivatives Market' IMF Working Paper 10/99

[14] This is based on a ratio of the cost of clearing to notional values from LCH.Clearnet financial statements, and assumes approximately 9,000 trades a year undertaken by Company X. This is an approximation and thus should be treated with caution.

notional values. Accounting for the same costs as in the previous example,[15] the total additional costs to company Y would be just over €3 million, representing 0.04% of its profit.

Our third example, Company Z, is one of the smallest energy companies on the ISDA survey list (annual revenue of €18 billion), and yet would still breach the thresholds according to IFRS hedge accounting definitions (€3.5 billion in notional value for exchange rate derivatives and nearly €40 billion notional value outstanding for commodity derivatives). As noted above it undertakes some trading activity, but the level of this is unclear. If company Z was required to clear its future derivatives trading contracts the maximum cost would be around €3 million, representing 0.5% of its profit. This illustrates that smaller energy firms with significantly lower revenues and profits could face similar costs of clearing, thus affecting their profits to a greater extent.

(c) Regulatory costs

The assessment of trades against the criteria is performed by the NFC and the national competent authorities as supervisors will check implementation and compliance with the rule. This is likely to involve some extra cost, although the inclusion of all trades and the hedging status of trades by NFCs within the TR dataset should expedite the discovery process within this (i.e. the identification of NFCs of interest). NFC will also report to TR whether the contract is above or below the clearing threshold, which will further facilitate the analysis by competent authorities.

Qualification as a hedging contract under IFRS is available as a short-cut which should mean that the supervisors would be able to rely upon the individual NFC's auditors in those cases. However it seems likely that some hedging contracts would not fall within the remit of the shortcut and would require some assessments by supervisors.

The level of work involved by the supervisors may be significant: potentially untangling a bundle of trades to assess the contribution to risk reduction.

Once satisfied that the criteria have been interpreted appropriately, the assessment against the thresholds would be relatively straight-forward.

TIMELY CONFIRMATION

(a) What should be the timeframe within which confirmation should occur?

Specific objective	To set a timeframe that is timely and practical for counterparties to achieve.
Option 1	Confirmation should occur within a set time period following the execution of the transaction, for example within 15 minutes.
How would achieving the objective alleviate/eliminate the problem?	This approach would ensure that a common understanding and legal certainty of the terms of the contract are reached almost immediately following the execution of the transaction.

[15] Although we use a WACC for the petroleum industry of 8%

Option 2	Confirmation should occur as soon as possible following the execution of a transaction but within a maximum timeframe.
How would achieving the objective alleviate/eliminate the problem?	This approach would grant more time to counterparties to achieve a common understanding and legal certainty of the terms of the contract, particularly in the case of non-standard or complex OTC derivative contracts.
Which option is the preferred one? Explain briefly.	Option 2 is the preferred option as the requirement will encourage counterparties to confirm transactions as soon as possible, but acknowledges the fact that more bespoke contracts may take longer to confirm.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Confirmation should occur within a set time period following the execution of the transaction, for example within 15 minutes.
Benefits	Gives legal certainty to both counterparties very quickly following the conclusion of the transactions.
Disadvantages	It is a demanding timeframe and gives little room for counterparties to finalise all the terms of the contract. There is a risk that participants will focus on speed rather than accuracy.
Regulator's costs	N/A
Compliance costs	Counterparties entering into non-standard or complex OTC derivative contracts may have to implement systems to enable compliance with the requirements.
Indirect costs	N/A
Option 2	Confirmation should occur as soon as possible following the execution of a transaction but within a maximum timeframe.
Benefits	This provides counterparties with a degree of flexibility to meet the requirements.
Disadvantages	It may not incentivise counterparties to confirm their contracts as soon as possible, which could potentially lead to less legal certainty on the terms of the transaction.
Regulator's costs	N/A
Compliance costs	Counterparties entering into complex OTC derivative contracts may have to implement systems to enable compliance with the requirements.
Indirect costs	N/A

(b) Should the requirements for timely confirmation differ depending on the ways it is executed or processed?

Specific objective	To set a timeframe that is timely and practical for counterparties.
Option 1	To have a specific timeframe when the transaction is electronically executed.
How would achieving the objective alleviate/eliminate the problem?	The timing of the confirmation could be more ambitious as tools are already in place when transactions are electronically executed.
Option 2	To have a specific timeframe when the transaction is not electronically executed but is electronically processed.
How would achieving the objective alleviate/eliminate the problem?	Counterparties may need longer to confirm the details when the transaction is not electronically executed but is electronically processed.
Option 3	To have a specific timeframe for transactions that are not electronically executed or processed
How would achieving the objective alleviate/eliminate the problem?	This approach would allow counterparties greater flexibility to ensure there is a common understanding of the terms of a transaction.
Option 4	To have the same timeframe for all transactions, whether electronically confirmed, processed or not.
How would achieving the objective alleviate/eliminate the problem?	This approach would ensure a level playing field for all counterparties.
Which technical option is the preferred one? Explain briefly.	Option 4 is the preferred option as it would foster consistency and certainty for all EU counterparties.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To have a specific timeframe when the transaction is electronically executed.
Benefits	Electronic execution uses standardised key terms of the contract, therefore leading to less legal uncertainly following the execution of a transaction.
Disadvantages	Electronic execution may not always equal legal standardisation, therefore it does not guarantee that transactions can be confirmed quicker.
Regulator's costs	N/A
Compliance costs	Counterparties whose transactions are electronically executed already use systems that enable quicker confirmation therefore the costs may be less important.
Indirect costs	N/A
Option 2	To have a specific timeframe when the transaction is not

	electronically executed but is electronically processed.
Benefits	This approach gives counterparties a degree of flexibility to achieve the requirements when the transactions is not electronically confirmed.
Disadvantages	The fact that the transaction is electronically processed does not necessarily mean that the legal terms of the contracts can be agreed between counterparties quicker.
Regulator's costs	N/A
Compliance costs	Counterparties whose transactions are electronically processed already uses systems that may enable quicker confirmation therefore the costs may be less.
Indirect costs	N/A
Option 3	To have a specific timeframe for transactions that are not electronically executed or processed.
Benefits	Counterparties which transactions are neither electronically executed nor electronically processed, may need a greater degree of flexibility to have systems in place to achieve the requirements.
Disadvantages	This may not incentivise counterparties to confirm the contracts on a timely basis.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	N/A
Option 4	To have the same timeframe for all transactions, whether electronically confirmed, processed or not.
Benefits	This ensures that the timely confirmation requirements are the same, irrespective of the execution or processing mean, therefore fostering consistency and certainty.
Disadvantages	The requirement does not provide a strong incentive for counterparties to confirm their trades more quickly even when they have the possibility to do so.
Regulator's costs	N/A
Compliance costs	Counterparties, particularly those who transact less frequently, may have to implement systems to enable them to achieve compliance.
Indirect costs	N/A

(c) Should the requirements for timely confirmation differ depending on the category of the counterparties?

Specific objective	To set a timeframe that is timely and practical for NFCs below the clearing threshold.
Option 1	To set the same timeframe for all counterparties.
How would achieving the objective alleviate/eliminate the problem?	This would ensure a consistent approach across counterparties.
Option 2	To set different timeframe for FCs and NFCs above the clearing

	thresholds, on one side, and NFCs below the clearing thresholds, on the other side.
How would achieving the objective alleviate/eliminate the problem?	The timing of the confirmation could be less ambitious for NFCs below the clearing thresholds as in general they transact less regularly and are less equipped than FCs and NFCs above the thresholds.
Which technical option is the preferred one? Explain briefly.	Option 2 is the preferred option as it takes into consideration the technologic capacity of the type of counterparty.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To set the same timeframe for all counterparties.
Benefits	This option gives the same incentive to all counterparties to develop systems to ensure a rapid legal certainty following the conclusion of the transactions.
Disadvantages	This option does not take into account the different degree of sophistication and automation of post-trade processes which are likely to differentiate counterparties above and below the clearing thresholds.
Regulator's costs	N/A
Compliance costs	NFCs may have to implement systems to enable them to comply with the same timely confirmation requirements than those of larger counterparties.
Indirect costs	N/A
Option 2	To set different timeframe for FCs and NFCs above the clearing thresholds, on one side, and NFCs below the clearing thresholds, on the other side.
Benefits	This provides NFCs below the clearing threshold with a greater degree of flexibility to meet the requirements.
Disadvantages	It does not create an incentive for NFCs below the clearing thresholds to confirm their contracts as quickly as larger counterparties.
Regulator's costs	N/A
Compliance costs	NFCs may have to implement systems to enable them to comply with the timely confirmation requirements, but those costs would be lower than in option 1.
Indirect costs	N/A

A recent survey by ISDA[16] suggests that the proportion of OTC derivatives which NFCs claim to be eligible for electronic confirmation is smaller than for large entities, with the exception of commodity derivatives. The details can be found in the following table:

	Large entities	Small entities
Interest rate derivatives	91%	66%
Currency options	99%	64%
Commodity derivatives	42%	51%
Credit derivatives	90%	54%
Equity derivatives	85%	57%

Table 3: Estimation of the eligibility for electronic confirmation as reported by large and small entities

One of the reasons for this is that NFCs mainly use OTC derivatives for hedging purposes and therefore tend to use more bespoke contracts, to fit their exact needs.

Moreover, as stressed by a number of respondents to the CP, NFCs, and more specifically those below the clearing thresholds, do not have the same resources and sophisticated systems dedicated to handling the operational risks of their OTC transactions, as FCs, because the relatively low volumes of their activity would not justify the associated costs.

The low level of eligibility for electronic confirmation of the commodity derivatives asset-class, compared to other asset classes, also reflects the difference in market practices between FCs and NFCs. Indeed, NFCs are very active in the commodity derivatives field, and represent an important share of that market compared to purely financial derivatives markets.

This generally supports the view that NFCs below the clearing threshold should be given more time to confirm their trades, as timely confirmation might be more difficult and costly for them to achieve.

As regards NFCs above the clearing thresholds, it is likely that their level of activity and technological capacity would be close enough to those of FCs to justify the choice of having the same requirements for the two categories.

(d) Should the requirements on timely confirmation depend on the asset class of the OTC derivatives contract?

Specific objective	To ensure that timely confirmation of trades is feasible by taking into account the characteristics of the different asset class of those OTC derivatives.
Option 1	To set different timeframes for OTC derivatives depending on the asset class of the underlying (e.g. interest-rate derivatives, credit derivatives, equity derivatives, foreign-Exchange derivatives and

[16] 2012 ISDA Operations Benchmarking Survey

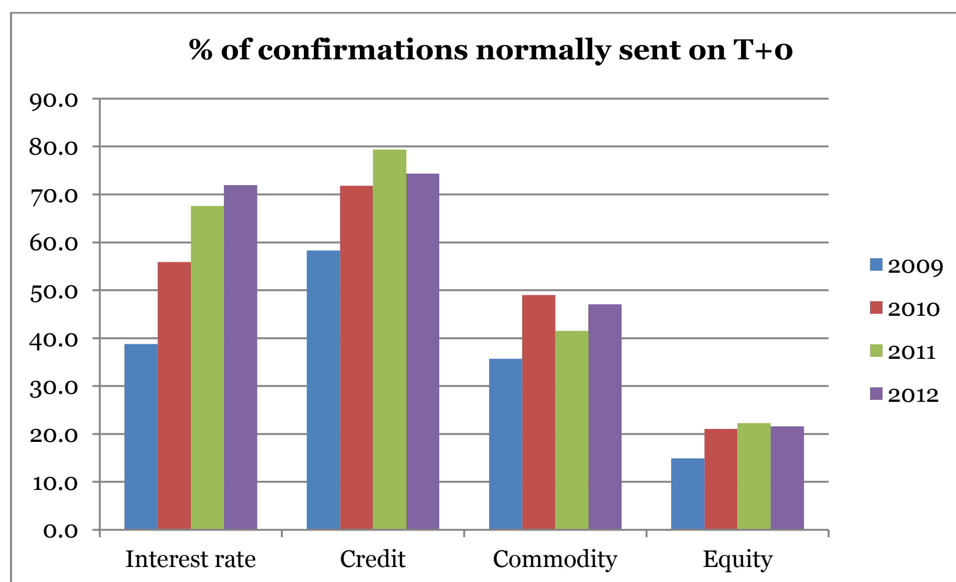
	commodities derivatives).
How would achieving the objective alleviate/eliminate the problem?	This would allow to take into account specificities of certain asset classes with regards to timely confirmation.
Option 2	To set the same timeframe for all OTC derivative contracts, but with different phase-in depending on the asset class. For OTC derivatives related to equity, foreign-exchange and commodities, the counterparties would be given more time to adapt.
How would achieving the objective alleviate/eliminate the problem?	This would ensure an equivalent treatment of OTC derivatives regardless of the asset-class, while leaving sufficient time for counterparties to adapt their process to the new requirements
Which technical option is the preferred one? Explain briefly.	Option 2 is preferred, because the benefits of timely confirmation are important regardless of the asset class and because the phased-in approach would improve the ability to comply.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To set different timeframes for OTC derivatives depending on the asset-class (e.g. interest-rate derivatives, credit derivatives, equity derivatives, foreign-exchange derivatives and commodities derivatives).
Benefits	This would take into consideration current market practices, and specifically the fact that today, the percentage of trades which are confirmed on the same day is typically higher for interest-rate derivatives than for equity derivatives (see numbers below).
Disadvantages	This approach does not incentivise market participants to extent the efforts already achieved on certain asset classes to other asset classes.
Regulator's costs	N/A
Compliance costs	This approach is close to current market practice so would be less costly than option 2. However there would still be associated costs because within the same asset-class, timely confirmation might be more or less difficult to achieve depending on the characteristics and level of complexity of the product.
Indirect costs	N/A
Option 2	To set the same timeframe for all OTC derivative contracts, but with different phase-in depending on the asset-class. For OTC derivatives linked to equity, foreign-exchange and commodities, counterparties would be given more time to adapt.
Benefits	The approach is simple and guarantees at a final stage an equivalent treatment of OTC derivatives regardless of the asset-class. The phase-in approach provides additional flexibility to market partici-

	pants to prepare for compliance with stricter requirements. It would also provide convergence with approaches adopted in other jurisdictions, especially in the US.
Disadvantages	The final objective for timely confirmation would not be achieved immediately but within a few months.
Regulator's costs	N/A
Compliance costs	The costs will be higher than for option 1, but market participants will be able to leverage on the work which has already been achieved on certain asset-classes.
Indirect costs	N/A

As shown in the graph below, there has been a strong trend towards reducing confirmation timeframes over the past few years, however with remaining differences among asset classes. Interest rate and Credit derivatives show today the highest rate of T+0 confirmations, with above 70% of trades normally confirmed on a same-day basis, while the figures for Commodity and Equity derivatives remain at relatively low level (47% and 21% respectively).



Graph 1: Percentage of confirmations normally sent on T+0, based on ISDA Operations benchmarking surveys from 2009 to 2012

Although the percentages of same-day confirmations have increased for all asset classes, it hasn't increased at the same speed: for example, interest rate derivatives and commodity derivatives had roughly the same level of same-day confirmation in 2009 (39% and 36% respectively) but while the number jumped to 72% in 2012 for interest rate, it only shows a modest increase to 47% for commodity derivatives.

This is consistent with the fact that the industry has, for now, concentrated most of its efforts related to improvements of the OTC derivative markets efficiency, transparency, risk management process and standardisation in the field of interest rate and credit derivatives. For example, those asset classes are also the ones which show the highest rate of CCP clearing acceptance, of electronic confirmation and portfolio compression.

It is however unlikely that the lag observed today with regards to timely confirmation of the other asset classes is structural, but rather that it will tend to decrease over time, as the industry leverages on what has already been accomplished in the field of credit and interest rate derivatives.

The phase-in period of option 2 takes into account current market practice (where interest-rate and credit OTC derivatives trades are faster to confirm) while setting high standards for the future, which is consistent with the fact that the benefits of timely confirmation are equivalent regardless of the asset class.

PORTFOLIO RECONCILIATION

(a) What are the key trade terms to be included in portfolio reconciliation?

Specific objective	To ensure that the appropriate key trade terms are included in portfolio reconciliation.
Option 1	Portfolio reconciliation covers the key trade terms that identify each particular OTC derivative contract.
How would achieving the objective alleviate/eliminate the problem?	The key trade terms are likely to be standardised therefore making it easy for reconciliation to be agreed between counterparties.
Option 2	Portfolio reconciliation should cover the key trade terms including at least the valuation attributed to each contract.
How would achieving the objective alleviate/eliminate the problem?	This approach may allow reconciliation to be limited to valuation only and will be consistent with the valuation requirements that are already required under EMIR.
Which technical option is the preferred one? Explain briefly.	Option 2 is the preferred option as it covers the key terms of the contracts.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Portfolio reconciliation covers the key trade terms that identify each particular OTC derivative contract.
Benefits	The key trade terms are likely to be standardised and therefore easier to agree between counterparties.
Disadvantages	It may be burdensome for counterparties as each term may have to be individually reconciled.
Regulator's costs	N/A
Compliance costs	Counterparties may have to develop the necessary systems and processes to ensure effective reconciliation.
Indirect costs	N/A
Option 2	Portfolio reconciliation should cover the key trade terms including at least the valuation attributed to each contract.
Benefits	This approach may allow reconciliation to be limited to valuation,

	which is required under EMIR.
Disadvantages	This may duplicate the contract valuation exercise already required under EMIR as mark-to-market or to-model allows counterparties to identify any mismatches at the portfolio level.
Regulator's costs	N/A
Compliance costs	This may relieve counterparties from the burden of having to exchange all the underlying trade terms.
Indirect costs	N/A

(b) What should determine the frequency of portfolio reconciliation for financial counterparties and non-financial counterparties above the clearing threshold?

Specific objective	To ensure that portfolio reconciliation occurs over an appropriate frequency.
Option 1	A requirement to perform the exercise : • daily when counterparties have over 500 OTC derivatives contracts with each other; • weekly when counterparties have between 300 and 499 OTC derivatives contracts with each other; • monthly when counterparties have less than 300 OTC derivatives contracts with each other.
How would achieving the objective alleviate/eliminate the problem?	The frequency of portfolio reconciliation depends on the size of the portfolio, and portfolio reconciliation occurs at least monthly. This would ensure that discrepancies are promptly identified.
Option 2	A requirement to perform the exercise : • daily when counterparties have over 500 OTC derivatives contracts with each other; • weekly when counterparties have between 50 and 499 OTC derivatives contracts with each other; • quarterly when counterparties have less than 50 OTC derivatives contracts with each other.
How would achieving the objective alleviate/eliminate the problem?	The frequency of portfolio reconciliation depends on the size of the portfolio, and portfolio reconciliation occurs at least quarterly. The requirement to have a quarterly reconciliation process would be more appropriate for smaller portfolios.
Which technical option is the preferred one? Explain briefly.	Option 2 is preferred as it makes a clear distinction between counterparties that have a significant degree of interconnection (500 and more contracts with each other) and other counterparties (50 and less contracts with each other).
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	A requirement to perform the exercise : • daily when counterparties have over 500 OTC derivatives contracts with each other; • weekly when counterparties have between 300 and 499 OTC derivatives contracts with each other; • monthly when counterparties have less than 300 OTC derivatives contracts with each other.
Benefits	More counterparties will undertake a comprehensive review of their portfolio of transactions, as seen by its counterparty, in order to promptly identify any misunderstandings of the key transaction terms.
Disadvantages	This may be burdensome for counterparties who transact less but would nevertheless be captured by this requirement.
Regulator's costs	N/A
Compliance costs	Counterparties may have to develop the necessary systems and process in order to ensure compliance.
Indirect costs	N/A
Option 2	A requirement to perform the exercise : • daily when counterparties have over 500 OTC derivatives contracts with each other; • weekly when counterparties have between 50 and 499 OTC derivatives contracts with each other; • quarterly when counterparties have less than 50 OTC derivatives contracts with each other.
Benefits	Only the largest counterparties will undertake a comprehensive review of their portfolio of transactions on a daily or weekly basis. The possibility to perform the exercise on a quarterly basis for counterparties having less than 50 contracts with each other provides flexibility and removes costs for smaller counterparties. This approach also ensures convergence with those adopted in other jurisdictions, especially in the US.
Disadvantages	Some portfolios will only be reconciled on a quarterly basis.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	N/A

According to the ISDA Margin Survey 2012 (as of December 2011), 47% of OTC derivatives trade volumes are reconciled on a daily basis. Among the respondents, the largest OTC dealers[17] claim to perform a daily reconciliation on 70.8% of their trade volume.

[17] Respondents are classified as large when they have more than 3000 active collateral agreements outstanding. There are 14 such institutions out of the 51 respondents of the ISDA Margin Survey 2012.

	All firms		Large firms	
	2012	**2011**	**2012**	**2011**
Daily	47.5	30.9	70.8	60.5
Weekly	6.9	9.9	2.1	4.4
Monthly	10.7	12.5	5	8
Quarterly	5.9	3.8	1.2	0.1
Annually	1.1	0.7	0.9	1.2
Not regularly reconciled	27.9	42.2	20	25.5

Table 4: Reconciliation frequency by percentage of OTC trade volume (ISDA Margin Survey 2012)

Compared to the same survey performed the year before, there has been a general trend towards more frequent reconciliation. The percentage of OTC trade volumes not regularly reconciled decline by more than 14% in absolute terms, from 42.2% to 27.9%. In the same time, daily reconciliation improved by 16.6 points, from 30.9% to 47.5% in 2011.

This data suggest that frequent portfolio reconciliation is considered to be good market practice and that on-going efforts are being made to increase the frequency of such an exercise.

Option 2 better reflects the level of interconnection between counterparties and offers a better distinction between them depending on their systemic relevance. Option 2 is more justified in terms of cost and benefits as it saves costs for smaller companies while keeping strict requirements for counterparties which are the most likely to have already systems in place to meet the standards.

(c) Should the requirements on the frequency of portfolio reconciliation differ depending on the type of counterparty?

Specific objective	To ensure that the requirements on portfolio reconciliation occur over an appropriate frequency for each category of counterparties.
Option 1	Apply the same requirements for each category of counterparties.
How would achieving the objective alleviate/eliminate the problem?	This would ensure a level playing field. The frequency of portfolio reconciliation would only depend on the number of outstanding contracts that counterparties have with each other.
Option 2	To distinguish between (a) FCs and NFCs above the clearing thresholds and (b) NFCs below the clearing thresholds and to have a more lenient approach for counterparties below the clearing thresholds, specifically a requirement to perform the exercise: • Quarterly for counterparties having more than 100 OTC derivatives contracts with each other • Yearly for counterparties having 100 or less OTC derivatives contracts with each other
How would achieving the objective alleviate/eliminate the problem?	Portfolios would still be reconciled on a regular basis, but at a frequency which would be more appropriate depending on the different type of counterparties.
Which technical option is the	Option 2 is preferred as it better reflects the capabilities and risks of

preferred one? Explain briefly.	each category of counterparty.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Apply the same requirements for each category of counterparties.
Benefits	More counterparties will undertake a comprehensive review of their portfolio of transactions, as seen by its counterparty, in order to promptly identify any misunderstandings of the key transaction terms.
Disadvantages	This may be a disproportionate requirement for NFCs below the clearing thresholds who transact less but would nevertheless be captured by this requirement.
Regulator's costs	N/A
Compliance costs	NFCs, and especially the smaller ones, do not currently perform portfolio reconciliation at a high frequency. They may have to develop costly systems to ensure compliance.
Indirect costs	N/A
Option 2	To distinguish between (a) FCs and NFCs above the clearing thresholds and (b) NFCs below the clearing thresholds and to have a more lenient approach for counterparties below the clearing thresholds, specifically a requirement to perform the exercise : • quarterly for counterparties having more than 100 OTC derivatives contracts with each other • yearly for counterparties having 100 or less OTC derivatives contracts with each other
Benefits	The burden and costs would be alleviated especially for small companies compared to option 1. It takes into consideration the risks of each type of counterparty. This approach is also in line with the US approach and therefore ensures international consistency.
Disadvantages	Some portfolios will only be reconciled on a yearly basis. This may not incentivise companies to enhance their current process for portfolio reconciliation.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	It will take more time for NFCs below the thresholds to identify potential errors in the key transaction terms, which might lead to dispute.

According to the ISDA Margin Survey as of December 2011, as can be seen in Table 4 above, the differences between small and large firms in terms of the frequency of portfolio reconciliation have decreased from one year to the other, but are still substantial.

The most obvious difference is seen for daily reconciliation, where the number drops from 70.8% (for the largest OTC dealers) to 47% (for all firms, including the largest) therefore suggesting even lower numbers for daily reconciliation for small firms.

A requirement to perform daily or even weekly reconciliation for NFCs below the clearing thresholds departs substantially from current market practice. The compliance costs associated to option 1 would be disproportionate given the systemic relevance of those smaller counterparties; hence option 2 was privileged in the draft RTS.

PORTFOLIO COMPRESSION

(a) Should some counterparties with non-centrally cleared OTC derivative contracts be required to engage in portfolio compression?

Specific objective	Counterparties should reduce their counterparty credit risk for their non-centrally cleared OTC derivative contracts.
Option 1	To require counterparties having more than a set number of non-centrally cleared contracts to perform portfolio compression exercise.
How would achieving the objective alleviate/eliminate the problem?	This option would ensure participation of those counterparties to portfolio compression.
Option 2	To require counterparties having more than a set number of non-centrally cleared contracts to regularly assess whether portfolio compression should be undertaken.
How would achieving the objective alleviate/eliminate the problem?	This option would ensure counterparties assess on a regular basis the relevance of portfolio compression, depending on the structure of their portfolios.
Which technical option is the preferred one? Explain briefly.	Option 2 is the preferred option as portfolio compression may not always be possible or appropriate.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The choice is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To require counterparties having more than a set number of non-centrally cleared contracts to perform portfolio compression exercise
Benefits	This approach would ensure the reduction of counterparty credit risk for counterparties that have a relevant portfolio of non-centrally cleared contracts.
Disadvantages	Portfolio compression may not be appropriate for some OTC derivative contracts.
Regulator's costs	N/A
Compliance costs	Costs involved in ensuring that the exercise is carried out.

Indirect costs	N/A
Option 2	To require counterparties having more than a set number of non-centrally cleared contracts to regularly assess whether portfolio compression should be undertaken.
Benefits	The analysis would be mandatory and counterparties would assess when compression is appropriate.
Disadvantages	Counterparties may not be objective when conducting the assessment, to avoid participating in portfolio compression.
Regulator's costs	N/A
Compliance costs	Cost of performing the analysis and performing compression when appropriate.
Indirect costs	N/A

Portfolio compression consists in the termination or replacement of off-setting trades. Those trades are replaced by a smaller amount of new trades with an equivalent risk profile. This technique was introduced in 2003, with first cycles of portfolio compression on interest-rate swaps. Companies now also provide services to compress portfolios of credit default swap (CDS).

The amounts of nominal reduction already achieved by portfolio compression are significant. For example on interest-rate swaps, $45tr[18] of nominal amounts were terminated by portfolio compression during the first semester of 2012. In a recent publication, ISDA estimated that without portfolio compression, the size of the interest-rate swap market would be 30% larger[19].

According to ISDA's response to the CP, clearing and compression have reduced the size of the CDS market by 75%.

In terms of benefits, portfolio compression is an efficient way to reduce counterparty credit risk and operational risk: it was therefore added to the draft RTS on risk-mitigation techniques for OTC derivatives not cleared with CCPs.

For the purpose of drafting the RTS on portfolio compression, ESMA contemplated the following alternative: either to mandate portfolio compression at a pre-defined frequency for all market participants (Option 1), or to encourage this practice by requiring the largest institutions to have procedures in order to analyse the relevance of such an exercise (Option 2).

ESMA recognises that the efficiency of portfolio compression is strongly related to the level of interconnection between counterparties, and to the market exposure relative to the notional exposure. Such an exercise would not be relevant for counterparties having a limited number of transactions with each other, as there would be few off-setting trades. For example, non-financial counterparts using OTC Derivatives to mitigate risks related to commercial activity or treasury financing are likely to hold those contracts until maturity, so they will not be eligible to portfolio compression.

[18] TriOptima

[19] "Interest rate swaps compression: A progress report" ISDA Study, February 2012

Moreover, even for counterparties having a substantial amount of OTC derivatives outstanding with each other, portfolio compression is not always adapted for various reasons stated in the responses to the CP such as:

- The costs associated with the replacement of off-setting trades. For example, one respondent estimated this cost to be around 3 bps per trade for an interest-rate swap;
- The fact that portfolio compression processes are not available or suitable to some types of contract or asset class (e.g. short tenor products or equity derivatives).

Acknowledging that in some cases, the costs of performing portfolio compression will outweigh its benefits, it should not generally be required. These elements justify the choice of option 2.

DISPUTE RESOLUTION

(a) What length of time should the procedures cover when there is a dispute concerning an OTC Derivative contract and it is not resolved with a certain time period?

Specific objective	To ensure disputes are resolved in a timely manner.
Option 1	Procedures shall be agreed by the counterparties to deal with disputes that are not resolved in a timely manner.
How would achieving the objective alleviate/eliminate the problem?	This approach would enable counterparties to develop the procedures over a flexible time period if there is a disagreement.
Option 2	Procedures shall be agreed by the counterparties to deal with disputes that are not resolved in a timely manner, and procedure shall be agreed by the counterparties to deal with disputes that are not resolved within 5 business days.
How would achieving the objective alleviate/eliminate the problem?	This approach would ensure flexibility for the counterparties and still ensure that when a dispute is not resolved within a specified time period a specific approach is agreed upon.
Which technical option is the preferred one? Explain briefly.	Option 2 is the preferred option as it provides flexibility but still ensure a consistent time period for all.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Procedures shall be agreed by the counterparties to deal with disputes that are not resolved within a timely manner.
Benefits	Flexibility for the counterparties to agree on a procedure without strict timing constraints.
Disadvantages	It is not ensured that disputes are solved in a certain period of time.
Regulator's costs	N/A
Compliance costs	Set up of procedures by counterparties.
Indirect costs	N/A
Option 2	Procedures shall be agreed by the counterparties to deal with disputes that are not resolved in a timely manner, and procedures shall be agreed by the counterparties to deal with disputes that are not resolved within 5 business days.
Benefits	Combination of flexibility for counterparties when disputes do not exceed a certain time period and ensure a specific treatment is organised when disputes are outstanding for more than this period of time.
Disadvantages	Pressure for counterparties to resolve the dispute by 5 business days.
Regulator's costs	N/A
Compliance costs	Set up of procedures by counterparties.
Indirect costs	N/A

MARKET CONDITIONS PREVENTING MARKING-TO-MARKET AND CRITERIA FOR MARKING-TO-MODEL

(a) What is the most appropriate way to ensure that mark-to-market is used?

Specific objective	To ensure marking-to-market is applied when market conditions allow.
Option 1	To consider that marking-to-market is prevented when the market is inactive.
How would achieving the objective alleviate/eliminate the problem?	When the market is inactive, no market input can be used to mark-to market.
Option 2	To consider that marking-to-market is prevented when the market is inactive or when the range of reasonable fair values estimates is significant and probabilities of the various estimates cannot be reasonably assessed.
How would achieving the objective alleviate/eliminate the problem?	The definition of market conditions preventing marking-to-market is broadened and encompasses the situation where markets are active but market data may not be used in a reliable manner.
Which option is the preferred one? Explain briefly.	Option 2 is preferred as the definition reflects the fact that even when the market is active, market data may not be used.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To consider that marking-to-market is prevented when the market is inactive.
Benefits	The definition is simple.
Disadvantages	This option is not complete and other market conditions may prevent the use of marking-to-market.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	N/A
Option 2	To consider that marking-to-market is prevented when the market is inactive or when the range of reasonable fair values estimates is significant and probabilities of the various estimates cannot be reasonably assessed.
Benefits	This definition is more complete as it reflects the fact that even when the market is active, the conditions may prevent the use of market input as it is not reliable.
Disadvantages	This option is more complex as it requires reviewing the range of fair values estimates.
Regulator's costs	N/A

Compliance costs	N/A
Indirect costs	N/A

ACCESS TO A TRADING VENUE

(a) What would be the best approach to define the RTS on liquidity fragmentation?

Specific objective	To achieve an appropriate level of consistency in the interpretation of liquidity fragmentation as an issue for consideration in the assessment of CCPs' requests to access a new venue.
Option 1	To define measures which would need to be in place in order to prevent liquidity fragmentation.
How would achieving the objective alleviate/eliminate the problem?	Such an approach would set a clear standard by which to judge *ex ante* whether new CCP applications for access would cause liquidity fragmentation.
Option 2	To define liquidity fragmentation as a concept but to leave open the definition of measures which might be used to prevent it.
How would achieving the objective alleviate/eliminate the problem?	Such an approach would leave greater flexibility to national authorities to interpret the rules.
Which option is the preferred one? Explain briefly.	Option 1 appears preferable on the basis that CCPs may often be seeking access on a cross-border basis, and therefore that a consistent approach across the EU will be particularly important.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To define measures which would need to be in place in order to prevent liquidity fragmentation.
Benefits	Provides a clear and unambiguous benchmark to meet in order to demonstrate that access by a CCP would not cause liquidity fragmentation. Ensures a more consistent interpretation across the EU.
Regulator's costs	A more prescriptive approach may imply slightly lower costs for regulators since there would be less analysis and subjective judgement required. However, the difference appears unlikely to be significant.
Compliance costs	Compliance costs should be reduced if the RTS ensures a consistent interpretation of the rules across the EU.
Indirect costs	N/A
Option 2	To define liquidity fragmentation as a concept but to leave open the definition of measures which might be used to prevent it.
Benefits	Omitting any definition of the measures to be taken to avoid liquidity fragmentation would permit greater flexibility to regulators to interpret the

	rules.
Regulator's costs	This approach may imply slightly higher regulator's costs as it would require more analysis and subjective judgement to implement, with the relevant justification to be provided for.
Compliance costs	The absence of a consistent interpretation across the EU could require CCPs to adopt different approaches to preventing liquidity fragmentation in different jurisdictions.
Indirect costs	N/A

Monetary value: It would be very difficult to assign a specific monetary value to the cost and benefits of the option described above, as there is very significant uncertainty over i) the extent to which CCPs will seek access to new venues under EMIR; ii) the approaches they will take to addressing the problem of liquidity fragmentation; and iii) whether a highly specified requirement would prevent CCPs from requesting access or impose higher compliance costs on firms as they put in place costly measures to prevent liquidity fragmentation.

CCP REQUIREMENTS DRAFT RTS AND ITS

CCP COLLEGE

(a) Should the most relevant currencies be determined relatively to the CCP activity in a particular currency or of the relevance of the CCP activity for a particular currency?

Specific objective	Ensuring that the central banks of the most relevant Union currencies are adequately represented in the college.
Option 1	The relevance is determined relatively to the CCP activity in a particular currency.
How would achieving the objective alleviate/eliminate the problem?	Defining the percentage of the total CCP activity in a particular currency above which the currency would be considered one of the most relevant. This is set as 10% with maximum 3 central banks admitted as central banks of issuance of the most relevant currency.
Option 2	The relevance is determined on the basis of the total activity of CCPs in a particular currency.
How would achieving the objective alleviate/eliminate the problem?	The relevance is determined in absolute value, so that after a certain activity by a CCP in a particular union currency is reached that currency would be considered relevant.
Which option is the preferred one? Explain briefly.	Option 1. It will determine a limited number of central banks of issue consistently with the participation of other authorities.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA.

Impacts of the proposed policies:

Option 1	The relevance is determined relatively to the CCP activity in a particular currency.
Benefits	It will determine stable and consistent criteria for college participation.
Disadvantages	It will not provide for flexibility and central banks will not have the discretion to participate in a college after a certain level is reached.
Regulator's costs	Lower than under option 2 given the limited number of central banks participating in the college and the stability of the participation.
Compliance costs	N/A. It will be indifferent for CCPs which criteria is adopted.
Indirect costs	Information sharing with central banks that do not have right to participate, but interested in receiving certain information would need to be established.
Option 2	The relevance is determined on the basis of the total activity of CCPs in a particular currency.
Benefits	It will add flexibility, leaving central banks with the discretion to participate in a college after a certain level is reached.
Disadvantages	It will not determine stable and consistent criteria for college participation.
Regulator's costs	Higher in view of the larger and flexible college composition.
Compliance costs	N/A. It will be indifferent for CCPs which criteria is adopted.
Indirect costs	N/A

(b) Limited or unrestricted college participation?

Specific objective	The practical arrangements for colleges shall be designed in such a way as to promote the effective and orderly functioning of the college in order to facilitate with the exercise of the tasks as specified in EMIR.
Option 1	To prescribe in a detailed manner the participation of the college members.
How would achieving the objective alleviate/eliminate the problem?	This approach ensures a comparable structure and therefore consistency amongst EU college participation. The structure would ensure that the college size remains effective at making decisions.
Option 2	To enable unrestricted access to the college as long as the participants have a mandate under EMIR.
How would achieving the objective alleviate/eliminate the problem?	This approach ensures that college participation remains flexible and enables any authority with a relevant mandate to participate in the college.
Which option is the preferred one? Explain briefly.	A more flexible approach, as described in option 2, is preferred to ensure that college participation is not limited for authorities with a relevant mandate under EMIR.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To prescribe in a detailed manner the participation of the college members.
Benefits	Ensures that the college size remains effective and efficient.
Disadvantages	May not enable all the relevant participants with a mandate under EMIR to participate in the college.
Regulator's costs	There may be administrative costs or delays involved in determining who should or should not attend.
Compliance costs	N/A
Indirect costs	N/A
Option 2	To enable unrestricted access to the college as long as the participants have a mandate under EMIR.
Benefits	Ensures that all the relevant participants with a mandate under EMIR are able to participate in the college.
Disadvantages	The college size could become too large and the college may no longer be effective and efficient.
Regulator's costs	The size of the college could be quite large and therefore the practical costs of organising college meetings to accommodate all attendees could become high.
Compliance costs	N/A
Indirect costs	N/A

(c) Specific or more flexible rules for the practical arrangements of a college?

Specific objective	The practical arrangements for college shall be specified in a way as to promote the effective and orderly functioning of the college in order to facilitate with the exercise of the tasks as specified in EMIR.
Option 1	To prescribe in a detailed manner the working rules of the college and its members.
How would achieving the objective alleviate/eliminate the problem?	Specific rules would ensure that the roles and responsibilities of the college participants are defined and that the overall objectives of the college are able to be met in a clear manner.
Option 2	To remain flexible on the working rules of the college.
How would achieving the objective alleviate/eliminate the problem?	A more flexible approach would enable the college to decide on the most appropriate way to achieve the overall objectives of the college.
Which option is the preferred one? Explain briefly.	A more flexible approach, as described in option 2, is preferred to enable the college to decide on the most appropriate working rules and practices to adopt in order to achieve the overall objectives of the college.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To prescribe in a detailed manner the working rules of the college and its members.
Benefits	Ensures that the working rules and practices across EU colleges are harmonised.
Disadvantages	This would not allow flexibility on the working rules of the college.
Regulator's costs	There may be costs involved of producing specific documentation to the college if requested and specified in the RTS.
Compliance costs	There may be costs involved for the CCP of producing specific information to the college if prescribed in the draft RTS.
Indirect costs	N/A
Option 2	To remain flexible on the working rules of the college.
Benefits	Enables EU colleges to decide on the most appropriate way to achieve the objectives of the college.
Disadvantages	This may lead to inconsistencies in the way working rules and practices across EU colleges are applied.
Regulator's costs	There may be costs involved of producing ad-hoc documentation to the college if not specified in the RTS.
Compliance costs	There may be costs involved for the CCP of producing ad-hoc information to the college if not prescribed in the RTS.
Indirect costs	N/A

RECOGNITION OF THIRD COUNTRY CCPs

(a) What is the best approach for determining the information to be sent by a third country CCP for recognition?

Specific objective	Ensuring that ESMA has the relevant information to assess the relevant criteria for a third country CCP to be recognised.
Option 1	ESMA receives evidence from the CCPs that in complying with third country requirements, EMIR and the relevant RTS and ITS are respected.
How would achieving the objective alleviate/eliminate the problem?	Requiring third country CCPs to send a comparison table of their internal rules, the third country rules and the EMIR and RTS/ITS requirements.
Option 2	ESMA does not assess whether the third country CCPs in complying with the third country regime also complies with EMIR and relevant RTS and ITS.
How would achieving the objective alleviate/eliminate the problem?	Requiring evidence of the effective compliance of the CCP with the third country regime and on the actual implementation of these requirements.
Which option is the preferred one? Explain briefly.	Option 2 is the preferred one because it will not duplicate the equivalence assessment by the European Commission and the supervisory role of the third country competent authority.

Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option is the sole responsibility of ESMA, under the constraints imposed by EMIR that specify that the equivalence assessment is made by the Commission and therefore it cannot be replicated during the recognition process.

Impacts of the proposed policies:

Option 1	ESMA receives evidence from the CCPs that in complying with third country requirements, EMIR and the relevant RTS and ITS are respected.
Benefits	It gives greater certainty over the fulfilment of the overall objectives of the recognition process: no market disruption, no regulatory arbitrage, investor protection.
Disadvantages	It risks duplicating the work already conducted under the equivalence assessment by the European Commission.
Regulator's costs	Higher costs for ESMA in making its assessment.
Compliance costs	Higher compliance costs for the CCP to produce the relevant material and to ensure compliance with two regimes.
Indirect costs	Higher barriers to entry the European market will limit competition with an overall higher cost for the society.
Option 2	ESMA does not assess whether the third country CCPs in complying with the third country regime also complies with EMIR and relevant RTS and ITS.
Benefits	It ensures that the relevant criteria are fulfilled without duplicating efforts.
Disadvantages	N/A
Regulator's costs	Lower regulator costs in producing the assessment.
Compliance costs	Lower compliance costs in making the information available.
Indirect costs	Lower barriers to entry.

ORGANISATION REQUIREMENTS

(a) Prescriptive rules or criteria-based approach?

Specific objective	The governance arrangements shall be designed in such a way as to promote the sound and prudent management and thereby support financial stability and foster fair and efficient markets. Robust governance arrangements should be applied in a consistent and transparent manner across CCPs. Standards on governance arrangements should be sufficiently flexible to cater for the various governance and reporting structures employed by CCPs, to allow for future developments and new risks to be dealt with appropriately. It should be readily ascertainable as to whether a particular CCP is in compliance with the applicable standards.
Option 1	To prescribe in a detailed manner the key elements of its organisational structure, key functions and reporting lines.
How would achieving the objective alleviate/eliminate the problem?	Such approach ensures a comparable structure and therefore a level playing field across CCPs. It may be easier for competent authorities to assess compliance with such standards; exactly the same 'tests' would apply to every CCP.
Option 2	To adopt criteria to take in consideration by the CCP to determine the governance of the CCP in order to achieve the main objectives set forth in Article 24 EMIR.
How would achieving the objective alleviate/eliminate the problem?	A criteria based approach is more flexible and would allow the CCP, given its business strategy and the services it offers, to find appropriate governance structures that are supposed to reach the main objective of a sound and prudent management against the risk the CCP is exposed to.
Which option is the preferred one? Explain briefly.	A criteria based approach is preferred in order to ensure that certain key elements of sound and prudent management are implemented that support the objectives of central clearing.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To prescribe in a detailed manner the key elements of its organisational structure, key functions and reporting lines.
Benefits	Such approach promotes a level playing field between EU CCPs.
Disadvantages	The option lacks flexibility. The CCP will not be capable of adjusting its gov-

	ernance model to its business model and the structure it might be part of.
Regulator's costs	Monitoring compliance with more detailed rules should not entail material on-going costs for the regulator once the assessment framework for assessing compliance with the organisational requirements is established. The regulator could implicitly incur additional costs if the detailed rules were inappropriate for the specific risk profile and left little flexibility to apply more suitable requirements.
Compliance costs	A CCP may need to expend resources amending its governance framework to comply with the RTS. Compliance costs will embrace costs for documentation and provision of legal expertise necessary to assess the soundness of its governance arrangements.
Indirect costs	N/A
Option 2	To adopt criteria to take in consideration by the CCP to determine the governance of the CCP in order to achieve the main objectives set forth in Article 24 EMIR.
Benefits	A criteria based approach is inherently flexible, setting a high level framework against which the organisational arrangements of CCPs must comply.
Disadvantages	It might leave too much flexibility to CCPs with possible negative impacts on the sound and prudent management of them.
Regulator's costs	It may be more difficult for a regulator to assess the CCPs' on-going compliance with criteria based standards, since CCPs could adopt very different approaches to compliance.
Compliance costs	A CCP may need to expend resources amending its governance framework to comply with the standards prescribed in the RTS. Compliance costs will embrace costs for documentation and provision of legal expertise necessary to assess the soundness of its governance arrangements.
Indirect costs	N/A

(b) Designation of chief risk, chief compliance and chief IT officer

Specific objective	In order to ensure sound and prudent management, the CCP should appoint a chief risk-, compliance- and IT officer.
Option 1	To require the CCP to appoint a chief risk, compliance and IT officer.
How would achieving the objective alleviate/eliminate the problem?	Dedicated functions, resources and personnel with respect to risk, compliance and IT strengthen the key functions with respect to governance arrangements.
Option 2	To leave flexibility on how the risk, compliance and IT functions are exercised.
How would achieving the objective alleviate/eliminate the problem?	The implementation of functions with respect to risk, compliance and IT will meet the respective objectives. Staff and resources could be allocated as appropriate.
Which option is the preferred one? Explain briefly.	Option 1 is preferred as the reliability of core functions depends on clearly defined responsibility and designated personnel with clearly designated responsibilities.
Is the policy chosen within the sole re-	The policy response chosen is the responsibility of ESMA

sponsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To require the CCP to appoint a chief risk, compliance and IT officer.
Benefits	Core functions with respect to governance are equipped with designated staff with clear responsibilities. Ensuring sound and prudent risk management and appropriate control over key operational issues by dedicated staff (especially chief risk officer) on a continuous basis would be a valuable complement to the supervision exercised by competent authorities and as such might increase its effectiveness as well as strengthen the overall resilience of a CCP.
Disadvantages	In a group structure, sharing resources can create synergies and this would not be possible under this option.
Regulator's costs	N/A
Compliance costs	Costs for designated staff; CCPs cannot rely on personnel within the group.
Indirect costs	N/A
Option 2	To leave flexibility on how the risk, compliance and IT functions are exercised.
Benefits	Market entry might be easier for smaller CCPs with less human resources.
Disadvantages	It might threaten the effectiveness and overall resilience of a CCP, which might not have the relevant resources in key functions. If shared among other group entities it might give rise to conflicts of interest.
Regulator's costs	N/A
Compliance costs	Costs for implementing respective functions and attribute them with respective human resources.
Indirect costs	N/A

For the purpose of drafting the RTS on Organisational requirements, ESMA considered the costs and benefits of requiring CCPs to appoint a dedicated chief risk, compliance and IT officer (Option 1), or to leave the CCP with the flexibility to decide how those functions are organised (Option 2).

Option 1 would enable the CCP and the competent authority to fully rely on the dedicated resources, to assess the time dedicated to the CCP activity and to prevent possible conflicts of interest.

Ensuring sound and prudent risk management and appropriate control over key operational issues by dedicated staff (especially chief risk officer) on a continuous basis would be a valuable complement to the supervision exercised by competent authorities and as such might increase its effectiveness as well as strengthen the overall resilience of a CCP.

In order to assess the cost of mandatory dedicated resources, ESMA estimated the average salary of an experienced Chief Compliance Officer to be between the range of €80,000 to €180,000 per year, with wages highly connected to the geographical location. The cost of dedicated chief risk and chief IT would be slightly lower, within the range of €70,000 to €140,000, leading to an aggregated cost for the three

functions of €220,000 to €460,000[20]. In any case, most CCPs already have dedicated staff for these functions, so the overall impact is unlikely to be significant.

Given the systemic relevance of CCPs, ESMA considers the benefits of appointing a dedicated chief risk, compliance and IT officer to be sufficiently relevant relative to the costs; hence option 1 was chosen in the draft RTS.

(c) Should the CCP be required to have dedicated staff for all its functions?

Specific objective	Appropriate determination of a degree to which the CCP allocates the staff to its business activity is necessary in order to ensure the best execution of the core functions of CCPs.
Option 1	A CCP should be required to have dedicated staff for all its functions, which can be performed under an outsourcing agreement.
How would achieving the objective alleviate/eliminate the problem?	Dedicated own staff for all business functions would enable the CCP to execute its operations in a safe manner and fully independently from the whole group structure.
Option 2	A CCP should be allowed to rely on staff at the group level for some of its functions.
How would achieving the objective alleviate/eliminate the problem?	General permission for the CCP to use the staff at the group level gives more organisational flexibility and allows the CCP to adjust its structure and resources to the actual business purposes. In that way, the CCP could allocate the dedicated staff only for those functions that are considered to be the most essential.
Which option is the preferred one? Explain briefly.	Option 1 is preferred as it ensures a safer organisational model and an adequate level of the independence of the CCP within a corporate structure.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	A CCP should be required to have dedicated staff for all its functions.
Benefits	Covering the whole scope of CCPs functions by dedicated own human resources enhances corporate self-reliance and therefore fulfils the need for the uninterrupted provision of clearing services
Disadvantages	The obligation to ensure dedicated staff to all functions may constitute a more significant burden for smaller CCPs and, as a consequence, reduce

[20]Robert Walters salary survey 2012 available at

http://content.yudu.com/A1vf6s/RobertWaltersSal2012/resources/index.htm?referrerUrl=http%3A%2F%2Fwww.robertwalters.co.uk%2Fcareer-advice%2Fsalary-survey.html

	their competitive power.
Regulator's costs	Ensuring distinct staff for the CCP operation should not entail material on-going costs for the regulator once the proposed solution is implemented.
Compliance costs	The related costs are high as the CCP would have to permanently maintain a developed staff structure without possibility of recourse to the group's personnel. However, costs may be reduced, to a certain extent, by the way of outsourcing arrangements.
Indirect costs	N/A.
Option 2	A CCP should be allowed to rely on staff at the group level for some of its functions.
Benefits	Market entry for smaller CCPs with less human resources would be easier. Respective functions in a group structure could create synergies. There would be more organisational flexibility for all CCPs.
Disadvantages	With no dedicated staff it would be more difficult to ensure the proper level of independence within a larger organisation.
Regulator's costs	Not requiring distinct staff for the CCP operation should not entail material on-going costs for the regulator once this solution is implemented.
Compliance costs	The level of such costs would be easier to manage by the CCP as it could decide itself whether and how much own staff it needs to accomplish its functions effectively.
Indirect costs	Indirect costs may arise in the case the CCP fails to provide its core services due to the insufficiency of own resources.

(d) Should disclosure apply as a principle of full disclosure of all facts demonstrating that the CCP complies with its legal obligations?

Specific objective	Disclosure of arrangements necessary to comply with organisational requirements might help understand whether and how a CCP meets respective legal obligations.
Option 1	As a principle, a CCP should disclose all material necessary to understand how it meets its legal obligations.
How would achieving the objective alleviate/eliminate the problem?	This approach would help to ensure that each interested party would have a full picture of the CCPs operations.
Option 2	A CCP should disclose all key aspects of its operations to the public to the extent that they do not breach business secrecy or put at risk the CCP.
How would achieving the objective alleviate/eliminate the problem?	This approach would help to ensure that each relevant party would be put in a position to understand what the CCP does in order to meet its legal obligations relevant with respect to its relation to the respective party.
Which option is the preferred one? Explain briefly.	Option 2 is preferred, as it ensures the protection of commercial sensitive information and information that may put at risk the CCP.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	Disclosure of arrangements necessary to comply with organisational requirements might help understand whether and how a CCP meets respective legal obligations.
Benefits	On the basis of a full disclosure principle, the peer pressure to meet the legal obligations is strong. This could enhance the sound and prudent management of the CCP.
Disadvantages	Too wide disclosure of information might constitute the additional social cost as it will inherently decrease the information value.
Regulator's costs	Regulators would have to assess the application of caveats to disclosure.
Compliance costs	High, as the CCP would have to disclose extensive files and filter confidential information.
Indirect costs	
Option 2	A CCP should disclose all key aspects of its operations to the public to the extent that they do not breach business secrecy or put at risk the CCP.
Benefits	It ensure a wide disclosure and the flexibility to CCPs to disclose additional information to clearing members and clients.
Disadvantages	It leaves to the CCPs and competent authorities to determine the information that might not be disclosed or disclosed only to clearing members and clients. Additional harmonisation of practices might be needed.
Regulator's costs	Costs would incur in the course of regular supervision.
Compliance costs	Compliance costs for preparation of documentation but less than for option 1.
Indirect costs	N/A

RECORD KEEPING

(a) Adequacy of the data recorded for the aim of reconstruction of the CCP's clearing process

Specific objective	The information and data recorded should be adequate to conduct a comprehensive and accurate reconstruction of the CCP's clearing process for each contract and of the transactions that established each position.
Option 1	To specify in a detailed manner the fields of the transaction and position records.
How would achieving the objective alleviate/eliminate the problem?	The data required to be maintained are divided into those concerning each single cleared contract and those concerning each single position. Every contract/position registration reflects the articulation of the accounts' structure of the CCP (clearing members and clients, if known to the CCP) and gives information on the financial instrument of the contract/position and the venue in which the contract is concluded.
Option 2	To provide CCPs with the flexibility to identify the set of fields on transaction and position records to be maintained.
How would achieving the objective alleviate/eliminate the problem?	The requirement is to record data separately for transactions and positions, in compliance with the provision in Article 29 of EMIR, but no further details are indicated by the standard. This implies that CCPs are free to decide what level of granularity to provide within the records.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred one as it will ensure an harmonised approach and comparison of data among different CCPs.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	To specify in a detailed manner the fields of the transaction and position records.
Benefits	It would be easier for competent authorities to reconstruct the clearing process as well as the transactions that established each position. Benefits may also derive for CCPs, as the data stored could prove useful to govern the clearing process and to reconstruct it at a subsequent time, for internal purposes.
Disadvantages	The option lacks flexibility, CCPs might not be able to leverage on their current IT infrastructure.
Regulator's costs	Any possible change to the existing supervisory practices, as the verification of the CCPs' clearing process, will need to be structured taking into consideration the specific record fields established by the RTS. Consistency with the technical choices taken for TRs is also needed (e.g. the selection of the same uniform internationally accepted standard for financial instrument/trading venue classification), as far as the record keeping of contracts/positions by the CCP concerns the same data set captured by the reporting obligation to the TRs.
Compliance costs	An existing CCP may need to re-architect its IT infrastructure to allow the information to be correctly indexed, searched, maintained, retrieved and destroyed. Resources to be allocated in expanding its storage capacity and amending the procedures that set the type and number of records to keep the costs will be even higher for non-financial companies previously not subject to any requirements.
Indirect costs	There is the possibility of an overlapping with certain information fields due to be reported to TRs and or company law requirements, which are already at the disposal of the authorities.
Option 2	To provide CCPs with the flexibility to identify the set of fields on transaction and position records to be maintained.
Benefits	The wide discretion left to the CCP on the specific details to record allows calibration according to its own internal organisation. This option would still provide a useful level of information on the clearing process, as it obliges CCPs to distinguishing between the transaction and the positions.
Disadvantages	The dataset might be less harmonised and difficult to compare.
Regulator's costs	It may be more difficult (or it may take longer) for a regulator to reconstruct the CCP's clearing process, due to the different sets of information recorded. It leads to less comparability among CCPs. It could make more difficult the reconciliation of data coming from the CCP records and data coming from the TRs.
Compliance costs	CCPs could need to provide additional data at the request of the authority in case the recording of information should prove insufficient for regulatory purposes. The provision of additional information on a non-organised basis could even be more expensive than regular recording and maintenance.
Indirect costs	The absence of consistency and transparency across CCPs may lead to an effect on the competitiveness between CCPs based on the different costs of providing for different sets of record fields.

(b) Adequacy of the data recorded for the aim of reconstruction of the CCP's business

Specific objective	The draft RTS and ITS should require the same set of information and data on the CCPs activities related to their business and internal organisation to be recorded across CCPs, so as to ensure homogeneity of controls when coming to the verification of the CCPs compliance to EMIR.
Option 1	Detailed specification of the fields of the CCP business' records.
How would achieving the objective alleviate/eliminate the problem?	The Record keeping draft RTS indicates a number of specific charts, policies, procedures, minutes, reports, contracts, complaints and other relevant documents to be maintained in each record, which mirror the key aspects of the activity conducted by the CCP in relation to its business and internal organisation, with particular attention to those areas in which precise requirements have been prescribed by EMIR (i.e. the governance).
Option 2	CCPs are free to identify the set of fields on business records to be maintained.
How would achieving the objective alleviate/eliminate the problem?	The Record keeping draft RTS adopts an approach whereby reference is made to those areas in EMIR where specific requirements have been set, however leaving a CCP free to identify the specific documents to be maintained in order to allow demonstrating compliance with EMIR provisions.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred one as it will ensure an harmonised approach and comparison of data among different CCPs.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Detailed specification of the fields of the CCP business' records.
Benefits	It may be easier for competent authorities to assess compliance with the requirements provided by EMIR on several aspects of the CCPs' activity. A more prescriptive approach may also promote greater comparability and transparency across CCPs.
Disadvantages	It may create loopholes. The definition of an exact list of documents, although affirmed as not exhaustive, could induce CCPs to neglect keeping other documents, not included in the same list, that are important for the activity they perform.
Regulator's costs	Any possible change to the existing supervisory practices, as the verification of the CCPs' compliance with the regulation, will need to be structured based on the specific documents required to be recorded.
Compliance costs	An existing CCP may need to expend resources expanding its storage capacity and amending the procedures that set the type and number of records to keep as well as the relative IT equipment.
Indirect costs	Standards prescribed in the RTS may need to be amended when all of the rest of the RTS setting the requirements for CCPs should change. Such indirect costs are thus unavoidable but contained.
Option 2	CCPs are free to identify the set of fields on business records to be maintained.
Benefits	This approach is flexible enough to allow a CCP to best assess what are the most relevant documents attesting the compliance with EMIR, taking into consideration the specific characteristics of its activity.
Disadvantages	Little degree of harmonisation, less comparability and transparency across CCPs.
Regulator's costs	It may be difficult (or it may take longer) for a regulator to assess and/or compare compliance in case this approach is followed. The information/data retained by CCPs could also be not sufficient to allow a complete analysis of the compliance. In case the same regulator supervises more than one CCP, it may face different sets of data/information to process.
Compliance costs	It may be difficult (or it may take longer) for a CCP to assess exactly the right set of data/information to retain to be able to demonstrate its compliance. This could lead, time by time, to the request by the authorities of other information the CCP is expected to record, with costs for the CCP higher than producing information on an organised-basis.
Indirect costs	The absence of consistency and transparency across CCPs, which may have an effect on the competitiveness of a CCP (the different cost to the CCPs, associated with the different substance of the recording).

(c) Frequency of the records with the aim of reconstruction of the clearing process

Specific objective	The information and data should be recorded at a frequency that permits, at any time, the reconstruction of the CCP's clearing process.
Option 1	Specific frequencies for each type of records (transactions,

	positions, business).
How would achieving the objective alleviate/eliminate the problem?	According to the different types of data to record, a CCP is required to make the registration: • for the transaction records, on a close to real-time basis, that is "immediate" in relation to every contract it received for clearing; • for the position records, at the end of each business day; • for the business records, each time a material change in the relevant documents occurs.
Option 2	A CCP is free to identify the frequency of recording.
How would achieving the objective alleviate/eliminate the problem?	A CCP could individually establish the frequency of recording of the required data.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred one as it will ensure a harmonised approach and comparison of data among different CCPs.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the sole responsibility of ESMA.

Impacts of the proposed policies:

Option 1	Specific frequencies for each type of records (transactions, positions, business).
Benefits	As the frequency is pre-defined, certain information is expected to be found in the CCP database, thus without any unjustified time lapse. Accordingly, as all of the useful data are registered at the same time, it is easier for competent authorities to reconstruct the clearing process and to verify the general compliance of the CCP. Moreover, a more thorough frequency of recording at the CCP level could integrate the information the authorities get from TRs.
Disadvantages	The option lacks flexibility and prevents CCPs from adapting the frequency to their internal organisation.
Regulator's costs	Any possible change to the existing supervisory practices, as the verification of the clearing process and of the compliance of CCPs, needs to be structured taking into consideration the frequency of recording established by the draft RTS.
Compliance costs	An existing CCP may need to expend resources amending the procedures that set the frequency of recording as well as the relative IT equipment, whereas the actual internal procedure is less prescriptive.
Indirect costs	It could cause a somewhat generation of useless information (an example of this could be a position/contract on a low-volatile financial instrument that changes at a rate less than the frequency of the recording).
Option 2	A CCP is free to identify the frequency of recording.
Benefits	The CCPs would set the frequency of recording by taking into consideration the characteristics of the activity performed and by assessing the types of data to be recorded according to its internal organisation. This allows a re-

	duction of the costs relating to the record keeping requirements.
Disadvantages	Lack of comparability among CCPs.
Regulator's costs	It may happen that the data needed is not found in the CCP database, at the time it is required by the authority, because it has not been recorded yet.
Compliance costs	CCPs could need to provide additional data at the request of the authority in case the recording of information should prove not up to date. As aforementioned for other purposes, this situation will happen on a non-organised basis and then will probably be even more expensive than regular recording and maintenance.
Indirect costs	The absence of a consistent frequency of recording across CCPs may have an effect on the competitiveness of a CCP (the different cost to the CCPs, associated with the different frequency and thus number of records to be maintained).

Quantitative impact assessment of the draft RTS on record keeping

EMIR requires that CCPs maintain:

- for a period of at least ten years, all the records on the services and activity provided so as to enable the competent authority to monitor the CCP's compliance with the requirements under this Regulation.
- for a period of at least ten years following the termination of a contract, all information on all contracts it has processed. That information shall at a minimum enable the identification of the original terms of a transaction before clearing by that CCP.

These records and information are required by EMIR to be made available upon request to the competent authority, to ESMA and to the relevant members of the ESCB. In light of this framework, in order to ensure consistent application, ESMA is required to develop draft RTS and ITS specifying the details and format of the records and information to be retained.

Counterfactual

The counterfactual in this case relates to the minimal interpretation that could be made of the EMIR text. Records and information that can be clearly demonstrated as necessary for competent authorities to monitor the CCP's compliance and to enable the identification of the original terms of a transaction before clearing would be required. The timescale within which CCPs are required to make records and information available upon request would also be set high and search functionality included only for searches necessary for the core function of monitoring CCP compliance.

Benefits

Greater requirements for record keeping by CCPs may improve the ability of regulators to assess CCP compliance with EMIR, and hence support its objectives. In addition, it can enable the monitoring of the activities and behaviours of clearing members and clients.

Compliance costs

Compliance costs to clearing members would relate to the additional time taken to collect and transmit the extra information in the normal course of business. Compliance costs to CCPs would include the time taken to process and store the extra information received, as well as any additional time taken to respond to information requests from the various authorised bodies due to more frequent or demanding data requirements.

General Requirements

If there is a requirement to re-engineer existing databases to match the prescribed formats, compliance costs would be incurred. However, as specified in the first part of this report, CCPs will need to ensure that they can provide the data in the required format, but are not required to re-engineer their systems for that purpose.

CCPs must already have methods for extracting data from their systems. Adjusting this to ensure it fits with the formatting required by ESMA will imply some extra one-off and on-going costs to CCPs. We estimate the costs to CCPs of updating their reporting system based upon past experience in analogous cases (e.g. those costs faced by multilateral trading facilities to update their systems to cope with new post trade reporting requirements) to derive the following:

	Low	**High**
Average one-off costs per firm (IT development costs)	€8,696	€17,390
Average one-off cost relates to	4 weeks IT time per firm	8 weeks IT time per firm
Average on-going costs per firm	€3,478	€6,957
Average on-going cost relates to	40% of one-off cost	40% of one-off cost
Number of CCPs	18	18
Total one-off costs	€157,000	€313,000
Total annual on-going costs	€63,000	€125,000

Source: data obtained by ESMA from external consultants (i.e. Europe Economics)

Table 5: Costs to CCPs of the draft RTS on record keeping – General requirements

Records required (transaction, position and business)

The proposed records required by ESMA are summarised in the table below:

Record type	**Transaction records**	**Position records**	**Business records**
Approximate number of fields	24	12	427
Frequency of updates required	Any time a change is made to a trade	Daily	Ad hoc (approximated for number per year)

Table 6: Reporting Requirements Proposed by ESMA for Different Areas

The responses to the CCP survey carried out by ESMA relating to records which are kept by CCPs have been used to estimate how the current levels of record keeping compare with those listed in the draft RTS.

The responses to the related questions were collated and then mapped to the criteria given by the articles which refer to the requirements of transactional records, position records and business records. The percentage of CCPs that already record what is required was calculated from the matching for each detail required from the articles. The percentages were then averaged for each article, shown below in the table. Both a strict approach and a more lenient approach towards the matching process were used in order to determine an interval for the percentages, which act as form of a subjective confidence interval. Weighted averages have also been calculated using CCPs total capital and reserves as a proxy to size. These weighted figures provide a more accurate representation of the overall current level of record keeping with respect to that which will be required.

	Non-weighted		Weighted*	
	Low estimate	High estimate	Low estimate	High estimate
Transaction records				
(a) the unit price and price notation, the quantity and quantity notation	76%	82%	67%	67%
(b) the clearing capacity, which identifies whether the transaction was a buy or sale from the perspective of the CCP recording	59%	82%	63%	67%
(c) the instrument identification	53%	82%	62%	67%
(d) the identification of the clearing member , if known to the CCP, and in case of a give-up, the identification of the party that transferred the contract	65%	82%	76%	78%
(e) the identification of the venue where the contract was concluded	0%	53%	0%	58%
(f) the date and time of interposition of the CCP	6%	59%	1%	58%
(g) the date and time of termination of the contract	65%	82%	76%	81%
(h) the terms and modality of settlement	88%	88%	81%	81%
(i) the date and time of settlement or of buy-in of the transaction and to the extent they are applicable of the following details:	29%	59%	26%	72%
(j) the day and the time at which the transaction was originally concluded	24%	71%	15%	72%
(k) the original terms and parties of any contract cleared	59%	76%	65%	80%
(l) the identification of the interoperable CCP clearing one leg of the transaction	6%	41%	2%	30%
Transaction records average	**44%**	**72%**	**44%**	**68%**
Position records				
(a) the identification of the clearing member, of the client, if known to the CCP, and of the interoperable CCP maintaining such position, where applicable	76%	100%	89%	100%
(b) the sign of the position	47%	94%	74%	97%
(c) the daily calculation of the value of the position with records of the prices at which the contracts are valued, and of any other relevant information	6%	18%	0%	14%
(d) the amounts of margins, default fund contributions and other financial resources referred to in Article 43 of Regulation (EU) No 648/2012 [EMIR], called by the CCP and the corresponding amount actually posted by the clearing member at the end of day and changes to that amount that may occur intra-day, with respect to each single clearing member and client account if known to the CCP	35%	47%	40%	42%
Position records average	**41%**	**65%**	**51%**	**63%**
Business records				
(a) the organisational charts for the board and relevant committees, clearing unit, risk management unit, and all other relevant units or divisions	10%	60%	4%	55%
(b) the identities of the shareholders or members, whether di-	10%	30%	11%	16%

rect or indirect, natural or legal persons, that have qualifying holdings and the amounts of those holdings				
(c) the documents attesting the policies, procedures and processes required under Chapter III and Article 29	0%	20%	0%	5%
(d) the minutes of board meetings and, if applicable, of meetings of sub-committees of the board and of senior management committees	30%	40%	7%	18%
(e) the minutes of meetings of the risk committee	20%	70%	5%	42%
(f) the minutes of consultation groups with clearing members and clients, if any	0%	30%	0%	7%
(g) internal and external audit, risk management reports, compliance reports, and reports by consultant companies, including management responses	30%	70%	27%	47%
(h) the business continuity policy and disaster recovery plan, required under Article 17	0%	10%	0%	4%
(i) the liquidity plan and the daily liquidity reports, required under Article 32	0%	10%	0%	4%
(j) records reflecting all assets and liabilities and capital accounts as required by Regulation (EU) 648/2012	70%	90%	84%	99%
(k) complaints received, with information on the complainant's name, address, and account number the date the complaint was received the name of all persons identified in the complaint a description of the nature of the complaint the disposition of the complaint, and the date the complaint was resolved	10%	20%	4%	5%
(l) records of any interruption of services or dysfunction, including a detailed report on the timing, effects and remedial actions	10%	30%	4%	8%
(m) records of the results of the back and stress tests performed	10%	30%	4%	47%
(n) written communications with competent authorities, ESMA and the relevant members of the ESCB	10%	10%	1%	1%
(o) legal opinions received in accordance with RTS on organisational requirements	0%	0%	0%	0%
(p) where applicable, documentation regarding interoperability arrangements with other CCPs	0%	30%	0%	16%
(q) the information under Article 10, paragraph 1(f) and paragraph 4(c)	0%	0%	0%	0%
(r) the relevant documents describing the development of new business initiatives	0%	0%	0%	0%
Business records average	**12%**	**31%**	**8%**	**21%**

** Weighted by size of CCPs Capital and Reserves*

Note: Non-weighted results for transaction records and position records consist of observations from 17 CCPs whilst the weighted results for the same records are producing from 16 CCPs (since one did not provide an estimate of capital in its response). For business records, the responses were less robust and therefore the responses of only 10 CCPs have been considered (both for weighted and non-weighted).

Table 7: Records already kept by CCPs

Hence, transaction and position records are already being held by CCPs for many of the fields requested by ESMA. For transaction records, gaps appear to be on the identification of the venue where the contract was

concluded, the date and time of interposition of the CCP and the identification of the interoperable CCP clearing one leg of the transaction. For position records, the main gaps appear to be on the daily calculation of the value of the position and the amounts of margins, default fund contributions and other financial resources.

Based on an estimated €150,000 one-off cost and €25,000 annual cost for the delivery of 10 standard data fields at a sustained rate of 50 enquiries per minute (26 million transactions per annum), we can estimate the costs of updating the database system to cope with the additional transaction records as follows:

	Approximate number of fields	Current availability		Average additional fields required per CCP	
		Low estimate	High estimate	Low estimate	High estimate
(a) the unit price and price notation, the quantity and quantity notation	4	67%	67%	1.3	1.3
(b) the clearing capacity, which identifies whether the transaction was a buy or sale from the perspective of the CCP recording	2	63%	67%	0.7	0.7
(c) the instrument identification	1	62%	67%	0.3	0.4
(d) the identification of the clearing member , if known to the CCP, and in case of a give-up, the identification of the party that transferred the contract	2	76%	78%	0.4	0.5
(e) the identification of the venue where the contract was concluded	1	0%	58%	0.4	1.0
(f) the date and time of interposition of the CCP	2	1%	58%	0.8	2.0
(g) the date and time of termination of the contract	2	76%	81%	0.4	0.5
(h) the terms and modality of settlement	2	81%	81%	0.4	0.4
(i) the date and time of settlement or of buy-in of the transaction and to the extent they are applicable of the following details:	3	26%	72%	0.8	2.2
(j) the day and the time at which the transaction was originally concluded	2	15%	72%	0.6	1.7
(k) the original terms and parties of any contract cleared	2	65%	80%	0.4	0.7
(l) the identification of the interoperable CCP clearing one leg of the transaction	1	2%	30%	0.7	1.0
Total	**24**			**7.3**	**12.4**

Source: data obtained by ESMA from external consultants (i.e. Europe Economics)

Table 8: Additional Transaction Records Required

Across 18 CCPs, this would therefore imply a one-off cost of €2-€3.3 million and on-going costs of €0.3-€0.6 million to maintain the larger transaction database. This does not take account of the cost of collecting this additional data.

Retention and inspection of records

The cost of storing data depends significantly on the method of storage and accessibility of the information. Under the counterfactual, low accessibility of the data would be required over the obligatory 10 year storage period. CCPs typically currently archive data in offsite storage, implying a response time to regulatory queries of a number of days. Although a number of CCPs do not currently store archived records for this whole 10 year period, the cost comes under EMIR, so is not considered here.

ESMA has chosen to make only records less than six months old subject to a "real-time access" requirement: this seems the main source of incremental cost over and above EMIR.

This requirement may imply additional costs to CCPs if they do not hold it in an accessible way in the current normal course of their business. Some CCPs currently only have real time information available online for 5 days and for 30 days post-settlement, so they would not be able to comply with this requirement using their current system. No respondents to the consultation provided details of the relative cost of making data available in real time compared to holding it in archives.

The cost of storage is dependent on the possible search criteria required for the stored data. Additionally, the level of granularity in current CCP record-keeping will be an obvious factor in determining the extent of any incremental investment in IT infrastructure by CCPs or the counterparties dealing with CCPs (and the ultimate source of the raw data).

Regulatory costs

Any increase in data collection requirements above the minimum will increase the amount of data regulators have available to analyse; this may require matching increases in time spent evaluating this data and possibly in IT costs. Such costs are likely to be largely or wholly attributable to EMIR rather than to the draft RTS determining the details of the records.

Market and indirect effects

If additional information requirements are costly to clearing members or CCPs, this is likely to increase transaction costs. Such cost increases are likely to be relatively small relative to existing operational spending, certainly once net of EMIR's impact, unless the information requirements impact upon the informational advantages of counterparties which might lead to lower trading activity. Trading activity would not be lower due to the cost impact, rather the requirement to maintain and make available certain business records could be commercially sensitive and hence dissuasive.

BUSINESS CONTINUITY

(a) Should an exact time limit for the recovery of services be prescribed or should it be left to the CCPs on the basis of specific criteria?

Specific objective	To ensure that CCPs achieve a timely recovery of their services.
Option 1	Prescribe a maximum down time.
How would achieving the objective alleviate/eliminate the problem?	This approach provides a clear goal for the CCPs and the stakeholders such as regulators to design and maintain the Business Continuity Policy (BCP). It also allows for maximum harmonisation between CCPs and regulators in assessing the BCP arrangements.
Option 2	Prescribe criteria for the maximum down time.
How would achieving the objective alleviate/eliminate the problem?	This approach provides more flexible and tailor made BCP arrangements. This can, for example, be useful when considering the costs of continuing critical services compared to the costs of continuing all services.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred one, given that it will ensure a consistent application of the standard across CCPs. Flexibility in this respect will not help better manage the risks CCPs are exposed to. On the contrary, it could increase the overall cost for the system.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The option chosen is the responsibility of ESMA after consultation of the members of the ESCB.

Impacts of the proposed policies:

Option 1	Prescribe a maximum down time.
Benefits	The benefits include transparency and comparability across CCPs. It is straight forward, has limited complexity and increases the soundness of CCPs and market reliability.
Disadvantages	Might be difficult to respect the provision in practice under particularly stressed market situations.
Regulator’s costs	It facilitates regulators expectations and enforceability.
Compliance costs	Should be limited in view of the fact that the CCPs already implement similar standards today.
Indirect costs	N/A
Option 2	Prescribe criteria for the maximum down time.
Benefits	The approach is more flexible. It covers the CCP’s specific risk related to its business and the approach is adaptable to cover new developments and risks.
Disadvantages	Lack of comparability among CCPs.
Regulator’s costs	Higher costs in the definition of strict and harmonised criteria. Higher costs in assessing that the criteria are applied in a consistent manner.

Compliance costs	Unknown, possibly lower because of the flexibility for CCPs to adapt to their business.
Indirect costs	N/A

In order to ensure that CCPs are able to guarantee a timely recovery of services following a disruption of services, ESMA has contemplated two possibilities: to prescribe a maximum recovery time (Option 1), or to prescribe criteria for the maximum recovery time (Option 2).

The first approach provides a clear goal for the CCPs and the stakeholders such as regulators to design and maintain the BCP. It also allows for maximum harmonisation between CCPs and regulators in assessing the BCP arrangements. The benefits also include transparency, simplicity, soundness of CCPs and market reliability. It facilitates regulators expectations and enforceability.

This second approach allows more flexible and tailor-made arrangements which could be useful, for example, when considering the costs of continuing critical services compared to the costs of continuing all services.

According to the responses to a CCP survey gathered by ESMA[21], 2 CCP out of 3 are already operating with an objective to recover from operational disruptions within 2 hours, while the remaining CCPs generally reported recovery time of 4 hours.

Given that most CCPs already implement similar standards, the compliance costs should not be substantial compared to the benefits of option 1. Hence the draft RTS prescribes that a CCP shall ensure recovery of its critical functions within 2 hours, and leaves to the CCP the determination of recovery times for other functions.

[21] Survey performed in 2012 among 15 European CCPs

(b) **Should a CCP be allowed to maintain: 1) one secondary site for both business and IT operations or 2) a secondary site for business services as well as a secondary site for IT services.**

Specific objective	Ensure the continuity of business services and IT services to the maximum extent possible.
Option 1	Allow the CCP to combine business continuity with IT continuity.
How would achieving the objective alleviate/eliminate the problem?	The standard would be in line with international standards.
Option 2	The CCP should maintain a secondary site for business services and one for IT services.
How would achieving the objective alleviate/eliminate the problem?	The standard would be stricter than the international standard and improve the BCP of the CCP.
Which option is the preferred one? Explain briefly.	Option 2. This is considered common practice by CCPs within the EU.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy chosen is the responsibility of ESMA after consultation of the members of the ESCB.

Impacts of the proposed policies:

Option 1	Allow the CCP to combine business continuity with IT continuity.
Benefits	It is less complex.
Disadvantages	Lower level of security in the case of a failure of systems.
Regulator's costs	Limited but lower impact as BCP arrangements will be easier to assess.
Compliance costs	Lower costs than option 2.
Indirect costs	N/A
Option 2	The CCP should maintain a secondary site for business services and one for IT services.
Benefits	The benefits include increased safety and it is in line with current market practice.
Disadvantages	N/A
Regulator's costs	Limited but higher impact as BCP arrangements will be more extensive.
Compliance costs	Higher costs because of additional secondary site.
Indirect costs	

MARGINS

(a) What is the appropriate minimum confidence interval over 99% to be applied to the calculation of the margins? Should it be prescribed comprehensively for each class of financial instrument or should the percentage determination be built on a criteria based approach?

Specific objective	To reflect the risk characteristics of derivatives when defining margins, so that in the case of a default, the costs would likely be covered by the resources posted by the defaulting party, and to apply similar standards to all European CCPs, to ensure that CCPs do not compete on risks and lower the bar.
Option 1	Prescribe the minimum level of percentage for each class of financial instrument.
How would achieving the objective alleviate/eliminate the problem?	Such approach ensures transparency and an undoubted level playing field across CCPs. Additionally, it may be easier for competent authorities to assess that the technical standards are applied in a consistent way and in the manner the authorities are expecting. In addition, flexibility is introduced for OTC derivatives with the same risk characteristics as listed derivatives.
Option 2	Adopt criteria to be taken in consideration by the CCP to determine the percentage for confidence interval for each class of financial products.
How would achieving the objective alleviate/eliminate the problem?	A criteria based approach is inherently flexible because rather than fixing a specific percentage, the draft RTS sets out a high level framework against which a CCP's policies must comply. The CCP can adapt its risk exposure depending on the profile of the instruments cleared and adapt its risk policy over time.
Which option is the preferred one? Explain briefly.	A mixed approach is preferred. Percentage should be at least 99.5% for OTC derivatives products and at least 99% for other classes of financial products.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with EBA and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	Prescribe the minimum level of percentage for each class of financial instrument.
Benefits	Such approach promotes a high degree of level playing field in the EU. It may be easier for competent authorities to assess compliance with such standards. Prescription may also promote greater comparability and transparency

	across CCPs. This approach would allow the authorities to have a direct control of the level of margins that are requested by CCPs for each class of financial instrument. In this sense, it may be considered advantageous to specify high percentages in the draft RTS for the following reasons: • Procyclicality: setting margins in a conservative manner will help the CCP to maintain a sufficient buffer in stressed period, thus avoiding continuous adjustments via margin calls that can exacerbate a difficult market condition; • Moral hazard: setting higher confidence intervals would result in a lower use of default fund contribution, thus limiting the recourse to the latter and the moral hazard issue associated to it. • Better capital treatment: margins are expected to get a more favorable capital treatment than default fund contributions, thus clearing members would certainly have a preference for a higher confidence interval. • Portability: if the overall risk that the CCP needs to cover is managed via a larger recourse to margins, this would facilitate the portability of client positions. It would indeed be easier for a CCP to find a surviving clearing members if the positions that the latter should take are almost entirely covered by margins. The same will not be true if the surviving clearing member would be asked to pay a substantial contribution to the default fund in view of the client position it is taking. • Short history: if the product the CCP intends to clear have short time series on which to calibrate its model, it would be justified to apply a higher confidence interval.
Disadvantages	It might discourage innovation, and cause CCPs to rely on the parameters prescribed in the standards without trying to enhance their models.
Regulator's costs	A prescriptive approach facilitates the enforceability of the requirements.
Compliance costs	See detailed quantitative analysis below.
Indirect costs	The indirect costs would be similar in both cases if authorities set the percentages using the same level exigency as when assessing the criteria based approach. Compliance costs, in both cases, could be large if the result of the application of standards were percentages substantially higher than the current practices of CCPs. The disadvantages of explicitly setting high percentages are the following: • Lower trading activity: too high margins as a consequence of higher confidence intervals might disincentivise trading on particular products, thus reducing the liquidity of those. • Management of a default: if a CCP can rely mostly on margins, the management of a default would be seriously injured. With limited mutualised resources, the CCP could only rely on the resources of the defaulting clearing member, thus limiting the resources at its disposal in a default situation. • Little justification for clearing member involvement in the CCP governance: in case of very limited mutualisation of losses, the clearing members have less reason for being directly involved in monitoring the CCP risk management, given that they risk only the money they post to cover their exposures.

Option 2	Adopt criteria to be taken in consideration by the CCP to determine the percentage for confidence interval for each class of financial products.
Benefits	A criteria based approach is inherently flexible as it sets a framework against which a CCP's investment choices or policies must comply. The criteria allow the CCP to choose and manage their risk exposure in function of the market, the products cleared, the clearing members, etc. This approach gives the capacity to the CCPs to react rapidly in case of evolution of its risk exposure and ensure their robustness in keeping control of the risk exposure.
Disadvantages	Unlevel playing field.
Regulator's costs	It may be more difficult, costly and less efficient for a regulator to assess compliance with criteria based standards.
Compliance costs	See detailed quantitative analysis below.
Indirect costs	Criteria based standards may not be applied in a consistent and transparent manner across CCPs which may have an effect on the competitiveness of a CCP (a cost to the CCP) or the on-going viability of the CCP (a cost to the clearing members or to society).

(b) Should the look-back period include stressed market conditions?

Specific objective	The lookback period should be defined so that it is conservative and limits procyclicality.
Option 1	Initial margins are calculated taking into account the most recent market conditions (12 months minimum). Additionally, CCPs are required to ensure that the historical volatility captures a full range of market conditions, including periods of stress.
How would achieving the objective alleviate/eliminate the problem?	If the previous 12 months do not include period of stress, CCPs will need to use longer time periods, so that in any case, stressed market conditions are included in the calculation.
Option 2	Initial margins are calculated taking into account a relatively long time period, e.g. 10 years.
How would achieving the objective alleviate/eliminate the problem?	This approach would be more likely to include stressed market conditions.
Option 3	Initial margins are calculated on the basis of both stable and stressed market conditions, and both are equally weighted.
How would achieving the objective alleviate/eliminate the problem?	Such approach would ensure than both recent and stressed market conditions are taken into account.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option, because prescriptive approaches like option 2 or option 3 do not appropriately reflect certain specific market conditions. See also the quantitative analysis below.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

or consulted?	

Impacts of the proposed policies:

Option 1	Initial margins are calculated taking into account the most recent market conditions (12 months minimum). Additionally, CCPs are required to ensure that the historical volatility captures a full range of market conditions, including periods of stress.
Benefits	Takes into account the volatility under current and stressed market conditions. The option leaves flexibility to CCPs to choose the best way to incorporate period of stressed market conditions.
Disadvantages	Margins calculated on the basis of relatively short time horizon are more likely to evidence procyclical features. However the inclusion of stressed market conditions should mitigate this risk.
Regulator's costs	No specific regulator's cost is expected.
Compliance costs	Most CCPs do take into account a period of at least 12 months. The inclusion of stressed market conditions might require additional research and modelling.
Indirect costs	N/A
Option 2	Initial margins are calculated taking into account a relatively long time period, e.g. 10 years.
Benefits	Setting margins in a conservative manner will help the CCP to maintain a sufficient buffer in stressed period, thus avoiding continuous adjustments via margins calls that can exacerbate a difficult market condition. The longer the period under consideration, the most likely it will include stress market conditions and if stress market conditions are considered in the lookback period, the most conservative will be the determination of the actual margins requirements. However, if the stressed conditions occurred far in the past, their effects in the model might be of little significance and not be weighted appropriately.
Disadvantages	Models might be too slow to reflect changes in market conditions. This could lead to underestimated (respectively overestimated) margins when volatility rises (respectively falls).
Regulator's costs	No specific regulator's cost is expected.
Compliance costs	See detailed quantitative analysis below.
Indirect costs	The option does not leave flexibility to CCPs to choose the best way to incorporate periods of stressed market conditions. This could hamper innovation as CCPs would rely on the required parameters only. Higher levels of prescription would likely mean that the models used converge and hence would be more likely to fail simultaneously under particular combinations of market conditions. Lower trading activity: too high margins might disincentivise trading on particular products, thus reducing the liquidity.
Option 3	Initial margins are calculated on the basis of both stable and stressed market conditions, but both are equally weighted.
Benefits	The approach would by construction reflect both recent and stressed market conditions.

	It would also ensure that all CCPs use the same methodology, preventing a competition on risk grounds.
Disadvantages	The option makes the implicit assumption that stressed market conditions materialise as frequently as "normal" market conditions, which creates a distortion in the data: it would break correlation properties relied upon in margin models using historical distributions.
Regulator's costs	No specific regulator's cost is expected.
Compliance costs	CCPs do not currently apply such an approach so the models would need to be reviewed. See detailed quantitative analysis below.
Indirect costs	The option does not leave flexibility to CCPs to choose the best way to incorporate periods of stressed market conditions. This could hamper innovation as CCPs would rely on the required parameters only. If all CCPs use the same methodology, there could also be a risk that all margin adjustments occur at the same time, which could disturb market stability. This option would lead to significantly higher margins levels than option 1 (see quantitative analysis below). Like with option 2, too high margins might disincentivise trading on particular products, thus reducing the liquidity.

(c) What is the best approach to define the RTS as regard the appropriate liquidation period: a prescriptive approach or criteria based approach?

Specific objective	A prescriptive approach sets a minimum fix standard, similar for all European CCPs. This is particular important so that to ensure that CCPs do not compete on risks and lower the bar.
Option 1	Prescribe a minimum number of days for the liquidation period.
How would achieving the objective alleviate/eliminate the problem?	Such approach ensures transparency and a level playing field across CCPs. It may be easier for competent authorities to assess compliance with such standards.
Option 2	Adopt criteria to take in consideration by the CCP to determinate the liquidation period.
How would achieving the objective alleviate/eliminate the problem?	A criteria based approach is inherently flexible.
Which option is the preferred one? Explain briefly.	A mixed approach is preferred. Liquidation period should be: • at least 5 days for OTC derivatives products; • at least 2 days for other classes of financial products. Those minimum should be increased by each CCP if needed, based on a criteria based approach. For the determination of the adequate liquidation period, the CCP shall be responsible of defining the period for which the CCP is exposed after a default taking into consideration the characteristics of the financial instrument cleared, the market where is traded, and the period for the calculation and collection of the margins.

	In addition, flexibility is introduced for OTC derivatives with the same risk characteristics as listed derivatives.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	Prescribe a minimum number of days for the liquidation period.
Benefits	Such approach promotes a high degree of level playing field in EU. It may be easier for competent authorities to assess compliance with such standards. Prescription may also promote greater comparability and transparency across CCPs. This approach would allow the authorities to have a direct control of the level of margins that are requested by CCPs for each class of financial instrument.
Disadvantages	It might discourage innovation, and cause CCPs to rely on the parameters prescribed in the standards without trying to enhance their models.
Regulator's costs	No specific regulator's cost is expected. Easier to enforce and ensure consistent application of a prescriptive approach.
Compliance costs	See detail quantitative analysis below.
Indirect costs	N/A
Option 2	Adopt criteria to take in consideration by the CCP to determinate the liquidation period.
Benefits	A criteria based approach is inherently flexible setting a framework against which a CCP's investment choices or policies must comply. The criteria allow the CCP to choose and manage their risk exposure in function of the market, the products cleared, the clearing members, etc. This approach gives the capacity to CCPs to react rapidly in case of evolution of its risk exposure and ensure their robustness in keeping control of the risk exposure.
Disadvantages	Unlevel playing field.
Regulator's costs	It may be more difficult, costly and efficient for a regulator to assess compliance with criteria based standards.
Compliance costs	The CCP needs resources to develop, monitor and adapt the margin framework.
Indirect costs	Criteria based standards may not be applied in a consistent and transparent manner across CCPs which may have an effect on the competitiveness of a CCP (a cost to the CCP) or the on-going viability of the CCP (a cost to the clearing members or to society).

Quantitative impact assessment of the draft RTS on margins requirements

Margins held by CCPs are made up of two different components, initial margin and variation margin. The draft RTS affects the calculations of initial margin, which depends on the risk profile of the trade and not the variation margin, which relates to changes in the value of the positions. Increases in initial margin calls due to new information on the risk profile will be applicable to both counterparties in the trade whilst changes to variation margin due to changes in the value of the asset will cancel out across the two ultimate trading parties, with one party receiving a margin call and the other a margin pay-out.

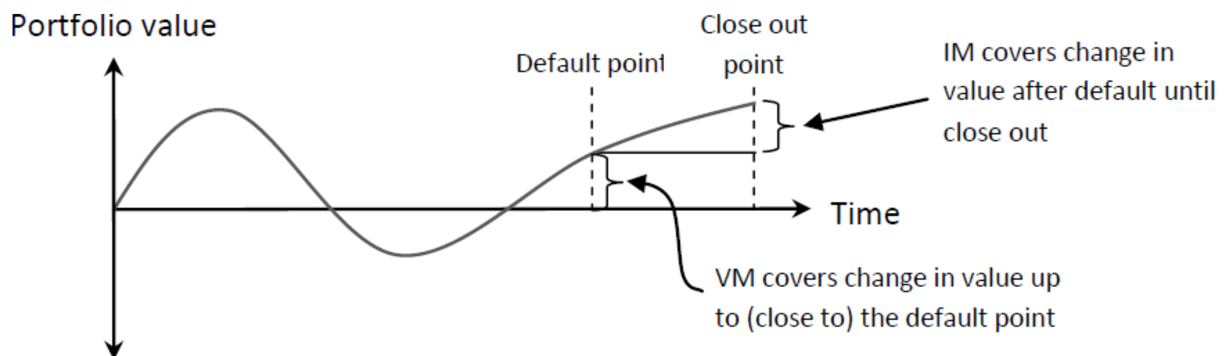


Figure 1: Diagram of Initial and Variation Margin[22]

The initial margin held by CCPs is intended to cover their exposure to changes in the value of assets from the default of a clearing member to the close-out of their trades. The diagram below demonstrates the exposure of the clearing house at different distances away from the price at time of default.

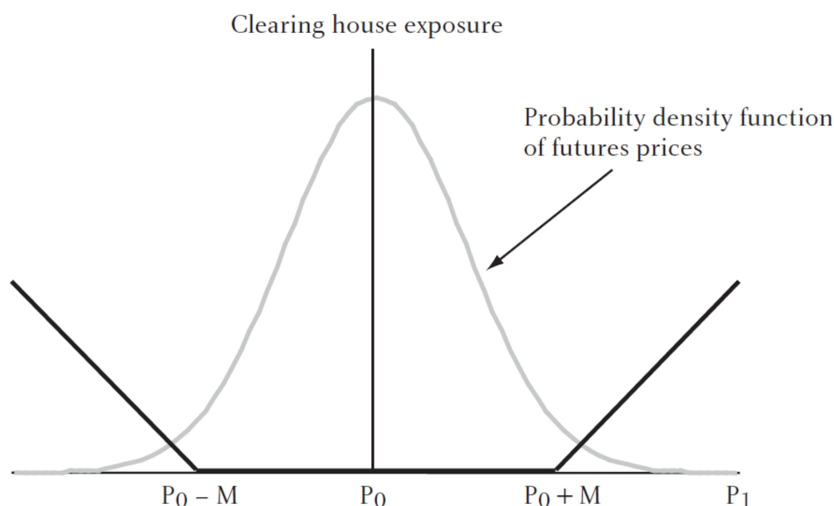


Figure 2: Clearing House Exposure[23]

[22] Source: Murphy, David (2012) "The systematic risks of OTC derivatives central clearing" rivast consulting

[23] P_0 and P_1 are the initial and subsequent prices, respectively. M is the margin per contract.

Source: Knott, Raymond and Mills, Alistair, Market Infrastructure Division, Bank of England (2002) "Modelling risk in central counterparty clearing houses: a review" Financial Stability Review, December 2002

Of the three proposals affecting margin requirements, the opinion from the industry, as analysed from their responses to the CP, was that the proposal of the CP for lookback period would have the largest impact on margin levels. This was verified both by data provided by market participants and by the following calculations.

In order to measure the impact of the draft RTS on margins, we first estimate the impact of each of the three standards separately (lookback period, confidence interval and liquidation period), before combining their effect to derive an estimation of the overall costs.

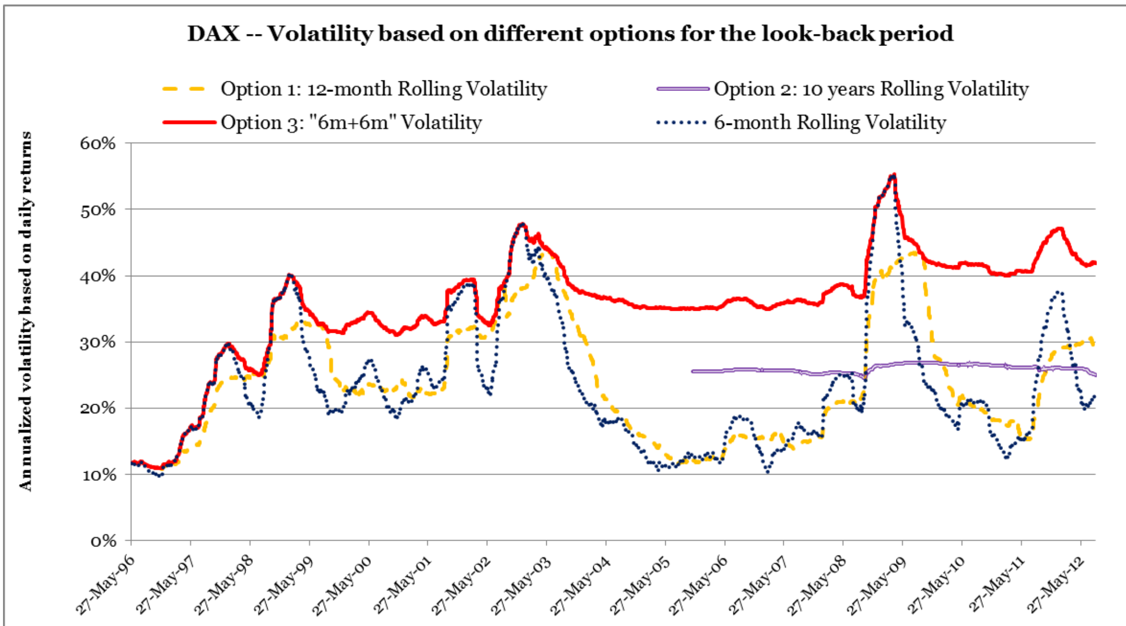
(a) Lookback period

We will refer to the following options:

- Option 1: Initial margins are calculated taking into account the most recent market conditions (12 months minimum).
- Option 2: Initial margins are calculated taking into account a relatively long time period, e.g. 10 years. This approach would be more likely to include stressed market conditions, although would not necessarily weight these conditions appropriately if they occurred long ago.
- Option 3: Initial margins are calculated on the basis of both stable and stress market conditions, but both are equally weighted.

In order to compare the impact of the different options, we first calculated the annualised volatilities of a sample of liquid Futures (equity index, bonds and energy Futures).

To illustrate those calculations, the following graphs show the volatility of a selection of instruments with the 3 different options:


DAX -- Volatility based on different options for the look-back period
Option 1: 12-month Rolling Volatility
Option 2: 10 years Rolling Volatility
Option 3: "6m+6m" Volatility
6-month Rolling Volatility
Annualized volatility based on daily returns
60%
50%
40%
30%
20%
10%
0%
27-May-96
27-May-97
27-May-98
27-May-99
27-May-00
27-May-01
27-May-02
27-May-03
27-May-04
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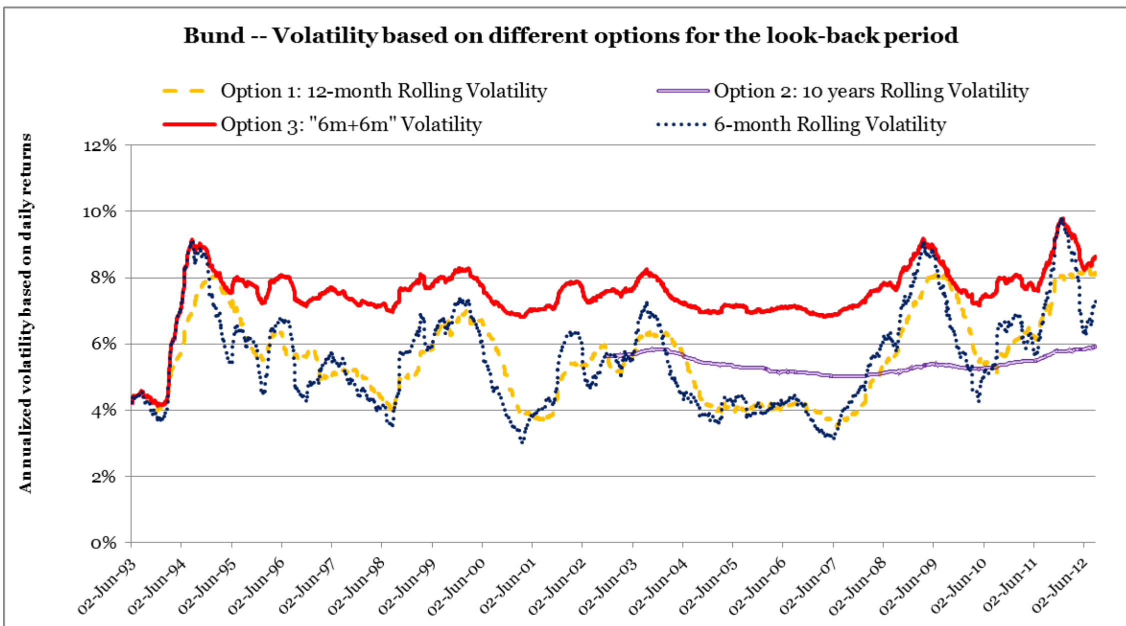
27-May-11
27-May-12


Bund -- Volatility based on different options for the look-back period
Option 1: 12-month Rolling Volatility
Option 2: 10 years Rolling Volatility
Option 3: "6m+6m" Volatility
6-month Rolling Volatility
Annualized volatility based on daily returns
12%
10%
8%
6%
4%
2%
0%
02-Jun-93
02-Jun-94
02-Jun-95
02-Jun-96
02-Jun-97
02-Jun-98
02-Jun-99
02-Jun-00
02-Jun-01
02-Jun-02
02-Jun-03
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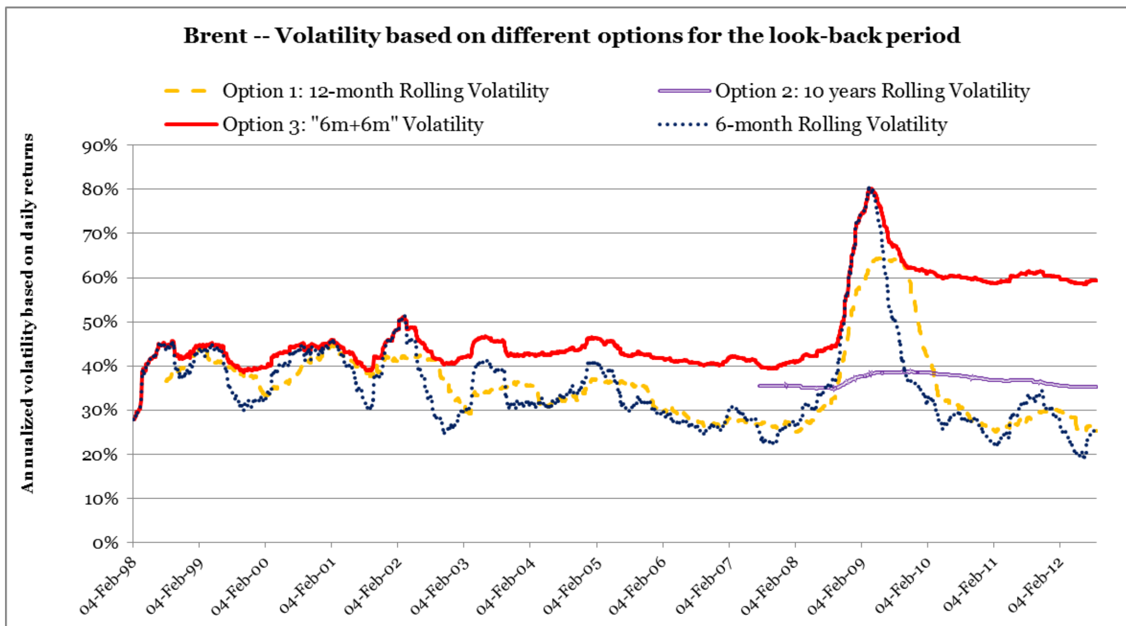
02-Jun-11
02-Jun-12



Option 2

As can be seen from those graphs, and similarly for all the other instruments studied, the volatility calculated according to option 2 (10 year rolling volatility) is extremely slow in adjusting to current market conditions. If this can be seen as a way to avoid pro-cyclicality, it has the drawbacks of overestimating (resp. underestimating) the short term volatility under "normal" (resp. "stressed") market conditions.

For example on 2 April 2009, the 6-month volatility of the DAX was at its highest level at 55.5%, while the 10-year volatility was less than half of it, at 26.7%. Today's market conditions have radically changed from that time, with the 6-month volatility of the DAX now close to 21%: however, the level of the 10-year volatility hasn't changed and is now at 25%.

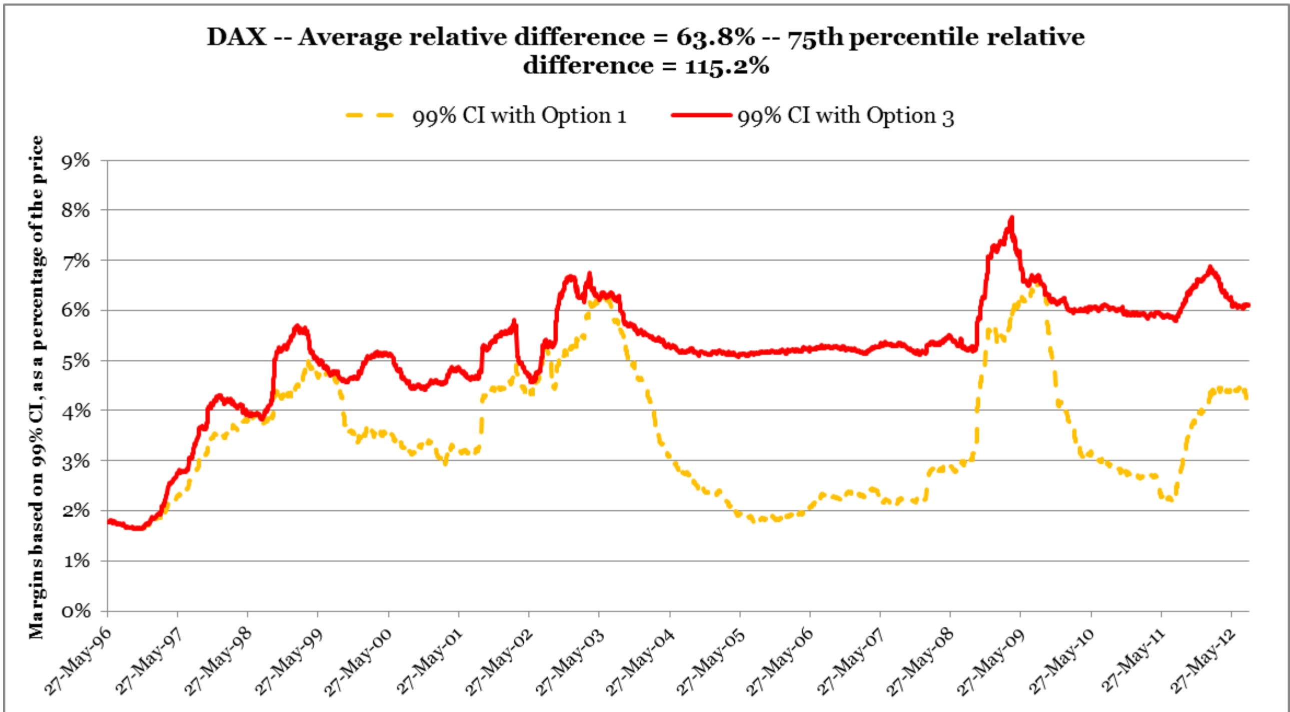
For this reason, option 2 was not adopted. However, ensuring that margins are not lower than those calculated on the basis of a 10-year volatility ensures a minimum floor that can prevent procyclical changes. For this reason, this is one of the options CCPs can implement to cater for limiting procyclical effects on margins.

Option 1 and Option 3

We now compare the impact of option 1 and option 3 on the level of margins. For this analysis, we adopt a simplified margin model where margins are derived directly from the volatility.

Each day, we calculate the relative difference between the margins as a result of option 3 versus option 1. Eventually we calculate the average of those differences every day, as well as the 75th percentile of those differences (so in 75% of the cases, the relative difference would be less than that number).

As an illustration, we show again the graphs for the DAX, Bund and Brent Futures:


DAX -- Average relative difference = 63.8% -- 75th percentile relative difference = 115.2%
99% CI with Option 1
99% CI with Option 3
Margins based on 99% CI, as a percentage of the price
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
27-May-96
27-May-97
27-May-98
27-May-99
27-May-00
27-May-01
27-May-02
27-May-03
27-May-04
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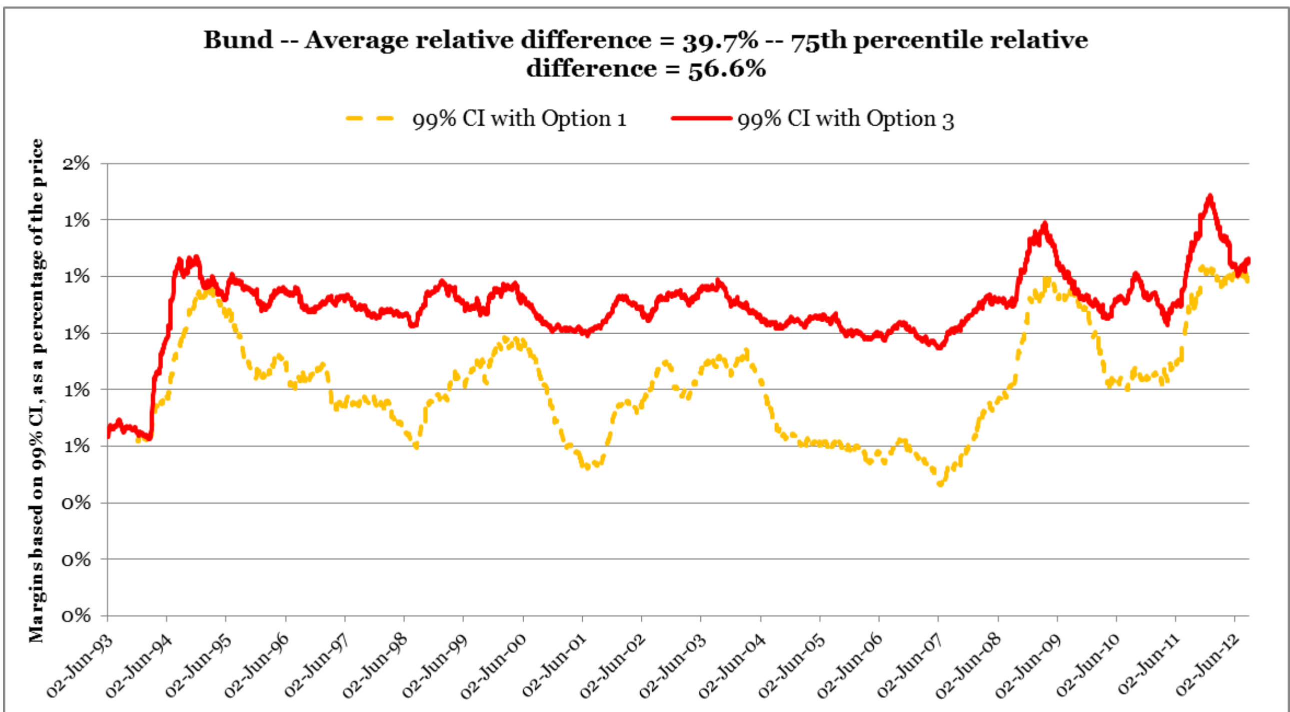
27-May-11
27-May-12


Bund -- Average relative difference = 39.7% -- 75th percentile relative difference = 56.6%
99% CI with Option 1
99% CI with Option 3
Margins based on 99% CI, as a percentage of the price
2%
1%
1%
1%
1%
1%
0%
0%
0%
02-Jun-93
02-Jun-94
02-Jun-95
02-Jun-96
02-Jun-97
02-Jun-98
02-Jun-99
02-Jun-00
02-Jun-01
02-Jun-02
02-Jun-03
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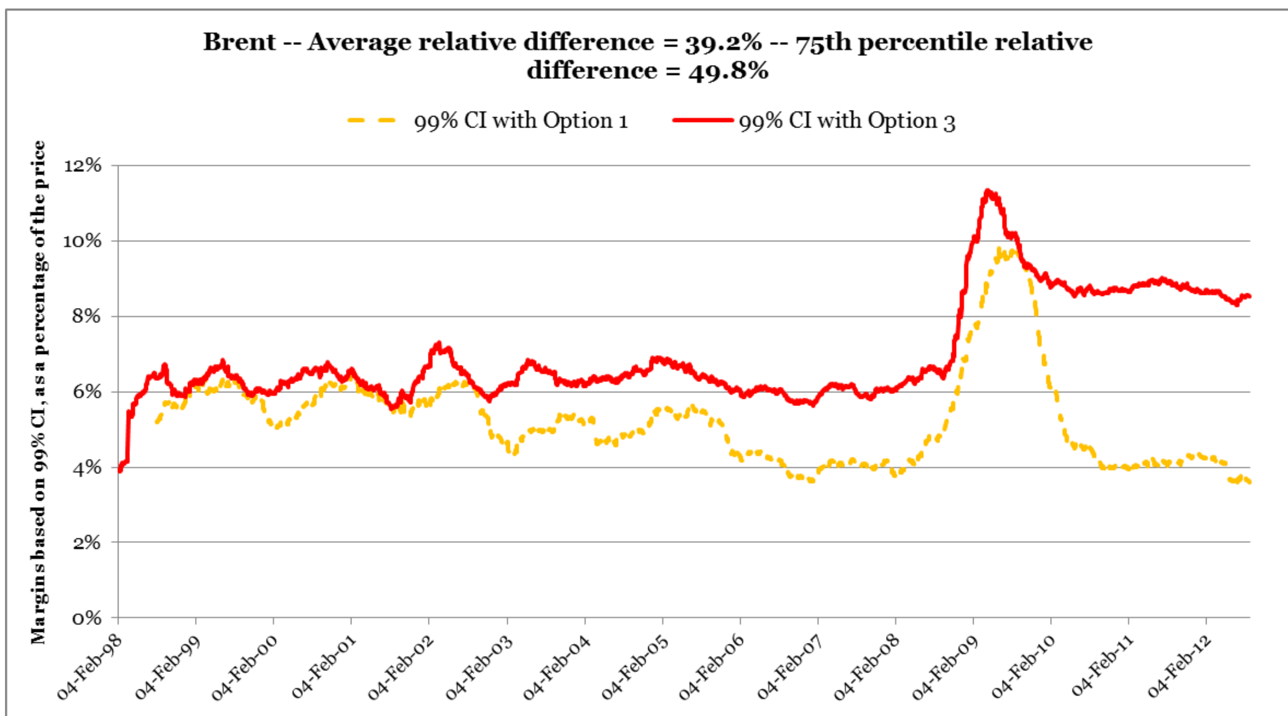
02-Jun-11
02-Jun-12



For the other instruments studied, the table below gives the average and 75th percentile relative difference in margins as a result of option 3 compared to option 1:

	Average relative difference in margins between option 1 and option 3 (%)	75th percentile relative difference in margins between option 1 and option 3 (%)	Period studied
DAX Futures	63.8	115	Since 1995
Euro Stoxx 50 Futures	75.4	134.3	Since 1998
FTSE 100 Futures	71.5	114.6	Since 1997
CAC Futures	62.1	107.1	Since 1997
MIB Futures	29.5	47.6	Since 2004
IBEX Futures	52.9	68.2	Since 1992
Bund Futures	39.7	56.6	Since 1992
Bobl Futures	31.5	49.6	Since 1992
Schatz Futures	33.4	50.7	Since 1997
Brent Futures	39.2	49.8	Since 1997

Table 9: Impact on margins of option 3 (“6m+6m”) versus option 1 (12-month volatility)

As can be seen from the graphs, the difference between the two options is extremely volatile and highly depends on market conditions. Therefore the data presented in the table should be interpreted with care.

From this table we estimated that the choice of option 3 versus option 1 could lead to margins 30% to 70% higher on average.

One respondent estimated the impact of option 3 versus option 1 to be currently 140% for one specific energy Futures contract. According to our calculations, the impact of option 3 versus option 1 for a similar Futures contract is 136% as of 24 August 2012. Both estimates are therefore consistent. However this impact is valid at one point in time and cannot be used to derive the average or global impact of option 3. Indeed, the current impact of 136-140% for this product is close to the maximum observed for the whole period.

The maximum impact of option 3 occurs during periods of low and decreasing volatility. The "most stressed 6 month period" dominates the calculation of historical volatility, and the impact of recent low volatility is almost absent.

For example, in August 2005, the 6-month volatility of the FTSE 100 was as low as 8.5%. The "most stressed 6 month period" from that day was the period ending in November 2002, with a 6-month volatility of 37%. The result of the "6m+6m" approach is a volatility of 27%, so more than 3 times the actual short term volatility.

The volatility calculated according to option 3 adequately reflects current market conditions when the volatility is rising, but it fails to adapt quickly enough when volatility declines and returns to "normal levels", leading to margin levels which could highly overestimate the risks.

This is one of the reasons why option 3, which was the original choice of ESMA in the CP, was changed to option 1. Given current market practice, this option is unlikely to create any significant increase in margins, so it was not included in the simulation of the global impact of the draft RTS on margins.

(b) Level of the Confidence Intervals (CI)

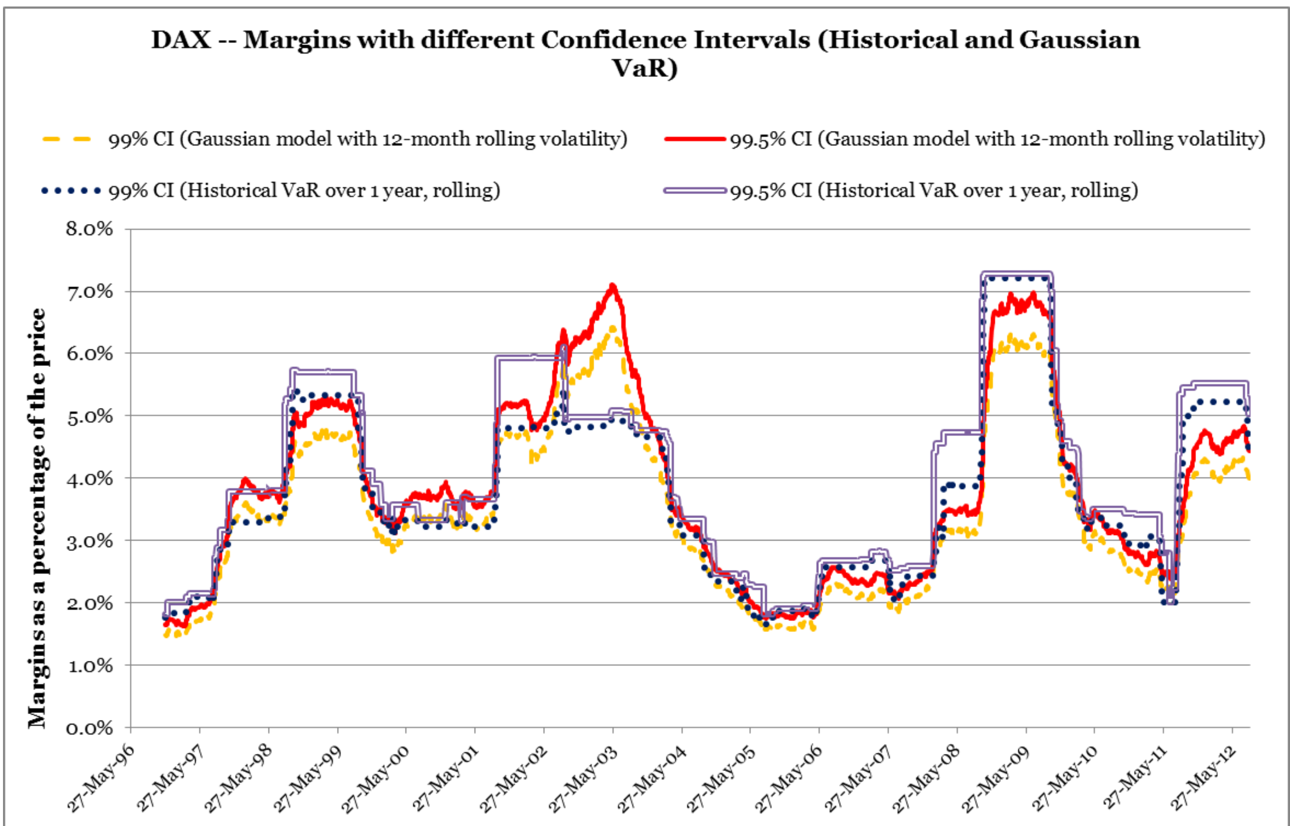
For the purpose of measuring the impact of the confidence interval on margins, we considered the two following basic models:

- A model based on historical value at risk (VaR) over a one year rolling window[24];
- A parametric VaR using a Gaussian distribution. The VaR is deducted from the volatility, and the volatility is calculated over a one year rolling window.

The following graphs show the different margins that these models would return through time, with a 99% and a 99.5% confidence interval[25].

[24] The choice for the one-year rolling window was motivated by the draft RTS on the lookback period which requires a minimum of one year. However CCPs using historical VaR are likely to use larger set of data including stressed market periods to properly account for tail events.

[25] For the sake of simplicity, the set of instruments in this analysis is the same as the one used for the impact analysis of the lookback period. Even though the 99.5% requirement would apply to OTC derivatives only, the impact is unlikely to vary significantly and should be used as an estimate.


DAX -- Margins with different Confidence Intervals (Historical and Gaussian VaR)
99% CI (Gaussian model with 12-month rolling volatility)
99.5% CI (Gaussian model with 12-month rolling volatility)
99% CI (Historical VaR over 1 year, rolling)
99.5% CI (Historical VaR over 1 year, rolling)
Margins as a percentage of the price
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
27-May-96
27-May-97
27-May-98
27-May-99
27-May-00
27-May-01
27-May-02
27-May-03
27-May-04
27-May-05
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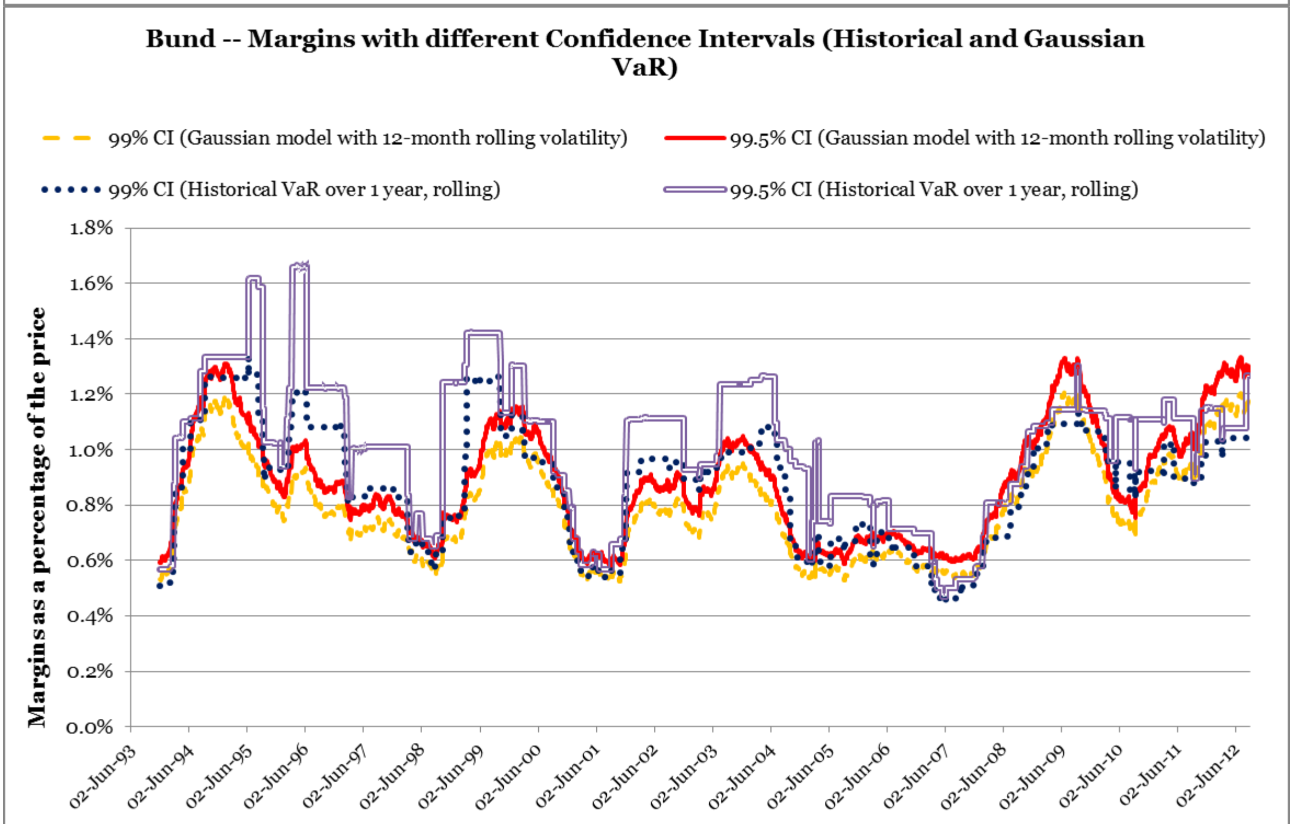
27-May-07
27-May-08
27-May-09
27-May-10
27-May-11
27-May-12


Bund -- Margins with different Confidence Intervals (Historical and Gaussian VaR)
99% CI (Gaussian model with 12-month rolling volatility)
99.5% CI (Gaussian model with 12-month rolling volatility)
99% CI (Historical VaR over 1 year, rolling)
99.5% CI (Historical VaR over 1 year, rolling)
Margins as a percentage of the price
1.8%
1.6%
1.4%
1.2%
1.0%
0.8%
0.6%
0.4%
0.2%
0.0%
02-Jun-93
02-Jun-94
02-Jun-95
02-Jun-96
02-Jun-97
02-Jun-98
02-Jun-99
02-Jun-00
02-Jun-01
02-Jun-02
02-Jun-03
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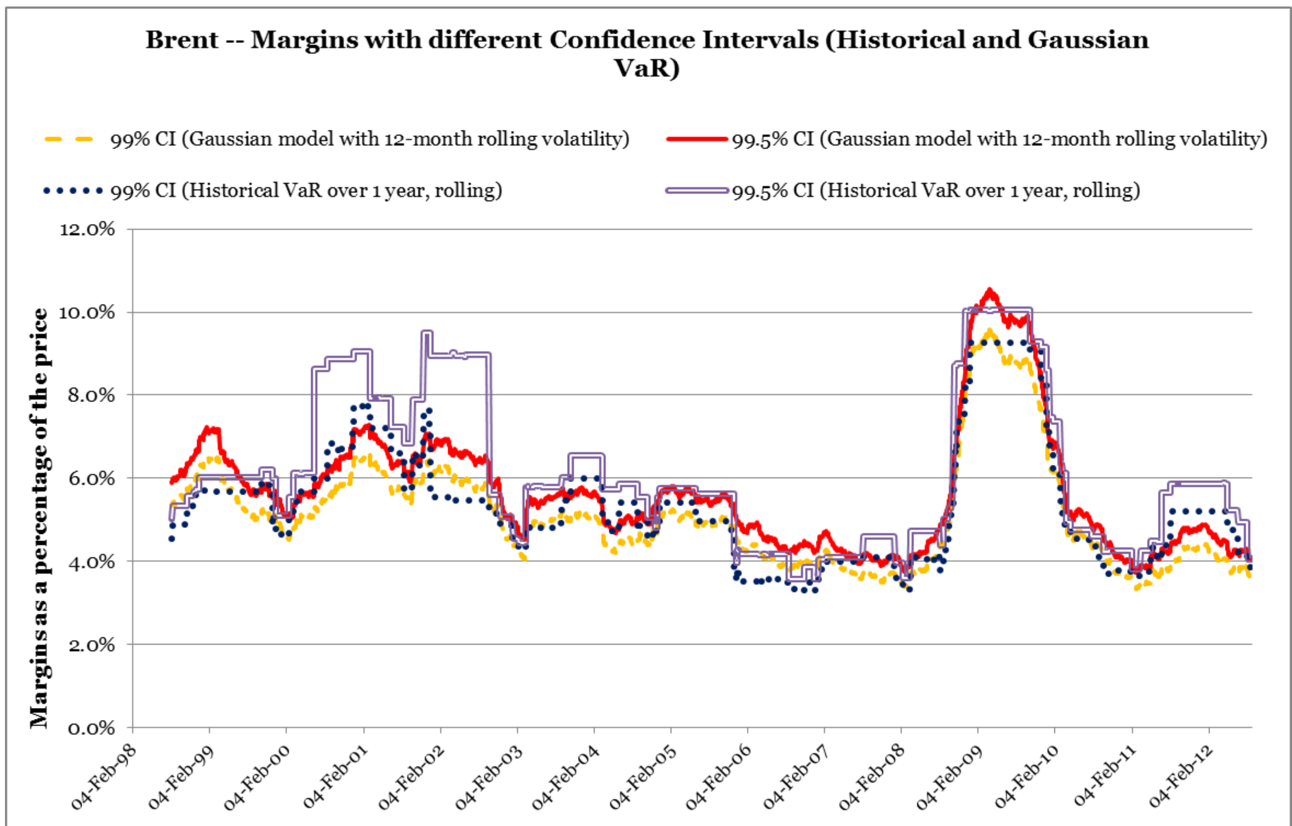
02-Jun-12



As can be seen from the graphs, the impact on margins, of a shift from 99% to 99.5% confidence interval, is relatively stable through time.

One exception is noted in the case of the historical VaR model: margins calculated with a 99.5% parameter sometimes evidence jumps and significant differences with the 99% margins. Calculating a 99.5% confidence over one year only means that the result only relies on 1 or 2 data points. Therefore the result is highly sensitive to those data points coming in and out of the rolling window. This is again a simplified model and this feature would be accounted for by CCPs, for example by adapting the lookback period.

The following table provides, for each instrument of the dataset, the average and 75th percentile increase in margins caused by a shift of the confidence level parameter from 99% to 99.5%.

	Relative impact on margins of a shift from 99% to 99.5% confidence interval (%)				
	Historical VaR model		Parametric VaR model (Gaussian with 12-month volatility)		
	Average impact	**75th percentile impact**	**Average impact**	**75th percentile impact**	**Period studied**
DAX Futures	9.7	14.1	10.9	11.2	Since 1995
Euro Stoxx 50 Futures	11.9	14.4	10.8	11	Since 1998
FTSE 100 Futures	10.7	13.8	10.8	11	Since 1997
CAC Futures	12.4	16.5	10.8	11.1	Since 1997
MIB Futures	11	16.8	10.7	11	Since 2004
IBEX Futures	12.7	18	10.9	11.2	Since 1992
Bund Futures	15.5	20.3	10.9	11.2	Since 1992
Bobl Futures	19	25.5	10.8	11.2	Since 1992
Schatz Futures	15.8	23.3	10.8	11.1	Since 1997
Brent Futures	14.1	16.7	10.9	11.2	Since 1997

Table 10: Impact of the confidence interval parameter on margins

From this table, we estimated that increasing the confidence level from 99% to 99.5% could cause margins to increase on average by a factor [10%-20%].

One participant isolated the effect of an increase in the confidence interval from 99% to 99.5% as causing average margin levels to rise by around 23%. Therefore we have used the estimates [10%-23%] in the analysis below.

Considering the CI aspect of the margin proposals, a review of current CCP practice shows that all CCPs use a minimum margin level of at least 99%. Hence, the confidence interval requirements proposed for exchange-traded derivatives (ETD) will not have any effect on current market practice.

For OTC derivatives, some CCPs providing OTC derivatives clearing currently use confidence intervals of less than 99.5% (see table below). If a minimum margin level of 99.5% was introduced for OTC derivatives, only about one third of CCPs would have to adjust their margining methodology because of this, representing a smaller share of trades in the market — about 25%.

So in the current situation, it is not uncommon for CCPs to use confidence intervals higher than 99% for OTC derivatives. There could be a case for two CCPs clearing the same product but applying different confidence intervals in their margining models. In order to insure a level-playing field between CCPs in setting the standards for margins, ESMA should rely on those CCPs already setting high standards instead of lowering the bar.

CCPs providing clearing for OTC derivatives		
Margin level	**Number**	**Weighted percentage[26]**
Below 99.5%	4	24.7
99.55 and above	8	75.3

Table 11: Current confidence intervals used by CCPs for OTC Derivatives

(c) Liquidation period

A common methodology employed by CCPs to adjust for the number of days of the liquidation period is to multiply the estimated value for one day by the square root of the number of days until liquidation. We take this as a benchmark to measure the impact of the draft RTS on liquidation period.

For example, a move from 1 to 2 days liquidation period causes margins to increase by 41% ($\sqrt{2} - 1 = 41\%$). This is consistent with the impact provided by market participants in their reponses to the CP. A move from 3 to 5 days liquidation period causes margins to increase by 29% ($\frac{\sqrt{5}}{\sqrt{3}} - 1 = 29\%$). The margin increases for different current liquidation periods are given in the table below.

A review of current CCP practice (see table below) shows that for both OTC derivatives and other products, some CCPs are using liquidation periods below those proposed by the draft RTS.

[26] Weighting based on estimated trade volumes (by notional value). Trade volumes based upon ECB clearing data; annual reports of various CCPs and data obtained by ESMA from external consultants (i.e. Europe Economics).

	Non-OTC derivative product		**OTC** derivative products	
Liquidation period currently used (days)	**Weighted percentage**[27]	**Percentage margin increase required (2 days)**	**Weighted percentage**[28]	**Percentage margin increase required (5 days)**
1	43.5	41	14.7	124
2	55.2	0	1.6	58
3	1.3	0	0	29
5	0	0	83.7	0

Table 11: Current liquidation periods used by CCPs for OTC and Exchange traded Derivatives

Hence, we estimate that approximately 44% of non-OTC derivatives trades and 16% of OTC derivatives trades would see increase in margins due to the RTS proposal on margin requirements.

(d) Global impact of the RTS on margins

To derive the global impact of the confidence interval (CI) and the liquidation period on margins, we have divided the OTC trades in 6 buckets:

- Trades requiring an increase in the CI from 99% to 99.5%, and an increase in the liquidation period from 1 to 5 days;
- Trades requiring an increase in the CI from 99% to 99.5%, and an increase in the liquidation period from 3 to 5 days;
- Trades requiring an increase in the CI from 99% to 99.5%, and an no increase in the liquidation period;
- Trades requiring no increase in the CI, and an increase in the liquidation period from 1 to 5 days;
- Trades requiring no increase in the CI, and an increase in the liquidation period from 3 to 5 days;
- Trades requiring no increase in the CI and no increase in the liquidation period.

For each bucket, we calculate the global increase in margins, and the percentage of trades affected by those changes.

For ETDs the same methodology is used, but the number of buckets is reduced to 2 as there is no change required in the CI, and the liquidation perdiod can only move from 1 to 2 days. The results are presented in the following tables.

[27] Weighting based on estimated trade volumes (by notional value). Trade volumes based upon ECB clearing data; annual reports of various CCPs and data obtained by ESMA from external consultants (i.e. Europe Economics).

[28] Weighting based on estimated trade volumes (by notional value). Trade volumes based upon ECB clearing data; annual reports of various CCPs and data obtained by ESMA from external consultants (i.e. Europe Economics).

OTC	Increase in margins			% of trades[29]	
	CI: increase to 99.5 (Lower bound)	CI: Increase to 99.5 (Upper bound)	CI: No Increase	CI: Increase to 99.5	CI: No Increase
Liquidation Period: from 1 to 5 days	146%	175%	124%	14.7%	0.0%
Liquidation Period: from 2 to 5 days	74%	94%	58%	1.3%	0.2%
Liquidation period: no increase	10%	23%	0%	8.5%	75.1%

	Lower Bound	Upper Bound
Global weighted impact on OTC	**23%**	**29%**

ETD	Increase in margins	% of trade[30]	# CCPs
Liquidation Period: from 1 to 2 days	41%	43.50%	4
Liquidation period: no increase	0%	56.50%	12

Global weighted impact on ETD	**18%**

Table 12: Increase in margins due to changes in liquidation period and initial margins, weighted by the trade volumes.

For OTC, the weighted sum of the impacts comes to 23%-29%, which forms our estimate range for the total impact of the proposed measures on OTC derivatives margins. If the impact of the initial requirement on the lookback period was taken into account (Option 3), the figures would change to 60%-99%. For reference we note that EACH identified one CCP as expected to experience a 90% increase (without specifying its current assumptions), which is compatible with the upper part of our estimation. It is important not to loose sight of the variability in the consequences to different CCPs and in different product areas.

For ETDs, the weighted sum of the impacts comes to 18%. This number is computed by multiplying the impact of an increase in the liquidation period from 1 to 2 days (41%) by the percentage of trades which will

[29] Weighting based on estimated trade volumes (by notional value). Trade volumes based upon ECB clearing data; annual reports of various CCPs and data obtained by ESMA from external consultants (i.e. Europe Economics).

[30] Weighting based on estimated trade volumes (by notional value). Trade volumes based upon ECB clearing data; annual reports of various CCPs and data obtained by ESMA from external consultants (i.e. Europe Economics).

be concerned by this increase (43.5%). If the impact of the initial requirement on the lookback period (Option 3) was taken into account, the 18% figure would change to 30%-100%. It is important to note that only 4 CCPs are currently using a one day liquidation period, however those CCPs are major participants and represent 43.5% of the volume of European ETDs according to our estimates.

For OTC derivatives, ISDA's 2012 margin survey found that dealers acting as executing brokers for OTC derivatives had a total of €18 billion initial margin outstanding with CCPs and dealers acting as an OTC derivatives clearing member had an additional €1 billion initial margin outstanding with CCPs, implying a total of €19 billion initial margin held by CCPs for OTC derivatives. We assume that half of the margins are held in European CCP.

For ETDs, we looked at the current margins and open-interest for the most traded European contracts, and found that initial margins held by European CCPs for ETDs would be around €22-30 bn. From those numbers, we apply the average increase in margins due to the RTS, [23-29%] for OTC and 18% for ETD[31].

	Low Impact	**High Impact**
Margins currently held by European CCP for OTC (€bn)	10	10
Average increase in margins	23%	29%
Extra margin required (€bn)	**2.34**	**2.90**
Margins currently held by European CCP for ETD (€bn)	22	30
Increase in margins	18%	18%
Extra margin required (€bn)	**3.96**	**5.41**
Total extra margin required	**6.30**	**8.31**
One-off fund raising costs (4%) €m	252	332
On-going costs (7%) €m	441	582

Table 13: Overall costs of the draft RTS on margin requirements (liquidation period and confidence interval)

In the current situation, the impact of the draft RTS on margin requirements, both for OTC and exchange-traded derivatives, would imply extra initial margins in the range €6.3-8.3bn, leading to one-off costs of €252-332m and on-going costs of €441-582m.

When the clearing obligation comes into force, more OTC derivatives products will be cleared, which will have a significant impact on extra initial margin requirements. We have not incorporated this impact in our analysis because these costs relate both to EMIR provisions, and to the definition of the classes of OTC derivatives which will become subject to the clearing obligation, but not specifically to the margins requirements prescribed by the draft RTS.

[31] Although cash products are not covered by our analysis, we make the assumption that similar results would be obtained for cash and ETDs, as the same parameters are likely to be used.

In addition, since EMIR will bring extra clearing activity for CCPs, the potential costs of higher margin requirements (from a CCPs perspective) might be more than offset by the benefits of the extra activity. For market participants, the global impact would preferably be compared to a situation which takes into account the other provisions of EMIR, so a situation in which margins will apply to bilateral transactions as well.

DEFAULT FUND

(a) Should the draft RTS only set criteria on how to specify a framework for defining extreme but plausible market conditions, or should some key parameters also be subject to prescriptive measures ensuring that certain minimum standards are adhered to?

Detailed objectives	To ensure that the framework does consider the relevant historical scenarios in defining extreme but plausible market conditions
Option 1	To prescribe the time period to be applied when considering which historical scenarios shall be included in identifying extreme but plausible market conditions.
How would this option achieve the objective?	The advantage of prescribing the minimum historical period to be considered is that it may be easier for competent authorities to assess compliance.
Option 2	To provide broad criteria stating that historical scenarios should be considered in defining extreme but plausible market conditions.
How would this option achieve the objective?	A criteria based approach is inherently flexible and leaves to the CCP the identification of the relevant time period to be considered in identifying historical scenarios that would expose it to greatest risk.
Which option is the preferred one? Explain briefly.	Option 1, as this will ensure that the CCPs have a common approach and that most likely will consider occurred market conditions in their frameworks. It should be noted that although the RTS will not include a list of scenario that CCPs should include in their models, at least the framework for defining them should follow common standards.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To prescribe the time period to be applied when considering which historical scenarios shall be included in identifying extreme but plausible market conditions.
Benefits	Prescription may help to ensure consistently strong standards across CCPs and also promote greater comparability and transparency.

Disadvantages	Lack of flexibility.
Regulator's costs	It may be easier for competent authorities to assess compliance with prescriptive standards as experience with one CCP would read across to all other CCPs. On the other hand, more prescription may equate to more rules and may therefore require more compliance checks by the regulator.
Compliance costs	An existing CCP may need to expend resources amending its risk management framework to comply with the standards prescribed in the RTS where such are incompatible with current practice. This could lead to the CCP being unable to identify and take due care of those situations that are "extreme but plausible" for the CCP. In any case, the draft RTS still leaves it to the CCPs to define the most appropriate framework and it is essentially a criteria-based approach with certain prescribed elements. Thus the burden of compliance is not expected to be huge. In addition, the requirement to have a framework for defining extreme but plausible conditions is set out in EMIR and it is not for this impact assessment to measure the impact of such a requirement.
Indirect costs	Standards prescribed in the draft RTS may not be sufficiently flexible to deal with risks or developments which arise or are identified in the future. Amending the draft RTS would likely require considerable resources (including time). If the prescribed standards were not to be amended, or were not to be timely amended, then the on-going viability of the CCP may be affected (which might impose a cost to the clearing members or to society). There is also a risk that CCPs simply follow the requirements without taking due care to the specifics of their own operations, which could result in moral hazard.
Option 2	To provide broad criteria stating that historical scenarios should be considered in defining extreme but plausible market conditions.
Benefits	A criteria-based approach is inherently flexible setting a high level framework that can adapt to take account of future market developments.
Disadvantages	Less comparability and transparency across CCPs.
Regulator's costs	It may be difficult/take longer for a regulator to assess compliance with criteria based standards. Different CCPs may adopt quite different approaches, increasing the resource cost of regulatory review.
Compliance costs	It may be difficult/take longer for a CCP to develop policies in compliance with criteria based standards. However, for those already having such a framework, it could more easily be adopted to the new requirements.
Indirect costs	Criteria based standards may not be applied in a consistent and transparent manner across CCPs which may have an effect on the competitiveness of a CCP (a cost to the CCP) or the on-going viability of the CCP (a cost to the clearing members or to society) – although such costs could be alleviated by strong cooperation between competent authorities as already envisaged in EMIR through the setup of colleges.

(b) On what level should the framework be adopted within the CCP? As a part of the risk management framework, should it be the sole responsibility of the risk manager, or should the Board be required to approve it as a separate requirement?

Specific objective	Ensuring that the framework is implemented by the CCP and forms part of its risk management task.
Option 1	To require that the framework should be presented to the Risk Committee for advice and approved by the Board; to require that the annual review is presented to the risk committee and reported to the Board.
How would this option achieve the objective?	This will ensure that the framework has been given adequate attention by CCPs' governing bodies, which should in turn translate into proper day-to-day risk management.
Option 2	To require the Chief Risk Officer to be responsible for implementing and updating the framework, as well as carrying out the annual review.
How would this option achieve the objective?	As this framework shall form an integrated part of the risk management policy of the firm, leaving the responsibility with the Chief Risk Officer would meet the objective.
Which option is the preferred one? Explain briefly.	Option 1 is chosen. As EMIR refers to this as a separate item, the importance given would be in line with Board practise.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To require that the framework should be presented to the Risk Committee for advice and approved by the Board; to require that the annual review is presented to the risk committee and reported to the Board.
Benefits	Requiring Board approval ensures commitment from the highest level of the organisation.
Disadvantages	The role and responsibilities of the Chief Risk Officer are more limited with this option.
Regulator's costs	As the framework of the extreme but plausible market conditions has to be approved by the Board, following up on formal adoption, this approach should not impose substantial costs on the regulator.
Compliance costs	Has to be included in the documentation that shall be subject to Risk Committee advice and Board approval. Will therefore likely involve more costs than option 2, although in absolute terms internal reporting costs are unlikely to be material.
Indirect costs	N/A
Option 2	To require the Chief Risk Officer to be responsible for implementing and updating the framework, as well as carrying out the annual review.
Benefits	As this forms part of the risk management policy, and the Chief Risk Officer is a designated role, making it the role of the Chief Risk Officer ensures that the

	responsibility is where the risk is handled.
Disadvantages	CCPs' governing bodies might not dedicate adequate attention to the framework.
Regulator's costs	As the model adopted will be the one chosen by the CCP, the regulator has to use more time to evaluate the model and assess compliance than would have been the case had a formal board procedure for approval been required.
Compliance costs	For CCPs already having a framework for identifying extreme but plausible market conditions, little compliance costs will arise as this is most likely in line with the current situation.
Indirect costs	N/A

LIQUIDITY RISK CONTROLS

(a) Should a prescriptive or criteria based approach be adopted when defining appropriate forms and sources of liquidity?

Detailed objectives	Standards should be applied in a consistent and transparent manner across CCPs. Standards should be sufficiently flexible to cater for the various risk management approaches employed by CCPs, the variety of products cleared by CCPs and allow for future developments and new risks to be dealt with appropriately It should be readily ascertainable as to whether a particular CCP is in compliance with the applicable standards.
Option 1	The Liquidity Risk Control draft RTS prescribes the specific financial assets that are regarded as fulfilling the liquidity requirement, the mix between the different assets including a minimum cash requirement.
How would this option achieve the objective?	The advantage of a prescriptive approach to defining standards in the RTS is that it may be easier for competent authorities to assess compliance with such standards. Such prescription may also promote greater comparability and transparency across CCPs.
Option 2	Criteria based approach where the characteristics of liquid assets are described.
How would this option achieve the objective?	A criteria based approach is inherently flexible because rather than identifying an exact list of financial assets and the distributions between these assets to fulfil the CCPs' Liquidity requirements or defining the exact characteristics of a particular policy that a CCP is required to have, the RTS sets out a high level framework against which a CCP's liquidity risk management or policies must comply.
Which option is the preferred one? Explain briefly.	A criteria based approached with certain prescribed elements is the preferred approach as it would maximise the benefits of the two approaches.
Is the policy chosen within the sole responsibility of ESMA? If not, what other	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with

body is concerned / needs to be informed or consulted?	the members of the ESCB.

Impacts of the proposed policies:

Option 1	The Liquidity Risk Control draft RTS prescribes the specific financial assets that are regarded as fulfilling the liquidity requirement, the mix between the different assets including a minimum cash requirement.
Benefits	It may be easier for competent authorities to assess compliance with prescriptive standards. Prescription may also promote greater comparability and transparency across CCPs.
Disadvantages	Lack of flexibility.
Regulator's costs	Where the standards prescribed in the draft RTS do not suit the business model or risk management approach of a CCP, the competent authority may need to expend resource more closely monitoring the CCP (as opposed to requiring that a CCP adapt its liquidity choices or policies to better suit its business model or risk management approach because technical standards cannot be 'gold-plated'). There is also a risk that CCPs simply place liquidity according to the permitted choices under the RTS without any prior risk assessment which would put the responsibility of the assessment on the regulator.
Compliance costs	An existing CCP may need to expend resources amending its business model or risk management framework to comply with the standards prescribed in the RTS where such are incompatible with the business model or risk management approach of the CCP. An existing CCP may be subject to increased costs where they need to alter their liquidity sources and providers.
Indirect costs	Standards prescribed in the RTS may not be sufficiently flexible to deal with risks or developments which arise or are identified in the future. Amending the RTS would likely require considerable resources (also including time). If the prescribed standards were not to be amended, or were not to be timely amended, then the on-going viability of the CCP may be affected (which might impose a cost to the clearing members or to society).
Option 2	Criteria based approach where the characteristics of liquid assets are described.
Benefits	A criteria based approach is inherently flexible setting a high level framework against which a CCP's liquidity choices or policies must comply.
Disadvantages	Less comparability and transparency across CCPs.
Regulator's costs	It may be difficult/take longer for a regulator to assess compliance with criteria based standards.
Compliance costs	It may be difficult/take longer for a CCP to develop policies in compliance with criteria based standards.
Indirect costs	Criteria based standards may not be applied in a consistent and transparent manner across CCPs which may have an effect on the competitiveness of a CCP (a cost to the CCP) or the on-going viability of the CCP (a cost to the clearing members or to society) – although such costs could be alleviated by strong cooperation between competent authorities as already envisaged in EMIR through the setup of colleges.

(b) Is concentration of liquidity an appropriate area for technical standards, i.e. shall the 25% limitation on provision of credit line also be applied to anyone providing liquidity?

Specific objective	Ensuring that the liquidity of a CCP is not subject to undue concentration risk both stemming from asset class and asset provider.
Option 1	The concentration of liquidity stemming from one source is defined by limiting exposure to given thresholds. Minimum cash requirements are also defined.
How would this option achieve the objective?	The advantage of prescribed limits is that these ensure equal understanding and application of the requirements. Supervisors will also have a less challenging task with respect to evaluate compliance than if the RTS takes a more qualitative approach.
Option 2	The draft RTS does not provide defined thresholds with respect to concentration, but rather states which factors shall be considered in evaluate concentration risk.
How would this option achieve the objective?	An approach where the RTS does not provide any absolute thresholds is more flexible and gives less dictation with respect to liquidity risk management. This approach will also ensure that CCPs are given a larger degree of choice, and the possibility to take into account local market conditions.
Which option is the preferred one? Explain briefly.	Option 2 is preferred as for certain markets it could be extremely difficult for CCPs to comply with such limit. In addition, such limits are considered to go beyond ESMA mandate under EMIR.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	The concentration of liquidity stemming from one source is defined by limiting exposure to given thresholds. Minimum cash requirements are also defined.
Benefits	It may be easier for competent authorities to assess compliance with prescriptive standards than with more criteria based ones. Prescription may also promote greater comparability and transparency across CCPs.
Disadvantages	Lack of flexibility, which does not leave the possibility to take into account local market conditions.
Regulator's costs	1) Moral hazard i.e. the risk that a CCP simply adhere to the standard without using own judgement. This would put the onus on the regulator. 2) Where the standards prescribed do not suit the CCP, i.e. local conditions or specific features of the clearing model might lead the competent authority to

	expend resources to monitor closely the CCP.
Compliance costs	Significant, as in certain markets, it might be extremely difficult to comply with a strict percentage. In addition, such a percentage could be a significant barrier for new CCPs to access the market.
Indirect costs	N/A
Option 2	The draft RTS does not provide defined thresholds with respect to concentration, but rather states which factors shall be considered in evaluate concentration risk.
Benefits	It will provide flexibility for the clearing house to adopt the liquidity risk management model best fitted for its characteristics. The CCP has the entire responsibility to adopt the best model.
Disadvantages	Less comparability and transparency across CCPs.
Regulator's costs	As the model adopted will be the one chosen by the CCP, the regulator has to use more time to evaluate the model and assess compliance than would have been the case had a prescriptive RTS stating thresholds been adopted.
Compliance costs	In view of the flexibility allowed to CCPs, the costs are expected to be much lower than under a prescriptive approach.
Indirect costs	Inappropriate liquidity risk management may lead to the CCP having greater liquidity risk.

DEFAULT WATERFALL

(a) What is the best basis to calculate the CCP's own financial resources to be dedicated to the default waterfall?

Detailed objectives	The draft RTS should provide the adequate incentives for CCPs to adopt a prudent approach in their risk-management policy.
Option 1	The draft RTS prescribe that the CCP's skin in the game (SIG) is determined on the basis of the CCP's minimum capital requirements
How would this option achieve the objective?	This approach avoids to disincentivise CCPs from adopting conservative policies with respect to the financial resources it collects from its clearing members, since the SIG is not linked to such resources.
Option 2	The RTS prescribe that the CCP's SIG is determined on the basis of the margins and default fund posted at the CCP itself.
How would this option achieve the objective?	The advantage of a margins/default fund-based approach in the RTS is that the size of the SIG is linked to the dimension of the counterparty risk handled by the CCP itself, and thus leaves unchanged, in relative terms, the commitment of the CCP.
Which option is the preferred one? Explain briefly.	The preferred option is option 1, i.e. linking the SIG to the CCP resources. On the one side, the advantage of a capital-based approach in the RTS is that the size of the SIG is supposed to be rather stable, since it is not linked to the cleared

	market volatility nor to the clearing members' positions. On the other side, disentangling the SIG of a CCP from the margins and default funds resources it collects avoids pro-cyclical implications since the SIG is not linked to market volatility, adding to the increase of guarantees.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with the members of the ESCB.

Impacts of the proposed policies:

Option 1	The RTS prescribe that the CCP's SIG is determined on the basis of the CCP's minimum capital requirements.
Benefits	Margins are more volatile than CCP's capital requirements, so option 1 would result in relatively more stability in the SIG and reduce pro-cyclicality.
Disadvantages	The minimum capital of CCPs might not be the most accurate indicator of the risks it faces.
Regulator's costs	It may be easier for competent authorities to assess compliance with a capital-based approach, since the parameter would be immediately available from the CCP balance sheet.
Compliance costs	The compliance costs would depend on the minimum capital requirements to be determined in a RTS to be developed by EBA. Being more constant over time, it is expected to be lower than in option 2.
Indirect costs	A capital-based approach could incentivise CCPs not to raise their financial resources above the minimum requirements. The CCP's contribution to the default waterfall would be independent from the overall amount of the counterparty risk handled by the CCP.
Option 2	The draft RTS prescribe that the CCP's SIG is determined on the basis of the margins and default fund posted at the CCP itself.
Benefits	Setting the SIG based on margins would most precisely reflect the risks faced.
Disadvantages	Such a link to margins might discourage the imposition by the CCP of margining requirements above minimum levels. Margins levels are volatile and this volatility can increase in times of financial stress.
Regulator's costs	It may be less easy for competent authorities to assess compliance with a margins/default fund-based approach, since not necessarily the necessary data would be immediately available.
Compliance costs	Expected to be high in view of the variability and size of margins requirements. The feed-back to the Discussion Paper suggests that this approach would imply significant costs to CCPs.
Indirect costs	A margins/default fund-based approach could disincentivise CCPs to adopt more conservative policies with respect to the overall financial resources collected from their clearing members.

Quantitative impact assessement of the percentage of the draft RTS on default waterfall

It is not envisaged that the CCP's SIG would be adequate to prevent the eventual mutualisation of losses. Indeed, contributors to the mutualised default fund must expect to assume some of the losses in extreme cases, so that they in turn have an interest in the risk management policies and governance practices of the CCP and that they are also incentivised to participate in any close-out actions. This matters to help counteract any increased risk-taking that might be a consequence of counterparties believing that they were fully insured against such moral hazard.

Therefore, the level of SIG needs to be within a "goldilocks" zone such that the interests of the CCP and of the market participants are properly aligned.

ESMA's preferred approach is to link the CCP's skin in the game within the default waterfall to the level of the CCP's capital and reserves. The percentage of 50% which was presented in the CP was linked to the assumption that the minimum capital requirements, drafted by EBA, would be the higher of a minimum twelve month wind-down and the capital required to cover the risks associated with the CCPs activities. The level of SIG now included in the draft RTS takes into account the final choice of EBA, as explained in more details below.

In order to measure the impact of the draft RTS on the Skin in the game, we have analysed data on the current capital of 11 CCPs[32], and the expected impact of the capital requirements under EMIR drafted by EBA[33].

We have taken into account the three options overlooked by EBA ie:

- Option 1: Higher of a minimum twelve month wind-down and the capital required to cover the risks associated with the CCPs activities (EBA Discussion Paper).
- With this option, ESMA's preferred SIG was 50% (highlighted in orange below)
- Option 2: Additive approach, adopting a minimum nine month wind-down (EBA Retained Option)
- With this option, ESMA's preferred SIG is 25% (highlighted in green below). This option has the minimum cost of the three options.
- Option 3: Additive approach, adopting a minimum twelve month wind-down (EBA Consultation Paper)
- With this option, market participants preferred SIG was 10% (highlighted in yellow below)

In order to isolate the impact of the RTS on skin in the game, we use the following approach:

A. For each CCP(i) of the survey, we calculate Capital_Shortage_1 attributable to EMIR and the EBA requirements:

$$Capital_Shortage_1 = \sum_{i=1}^{nb_CCP} Capital\ Shortage\ 1(i)$$

$$= Min\big(0, Current\ Capital(i) - (\max(7.5m^{34}, EBA\ capital\ requirement))\big)$$

[32] Data could not be gathered for all European CCPs, however the biggest are include, and the sample is representative of European CCPs.

[33] The following estimates incorporate elements of the cost-benefit analysis of EBA.

B. For each CCP(i) of the survey, we calculate the Capital_Shortage_2 attributable to EMIR, the EBA requirements *and the RTS requirements*:

$$Capital_Shortage_2 = \sum_{i=1}^{nb_CCP} Capital\ Shortage\ 2(i)$$
$$= Min(0, Current\ Capital(i) - (\max(7.5m, EBA\ capital\ requirement) * (1 + SIG)))$$

Finally, the impact of the draft RTS on the SIG is the difference between Capital_Shortage_2 and Capital_Shortage_1.

The results are presented in the following table:

All the numbers are in €million	1. Higher of, 12m - EBA DP	2. Sum of, 9m – EBA's retained Option	3. Sum of, 12m - EBA CP
A. Capital shortage due to EMIR + EBA	-30.3	-63.8	-222.8
B. Capital shortage due to EMIR + EBA + 10% SIG	-53.5	-101.7	-285.4
C. Capital shortage due to EMIR + EBA + 25% SIG	-91.7	-158.6	-380.5
D. Capital shortage due to EMIR + EBA + 50% SIG	-176.7	-265.5	-539.1
Impact of 10% Skin in the game (B - A)	-23.3	-37.9	-62.6
Impact of 25% Skin in the game (C - A)	-61.5	-94.8	-157.8
Impact of 50% Skin in the game (D-A)	-146.5	-201.7	-316.4
Costs of 10% Skin in the Game			
On-going cost at a cost of equity of 7.5%	1.7	2.8	4.7
On-going cost at a cost of equity of 9%	2.1	3.4	5.6
One-off costs (4%)	0.9	1.5	2.5
Costs of 25% Skin in the Game			
On-going cost at a cost of equity of 7.5%	4.6	7.1	11.8
On-going cost at a cost of equity of 9%	5.5	8.5	14.2
One-off costs (4%)	2.5	3.8	6.3
Costs of 50% Skin in the Game			
On-going cost at a cost of equity of 7.5%	11.0	15.1	23.7
On-going cost at a cost of equity of 9%	13.2	18.2	28.5
One-off costs (4%)	5.9	8.1	12.7

Table 14: Costs of the RTS on skin in the game (€m)

[34] €7.5m: EMIR minimum capital requirement for CCPs.

The main compliance cost impact relates to the cost of capital: an on-going holding cost equivalent to the CCP's cost of equity capital (given the nature of the policy this is more appropriate than the weighted average cost of capital). The cost of equity capital range that we have used in the above table draws upon NYU analysis of financial services firms[35] .

With the chosen draft RTS on capital requirements for CCPs, the draft RTS on skin the game (25%) results in on-going costs of €7.1-8.5m, and one-off costs of €3.8m. This is not considered overall a significant impact and does not depart significantly from the estimated impact of the 10% SIG on the minimum capital requirements proposed in EBA Consultation Paper, which most European CCPs recommended as the appropriate level of SIG.

COLLATERAL

(a) What is the best approach to define the collateral standard – prescriptive list of eligible collateral or criteria-based requirements?

Specific objective	Robust standards should be applied in a consistent and transparent manner across CCPs. Standards should be sufficiently flexible to cater for the various risk management approaches employed by CCPs, the variety of products cleared by CCPs and to allow for future developments and new risks to be dealt with appropriately. It should be readily ascertainable as to whether a particular CCP is in compliance with the applicable standards.
Option 1	The Collateral draft RTS prescribes the assets that can be considered eligible as collateral, the applicable haircuts and the concentration limits.
How would achieving the objective alleviate/eliminate the problem?	Such approach ensures transparency and a level playing field across CCP. It may be easier for competent authorities to assess compliance with such standards, exactly the same 'tests' would apply to every CCP.
Option 2	The Collateral draft RTS adopts criteria to take in consideration by the CCP to determine the assets eligible as collateral, the haircuts and the concentration limits. The standard contemplates a general requirement for CCPs to demonstrate that assets accepted as collateral satisfy the criteria, including that they display low credit and market risks.
How would achieving the objective alleviate/eliminate the problem?	A criteria based approach is inherently flexible because rather than identifying an exact list of assets, haircuts and concentration limits which a CCP must implement, the draft RTS sets out a high level framework against in which a CCP's policies must comply. The CCP can adapt its risk exposure in function of its profile, the profile of its clearing

[35] http://w4.stern.nyu.edu/~adamodar/New_Home_Page/datafile/wacc.htm

	members and adapts its risk policy over time.
Which option is the preferred one? Explain briefly.	A criteria based approach is preferred owing to the inherent difficulty of defining a durable list of assets that are sufficiently reliable and liquid to qualify as eligible collateral.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA), the ESRB and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	The Collateral draft RTS prescribes the assets that can be considered eligible as collateral, the applicable haircuts and the concentration limits.
Benefits	Such approach promotes a high degree of level playing field between EU CCPs and promote greater comparability and transparency across CCPs.
Disadvantages	The CCPs will have a limited ability to adapt their collateral requirements to the risks they face and the profile of their clearing members.
Regulator's costs	Monitoring compliance with detailed rules should not entail material on-going costs for the regulator – a standard compliance could be applied to all CCPs. Regulators would implicitly incur additional costs if the detailed rules were inappropriate for the specific risk profile and left little flexibility to apply more suitable requirements.
Compliance costs	A CCP may need to expend resources amending its business model or risk management framework to comply with the standards prescribed in the RTS where such are incompatible with the business model or risk management approach of the CCP. The CCP cannot adjust its risk policy without a change or the regulation, potentially leading to inadequate level of overall robustness.
Indirect costs	Standards prescribed in the RTS may not be sufficiently flexible to deal with risks or developments which arise or are identified in the future. Amending the RTS would likely require considerable resources (also including time). If the prescribed standards were not to be amended, or were not to be timely amended, then the robustness of the CCP may be adversely affected (which might impose a substantial near-term cost to the clearing members or to society).
Option 2	The Collateral RTS adopts criteria to take in consideration by the CCP to determinate the assets eligible as collateral, the haircuts and the concentration limits. The standard contemplates a general requirement for CCPs to demonstrate that assets accepted as collateral satisfy the criteria, including that they display low credit and market risks.
Benefits	A criteria based approach is inherently flexible setting a high level framework against which a CCP's investment choices or policies must comply. The criteria allow the CCP to choose and manage their risk exposure in function of the market, the products cleared, the clearing members, etc. This approach gives the capacity to the CCPs to react rapidly in case of evolution of its risk exposure and ensure their robustness in keeping control of the risk exposure.
Disadvantages	It does not ensure transparency and might create an unlevel playing field

	across CCPs.
Regulator's costs	It may be more difficult for a regulator to assess CCPs' on-going compliance with criteria based standards, since CCPs could adopt very different approaches to compliance.
Compliance costs	The CCP needs resources to monitor and adapt its risk exposure, although ensuring compliance with fewer precise rules will reduce the overall compliance burden.
Indirect costs	Criteria based standards may not be applied in a consistent and transparent manner across CCPs which may have an effect on the competitiveness of a CCP (a cost to the CCP) or the on-going viability of the CCP (with long-term costs for society).

(b) Should the standard require a minimum proportion of collateral in cash?

Specific objective	In order to ensure the robustness of the CCP, the CCP should have available sufficient cash to cover same-day liquidity needs arising from failure of one or more clearing members.
Option 1	To allow the CCP or the clearing member to determine the level of cash provided as collateral.
How would achieving the objective alleviate/eliminate the problem?	Such approach allows flexibility for the CCP which can determine the level of cash required relative to other types of collateral that can be used to generate liquidity when required. It also avoids any requirement for the CCP to maintain large unsecured cash balances.
Option 2	To prescribe a minimum level of cash that a CCP has to receive from the clearing member.
How would achieving the objective alleviate/eliminate the problem?	This prescription ensures that the CCP has a minimum amount of the most liquid resource (cash) immediately available in case of default of clearing member.
Which option is the preferred one? Explain briefly.	Option 1. Favour the flexible approach, allowing the Liquidity RTS to specify minimum requirements for CCP liquidity risk management that a CCP would have the option to satisfy (in part) via a minimum cash requirement.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA), the ESRB and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To allow the CCP or the clearing member to determine the level of cash provided as collateral.
Benefits	The CCP can determine the level of cash required from the clearing member in function of the market, the products cleared, the clearing members, etc. as well as a function of its access to alternative sources of liquidity in private markets or through regular access to the central bank.

Disadvantages	In case of a default of a clearing member, the CCP might not have sufficient liquid resource (cash) immediately available.
Regulator's costs	The monitoring of CCPs' net liquidity exposures may be more difficult, although this is more relevant to the liquidity RTS than for collateral per se.
Compliance costs	Minimal difference between options, as the CCP would need to comply with the broader requirements of the RTS under both options.
Indirect costs	The absence of a cash requirement may make CCPs more vulnerable to liquidity shortages following a member default, although this should be mitigated by the liquidity RTS. The level of cash required may not be applied in a consistent and transparent manner across CCPs which may have an effect on the competitiveness of a CCP (a cost to the CCP) or the on-going viability of the CCP (a cost to the clearing members or to society).
Option 2	To prescribe a minimum level of cash that a CCP has to receive from the clearing member.
Benefits	The minimum requirement to post collateral in the form of cash ensures that the CCP has resources immediately available to manage the default of a clearing member. The CCP can require a higher level of collateral in cash than the minimum sets out in the RTS enabling the CCP to manage its liquidity risk exposure. A minimum deposit in cash correlatively reduces the level of collateral in financial instruments or commercial bank guarantees and the market risk. The RTS allows a better transparency and a higher level playing field across the CCP.
Disadvantages	The approach lacks flexibility, it might not be adaptable to the potentially heterogeneous situations of CCPs and to the future evolution of their risk models, including the range of reliable liquidity resources that can be held.
Regulator's costs	The timeframe to evolve the RTS may be long and not compatible with changes to CCPs' business and risk management requirements. The cash may also need to be held on (unsecured) deposit with a commercial bank, introducing an additional risk as an unintended consequence of regulatory action. Given that cash would need to be maintained with a central bank or be collateralised with financial instruments, it would appear as a regulatory inconsistency to require a minimum amount of cash under the collateral requirements.
Compliance costs	Minimal difference between options, as the CCP would need to comply with the broader requirements of the RTS under both options.
Indirect costs	Cost to clearing members could be higher if the requirement to post cash is introduced.

According to the responses to a CCP survey gathered by ESMA[36], a large majority of CCP (73%) don't currently require their members to post a minimum level of collateral in the form of cash. Moreover, among those who do apply such a limit, there is no broad consensus, as the level of minimum cash requirement varies from 30% to 100%. Therefore the approach set out in the RTS is aligned with current market practise and should not lead to additional cost for clearing members.

However, CCPs will retain the possibility to impose minimum amounts of cash collateral on their members. Information on the type of collateral currently posted in bilateral transactions is useful to analyse the

[36] Survey performed in 2012 among 15 European CCP

impact on market participants, should those transactions become subject to the clearing obligation. According to the most recent ISDA Margin Survey[37], 75% to 80% of collateral received and delivered by respondents against non-cleared OTC transactions takes the form of cash.

Given the high percentage of collateral already collected in the form of cash, the impact of cash requirement imposed by certain CCPs, if those transactions became subject to the clearing obligation, would remain relatively subdued.

(c) Should clearing members be able to use their own or other clearing members' debt securities as collateral?

Specific objective	In order to ensure the robustness of the CCP, the CCP should minimise as far as possible its exposure to wrong-way risks. The framework set out in the RTS should be enough flexible to be adaptable to the heterogeneous situations of the CCP and to the future evolution of the CPP risk model, and avoid restricting the range of eligible collateral to the extent that central clearing becomes uneconomic.
Option 1	The CCP is not permitted to accept as collateral any security issued by any clearing member.
How would achieving the objective alleviate/eliminate the problem?	This approach would help to ensure that the CCP is robust to widespread distress among institutions (often with similar business models) that are members of the CCP.
Option 2	The CCP is not permitted to accept as collateral from a clearing member any security issued by that member.
How would achieving the objective alleviate/eliminate the problem?	This approach would help to ensure that collateral posted by a member does not immediately lose value following its default.
Which option is the preferred one? Explain briefly.	Option 2, with an exemption for self-issued covered bonds. This approach is judged to strike the most appropriate balance between minimising wrong-way risk to the CCP and ensuring adequate availability of eligible collateral.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA), the ESRB and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	The CCP is not permitted to accept as collateral any security issued by any clearing member.
Benefits	The value of the collateral held by CCPs is robust to generalised distress affecting multiple clearing members simultaneously – the CCP is better protected

[37] ISDA Margin survey 2012, based on data as of December 2011

	against member default. Clearing members are not able to cross-collateralise positions with the CCP.
Disadvantages	It would significantly restrict the universe of eligible collateral.
Regulator's costs	Minimal – a restriction of this kind would be relatively straightforward to apply and enforce.
Compliance costs	CCPs may need to adjust current risk management practices to accommodate tighter rules on use of clearing member securities. Restricting the set of eligible collateral is likely to increase costs (for members) and may undermine the competitiveness of the CCP (which may have costs for society).
Indirect costs	Restricting the set of eligible collateral may also cause wider market disruption, potentially disrupting the allocation of capital to the real economy.
Option 2	The CCP is not permitted to accept as collateral from a clearing member any security issued by that member.
Benefits	Ensures that value of the collateral held by CCPs is not directly related to the credit standing of the clearing member. But exposure to wrong-way risk is greater than under option 1. Limits wrong-way risk while allowing clearing members to use covered bonds as collateral (subject to certain conditions), consistent with their traditional role in funding markets.
Disadvantages	It would exclude some assets (such as certain types of covered bonds) that are commonly used as collateral in the market.
Regulator's costs	Minimal – a restriction of this kind would be relatively straightforward to apply and enforce.
Compliance costs	Same as for option 1, but significantly less acute. The exemption for covered bonds would also broaden range of eligible collateral.
Indirect costs	Same as for option 1, but significantly less acute.

According to the responses to a CCP survey gathered by ESMA[38], and to information publicly available on CCPs website, the definition of eligible collateral varies from one CCP to the other but share common principles. In particular, around 75% of European CCPs do not currently accept collateral which is issued by the clearing member itself or by an entity connected to this clearing member.

Some CCPs even adopt a more stringent approach whereby they do not accept collateral in the form of financial instruments issued by any private entity. CCPs which do accept corporate bonds or equities will typically apply prudent risk management processes by imposing haircuts of around 15 to 20%.

Given that current market practise is generally aligned with the option chosen in the draft RTS, in the sense that most CCPs do not accept as collateral from a clearing member any securities issued by that clearing member, the compliance cost of option 2 should be minimal.

[38] Survey performed in 2012 among 15 European CCP

(d) Should the standard limit the amount of collateral received in commercial bank guarantees?

Specific objective	In order to ensure the robustness of the CCP, the CCP risk exposure to commercial bank guarantees should be capped due to the uncertainty on the effectiveness of the payment by the issuer of the guarantee in the timeframe compatible with the management of the default. However, the framework sets out in the RTS should be sufficiently flexible to accommodate the heterogeneous situations of the CCP and to the future evolution of the CPP risk model.
Option 1	The CCP is able to determine the amount of collateral provided in commercial bank guarantees.
How would achieving the objective alleviate/eliminate the problem?	Such approach allows a high flexibility for the CCP which can determine the maximum amount of commercial bank guarantees received as collateral in accordance with the eligibility criteria and the concentration limits referred to in the RTS.
Option 2	The standard prescribes a maximum amount of collateral provided in the form of commercial bank guarantees.
How would achieving the objective alleviate/eliminate the problem?	In addition to the eligibility criteria, the RTS fixes specific ceilings for the maximum risk exposure that a CCP can take on commercial bank guarantees.
Which option is the preferred one? Explain briefly.	Option 1, but with a requirement for the CCP to get the approval of the competent authority.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA), the ESRB and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	The CCP is able to determine the amount of collateral provided in commercial bank guarantees.
Benefits	The CCP can adapt the level of commercial bank guarantees provided as collateral to market conditions, the products cleared, the clearing members, etc.
Disadvantages	Liquidity issues: a CCP might not hold collateral which can be liquidated easily and in a timeframe which is compatible with the management of the default.
Regulator's costs	The monitoring of the CCP risk exposure and its solvability may be more difficult to carry out owing to different practices across CCPs
Compliance costs	The CCP may need resources to monitor and adapt its risk exposure on commercial bank guarantees and establish procedures for responding to breaches.
Indirect costs	The level of commercial bank guarantees accepted by the CCP may not be applied in a consistent and transparent manner across CCPs which may have an effect on the competitiveness of a CCP (a cost to the CCP) or the on-going viability of the CCP (a cost to the clearing members or to society).
Option 2	The standard prescribes a maximum amount of collateral provided in the form

	of commercial bank guarantees.
Benefits	The level of the CCP risk exposure on commercial bank guarantees is better controlled. Limiting the amount of collateral provided in commercial bank guarantees oblige the CCP to hold collateral in cash and financial instruments which can be liquidate with more certainty and in the timeframe compatible with the management of the default. The RTS allows a better transparency and a higher level playing field across the CCP.
Disadvantages	Lack of flexibility: it will be more difficult for CCPs to adapt the level of commercial bank guarantees provided as collateral to market conditions, the products cleared, the clearing members, etc.
Regulator's costs	The timeframe to evolve the RTS may be long and not compatible with the CCP business.
Compliance costs	A CCP may need to expend resources amending its business model or risk management framework to comply with the standards prescribed in the RTS where such are incompatible with the business model or risk management approach of the CCP. The CCP cannot adjust its risk policy without a change or the regulation.
Indirect costs	Standards prescribed in the RTS may not be sufficiently flexible to deal with risks or developments which arise or are identified in the future. If the prescribed standards were not to be amended, or were not to be timely amended, then the on-going viability of the CCP may be affected (which might impose a cost to the clearing members or to society).

INVESTMENT POLICY

In respect of this draft RTS, there are overlapping aspects with other requirements of EMIR (such as collateral, capital and liquidity draft RTS) which should be considered. The policy issues mentioned below concern the ability of a CCP's investments to be liquidated rapidly with minimal adverse price effect.

(a) What are the appropriate criteria for determining the financial instruments that are sufficiently liquid and with minimal credit and market risk?

Specific objective	To ensure the robustness of the CCP by limiting the likelihood of a CCP incurring a loss.
Option 1	To prescribe that a CCP may only invest its financial resources in cash denominated in certain currencies and debt instruments that meet a restrictive set of conditions regarding credit risk (e.g. the issuer/guarantor), market risk (e.g. time-to-maturity) and liquidity risk (e.g. level of market liquidity in the financial instrument).
How would this option achieve the objective?	Restrictive investment standards would seek to limit the likelihood of a CCP making a loss.
Option 2	To prescribe that a CCP may invest its financial resources in cash denominated in any currency and any form of financial instrument that meets a restrictive set of conditions regarding credit risk (e.g. the issuer/guarantor), market risk (e.g. time-to-maturity) and liquidity risk (e.g. level of market liquidity in the financial instrument).
How would this option achieve the objective?	A greater degree of flexibility in the investment policy draft RTS framework would encourage CCP to hold diversified investment portfolios which would limit the likelihood of a CCP making a loss.
Which option is the preferred one? Explain briefly.	Option one. Given that CCPs should be prohibited to invest for the sole objective of profit maximisation. Its investment activity should aim at protecting the resources collected from clearing members. Therefore, strict conditions should apply to avoid that the CCP incur losses on its investment activity
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA after consultation with EBA and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To prescribe that a CCP may only invest its financial resources in cash denominated in certain currencies and debt instruments that meet a restrictive set of conditions regarding credit risk (e.g. the issuer/guarantor), market risk (e.g. time-to-maturity) and liquidity risk (e.g. level of market liquidity in the financial instrument).
Benefits	Restrictive investment standards may reduce the likelihood of a CCP incurring

	a loss by directing the financial resources of CCPs towards financial instruments which are more likely to be capable of being liquidated rapidly with minimal adverse price effect and cash in respect of which the CCP can manage the foreign exchange risk.
Disadvantages	The list of eligible instruments might be limited which might lead CCPs to hold concentrated investment portfolios.
Regulator's costs	There is a risk that CCPs may become complacent and simply invest in instruments permitted under the investment policy draft RTS without any prior assessment of whether such investments suit the business model or risk management framework of the CCP. This might place additional requirements upon the regulator to undertake such assessment.
Compliance costs	Restrictive investment standards may require some CCPs to change the allocation of their investment portfolio. The CCP may have to exit existing positions at a loss. Restrictive investment standards may prevent a CCP from holding a sufficiently diversified investment portfolio and therefore increase the likelihood of the CCP incurring a loss (for example by concentrating the CCP's counterparty credit risk exposure). Restrictive investment standards may not be sufficiently flexible to deal with the business model or risk management framework of some CCPs (i.e. may not permit a CCP to invest in financial instruments of a duration which matches the liabilities of the CCP).
Indirect costs	If the range of financial instruments in which CCPs can invest their financial resources is too narrow, the market for eligible financial instruments might become distorted (i.e. the investment policy draft RTS might cause an increase in demand and price which would not otherwise have occurred).
Option 2	To prescribe that a CCP may invest its financial resources in cash denominated in any currency and any form of financial instrument that meets a restrictive set of conditions regarding credit risk (e.g. the issuer/guarantor), market risk (e.g. time-to-maturity) and liquidity risk (e.g. level of market liquidity in the financial instrument).
Benefits	A greater degree of flexibility in the draft RTS may encourage CCPs to hold diversified investment portfolios which could limit the likelihood of a CCP making a loss.
Disadvantages	A greater degree of flexibility may expose a CCP to risks over and above those that it can monitor and manage.
Regulator's costs	It may involve resource for a regulator to assess whether the CCP has identified and can in fact monitor and manage the risks associated with investments in a wider range of currencies/financial instruments.
Compliance costs	It may involve resource for the CCP to assess whether the CCP has identified and can in fact monitor and manage the risks associated with investment in a wider range of currencies/financial instruments.
Indirect costs	It may increase the likelihood of a CCP incurring a loss. Such a loss may require the recapitalisation of the CCP (which would be a cost to the shareholders of the CCP), or in extremis could contribute to the failure of the CCP which could involve costs to market participants and the wider society.

It is difficult to assign a specific monetary value to the cost and benefit listed above. In particular, the following uncertainties should be considered:

- the degree to which a CCP can monitor and manage the risks associated with a less restrictive investment portfolio;
- the likelihood of a CCP incurring a loss where it invests its financial resources in a less restrictive investment portfolio;
- the extent to which CCPs would invest in instruments permitted under the investment policy draft RTS without any prior assessment of whether such investments suit the business model or risk management framework of the CCP;
- the amount of time that might be required to be expended by regulators in monitoring whether a CCP's investments suit its business model or risk management framework;
- the potential loss faced by CCPs in exiting from investments which would not be permitted under restrictive investment standards;
- the extent to which restrictive investment standards would prevent a CCP from holding a sufficiently diverse investment portfolio;
- the extent to which CCPs need to invest in instruments which would not be permitted under restrictive investment standards (i.e. to match the duration of their liabilities).

(b) What are the appropriate criteria for determining the arrangements that are sufficiently highly secure for the deposit of financial instruments?

Specific objective	To ensure the robustness of the CCP by limiting the likelihood of a CCP incurring a loss.
Option 1	To prescribe that where a CCP cannot deposit financial instruments posted as margins or as default fund contributions with the operator of a securities settlement system then such financial instruments shall be deposited with custodians that meet a restrictive set of conditions regarding their creditworthiness and operational robustness and only deposited under arrangements that prevent any losses to the CCP due to the default or insolvency of the custodian.
How would this option achieve the objective?	Restrictive requirements regarding custodians and depository arrangements would seek to limit the likelihood of a CCP incurring any losses to the CCP due to the default or insolvency of the custodian.
Option 2	To prescribe that a CCP may deposit financial instruments posted as margins or as default fund contributions with a wider variety of custodians.
How would this option achieve the objective?	A greater degree of flexibility in the draft RTS would enable CCP's to better diversify the custodians with which they deposit financial instruments posted as margins or as default fund contributions therefore limiting the likelihood of a CCP incurring a loss due to the default or insolvency of the custodian.
Which option is the preferred one? Ex-	Option one. Clearing members need to rely on the CCP abil-

plain briefly.	ity to always return the financial resources posted with it. Therefore, strict conditions should apply for the deposit of these resources in order to ensure that they are adequately protected.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA after consultation with EBA and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To prescribe that where a CCP cannot deposit financial instruments posted as margins or as default fund contributions with the operator of a securities settlement system, then such financial instruments shall be deposited with custodians that meet a restrictive set of conditions regarding their creditworthiness and operational robustness and only deposited under arrangements that prevent any losses to the CCP due to the default or insolvency of the custodian.
Benefits	Restrictive requirements regarding a CCP's custodians may reduce the likelihood of a CCP incurring a loss.
Disadvantages	Lower degree of diversification of the custodians with which CCP deposit financial instruments posted as margins or as default fund contributions. Higher exposure to the default or insolvency of a single custodian.
Regulator's costs	There is a risk that CCPs may become complacent and simply deposit instruments with custodians permitted under the investment policy RTS without a proper assessment of the risks associated with that particular custodian. This might place additional requirements upon the regulator to undertake such assessment.
Compliance costs	Restrictive standards may require some CCPs to change the arrangements under which they currently deposit financial instruments. Restrictive standards may prevent a CCP from depositing financial instruments with as diversified a range of counterparties and therefore increase the likelihood of the CCP incurring a loss.
Indirect costs	The use of custodians which qualify under restrictive standards may involve additional cost for CCPs insofar as financial institutions which are sufficiently robust and provide sufficient protection may charge higher fees. These fees may, to some degree, be passed on to end clients.
Option 2	To prescribe that a CCP may deposit financial instruments posted as margins or as default fund contributions with a wider variety of custodians.
Benefits	A greater degree of flexibility in the investment policy draft RTS framework would encourage CCP's to deposit financial instruments with a diversified range of custodians.
Disadvantages	The custodians selected by CCPs might not meet a restrictive set of conditions regarding their creditworthiness and operational robustness.
Regulator's costs	It may involve resources for a regulator to assess whether the CCP has identified and can in fact monitor and manage the risks associated with the deposit

	of financial instruments with a wider range of custodians.
Compliance costs	It may involve resources for the CCP to assess whether it can in fact monitor and manage the risks associated the deposit of financial instruments with a wider range of custodians.
Indirect costs	A greater degree of flexibility in the investment policy draft RTS framework may expose a CCP to risks over and above those that it can monitor and manage and may increase the likelihood of a CCP incurring a loss due to the default of or insolvency of the custodian. Such loss may require the recapitalisation of the CCP (which would be a cost to the CCP's shareholders), or in extremis could contribute to the failure of the CCP which could involve cost to market participants and wider society.

It is difficult to assign a specific monetary value to the cost and benefit listed above. In particular, the following uncertainties should be considered:

- the degree to which custodians with less operational robustness and creditworthiness would increase the likelihood of the CCP incurring a loss. Although it is likely, it is not evident to assign a monetary value;
- the degree to which diversification is correlated to a reduction in the risk of loss for a CCP;
- the extent to which CCPs would deposit financial instruments without an appropriate assessment of the risks associated with a particular custodian;
- the amount of time that would be required to be expended by regulators in monitoring whether a CCP's custodians provide appropriate protection for financial instruments deposited with them;
- the extent to which CCPs currently deposit financial instruments under arrangements which would not qualify under restrictive standards;
- the extent to which restrictive standards would prevent a CCP from depositing financial instruments with a sufficiently diverse range of custodians;
- the extent to which fees would differ between custodians;
- the extent to which CCPs currently use custodians which would not qualify under restrictive standards.

(c) What are the appropriate criteria for determining the arrangements that are sufficiently highly secure for the deposit of cash?

Specific objective	To ensure the robustness of the CCP by limiting the likelihood of a CCP incurring a loss.
Option 1	To prescribes that cash shall only be deposited by a CCP with custodians that meet a restrictive set of conditions regarding their creditworthiness and operational robustness. Where the deposit is not performed through facilities made available by a central bank, a significant proportion of cash needs to be deposited through arrangements that would ensure collateralisation with high quality collateral.
How would this option achieve the objective?	Restrictive requirements regarding a CCP's custodians and arrangements for cash deposits would seek to limit the like-

	lihood of a CCP incurring a loss.
Option 2	To prescribe that a CCP may deposit cash with a wider variety of custodians and under arrangements which do not ensure collateralisation with high quality collateral.
How would this option achieve the objective?	A greater degree of flexibility in the investment policy draft RTS framework would enable CCPs to better diversify the custodians with which they deposit cash therefore limiting the likelihood of a CCP incurring a loss.
Which option is the preferred one? Explain briefly.	Option one in order to limit potential losses that a CCP might incur and given that the objective of the investment policy for a CCP is to protect the financial resources posted by clearing members rather than profit maximisation.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA after consultation with EBA and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To prescribe that cash shall only be deposited by a CCP with custodians that meet a restrictive set of conditions regarding their creditworthiness and operational robustness. Where the deposit is not performed through facilities made available by a central bank, a significant proportion of such cash needs to be deposited through arrangements that would ensure collateralisation with high quality collateral.
Benefits	Restrictive requirements regarding a CCP's custodians and arrangements for cash deposits may reduce the likelihood of a CCP incurring a loss.
Disadvantages	Lower degree of diversification of the custodians with which CCP deposit cash posted as margins or as default fund contributions. Higher exposure to the default or insolvency of a single custodian.
Regulator's costs	There is a risk that CCPs may become complacent and simply deposit cash with custodians permitted under the investment policy RTS without a proper assessment of the risks associated with a particular custodian. This might place additional requirements upon the regulator to undertake such assessment.
Compliance costs	Restrictive standards regarding a CCP's custodians and arrangements for cash deposits may require some CCPs to change the arrangements under which they currently deposit cash. Restrictive standards may also prevent a CCP from depositing cash with as diversified a range of custodians and therefore increase the likelihood of the CCP incurring a loss.
Indirect costs	The use of custodians which meet restrictive standards regarding a CCP's custodians and arrangements for cash deposits may involve additional cost for CCPs insofar as financial institutions which are sufficiently robust and provide sufficient protection may charge higher fees. These fees may, to some degree, be passed on to end clients.
Option 2	To prescribe that a CCP may deposit cash with a wider variety of custodians and under arrangements which do not ensure collateralisation with high

	quality collateral.
Benefits	A greater degree of flexibility in the investment policy draft RTS framework would encourage CCPs to deposit cash with a diversified range of custody providers.
Disadvantages	The custodians selected by CCPs might not meet a restrictive set of conditions regarding their creditworthiness and operational robustness.
Regulator's costs	It may involve resource for a regulator to assess whether the CCP has identified and can in fact monitor and manage the risks associated with the deposit of cash with its custodians.
Compliance costs	It may involve considerable resource for the CCP to assess whether it can in fact monitor and manage the risks associated with the deposit of cash with its custodians.
Indirect costs	A greater degree of flexibility in the investment policy draft RTS framework may expose a CCP to risks over and above those that it can monitor and manage and may increase the likelihood of a CCP incurring a loss. Such loss may require the recapitalisation of the CCP (which would be a cost to the CCPs shareholders), or in extremis could contribute to the failure of the CCP which could involve cost to market participants and wider society.

It is difficult to assign a specific monetary value to the cost and benefit listed above. It should be noted however that from the survey carry out by ESMA, it appeared evident that only a limited number of CCPs are subject to such a strict requirement. Still, ESMA believes that the systemic role played by CCPs justifies such a strict requirement, as CCPs should not be exposed to the default of a limited number of credit institutions.

When considering the monetary values, ESMA is facing the uncertainties similar to those mentioned under the previous option and the following:

- the extent to which CCPs would deposit cash without an appropriate assessment of the risks associated with a particular custodian and the likelihood that: i) such custodian could default; ii) the cash deposited with such custodian might be lost in the event of a default;
- the amount of time that would be required to be expended by regulators in monitoring whether a CCP's custodians provide appropriate protection for cash deposited with them.

(d) What are the appropriate criteria for determining the concentration limits?

Specific objective	To ensure the robustness of the CCP by limiting the likelihood of a CCP incurring a loss.
Option 1	To require a CCP to establish concentration limits per individual financial instrument, type of financial instrument, individual issuer, type of issuer and counterparty.
How would this option achieve the objective?	Restrictive concentration limits would seek to limit the likelihood of a CCP making a loss.
Option 2	To require a CCP to establish concentration limits only at the level of individual obligors.

How would this option achieve the objective?	A greater degree of flexibility in the investment policy draft RTS framework might encourage CCPs to hold diversified investment portfolios which could limit the likelihood of a CCP making a loss.
Which option is the preferred one? Explain briefly.	Option one as it ensures greater safety of the CCP.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA after consultation with EBA and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	To require a CCP to establish concentration limits per individual financial instrument, type of financial instrument, individual issuer, type of issuer and counterparty.
Benefits	Restrictive concentration limits may reduce the likelihood of a CCP incurring a loss by limiting the exposure of the CCP not only to individual obligors but also to types of obligor.
Disadvantages	Restrictive standards may prevent a CCP from holding a diversified investment portfolio.
Regulator's costs	There is a risk that CCPs may become complacent and simply invest in instruments permitted under the investment policy RTS without assessment of whether such investments suit the business model or risk management framework of the CCP. This could place additional requirements upon the regulator to undertake such assessment.
Compliance costs	Restrictive standards may require some CCPs to change the allocation of their investment portfolio. The CCP may have to exit existing positions at a loss. Restrictive standards prescribed may not be sufficiently flexible to deal with the business model or risk management framework of some CCPs (i.e. permitting the CCP to invest in financial instruments of a duration which matches the liabilities of the CCP).
Indirect costs	Where the standards prescribed in the investment policy draft RTS are too restrictive then, when combined with a restrictive set of financial instruments in which a CCP can invest, it is possible that CCPs might struggle to find sufficient financial instruments in which they can invest their financial resources. In such circumstances the market for eligible financial instruments might become distorted whereby the investment policy RTS causes an increase in demand (and price) which would not otherwise have occurred.
Option 2	To require a CCP to establish concentration limits only at the level of individual obligors.
Benefits	A greater degree of flexibility in the investment policy draft RTS framework would encourage CCPs to hold diversified investment portfolios which could limit the likelihood of a CCP incurring a loss.
Disadvantages	A greater degree of flexibility in the investment policy draft RTS framework may expose a CCP to risks over and above those that it can monitor.
Regulator's costs	It may involve resource for a regulator to assess whether a CCP has identified

	and can in fact monitor and manage the risks associated with its investment portfolio.
Compliance costs	It may involve resource for a CCP to assess whether it has identified and can in fact monitor and manage the risks associated with its investment portfolio.
Indirect costs	

(e) Should a CCP be permitted to invest in derivative instruments for risk management (as opposed to speculative) purposes?

Specific objective	To ensure the robustness of the CCP by limiting the likelihood of a CCP making a loss.
Option 1	A CCP should be permitted to use derivatives for risk management purposes.
How would this option achieve the objective?	Using derivatives to hedge risks that a CCP would otherwise be exposed to may reduce the likelihood of a CCP making a loss.
Option 2	A CCP should not be permitted to invest in derivatives for risk management purposes.
How would this option achieve the objective?	Use of derivatives exposes a CCP to risks over and above those it would otherwise be exposed to may increase the likelihood of a CCP making a loss.
Which option is the preferred one? Explain briefly.	Option two, as it is considered that CCPs have other means than derivatives to manage the risks they might be exposed to. Therefore derivatives could only be used in exceptional circumstances for the management of a default.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA after consultation with EBA and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	A CCP should be permitted to use derivatives for risk management purposes.
Benefits	Using derivatives to hedge risks that a CCP would otherwise be exposed to may reduce the likelihood of a CCP making a loss.
Disadvantages	There is a risk of a circular reference, since CCPs are the entities which are clearing derivatives.
Regulator's costs	Regulators may need to expend resources reviewing and monitoring the policies, procedures and risk management framework of the CCP to ensure that it has appropriate arrangements in place to manage the risks associated with the use of derivatives. It could also be difficult to ascertain that derivatives are in fact hedging risks faced by the CCP and not being used for speculative purposes. Regulators may need to expend resources attempting to ascertain that a CCP is not using derivatives to speculate.
Compliance costs	A CCP may need to expend resources developing, executing and monitoring compliance with policies, procedures and a risk management framework for

	the use of derivatives. It could also be difficult to ascertain that derivatives are in fact hedging risks faced by the CCP and not being used for speculative purposes. A CCP may need to expend resources attempting to ascertain that derivatives are not being used to speculate.
Indirect costs	The use of derivatives may expose a CCP to risks over and above those that it would otherwise be exposed to and may increase the likelihood of a CCP incurring a loss (through its derivative positions). Such loss may require the recapitalisation of the CCP (which would be a cost to the shareholders of the CCP), or in extremis could contribute to the failure of the CCP which could involve cost to market participants and wider society. CCPs with a banking licence could be required to clear its derivatives with another CCP.
Option 2	A CCP should not be permitted to invest in derivatives for risk management purposes.
Benefits	The use of derivatives may expose a CCP to risks over and above those that it would otherwise be exposed to and may increase the likelihood of a CCP incurring a loss (through its derivative positions). A prohibition on the use of derivatives by a CCP may reduce the likelihood of a CCP incurring such a loss.
Disadvantages	Lack of flexibility in risk management.
Regulator's costs	N/A
Compliance costs	Some CCPs may have previously entered into long-dated derivatives which could take some time to unwind. A prohibition on the use of derivatives by a CCP might force CCPs to exit these positions at a loss.
Indirect costs	A CCP, which by definition should have a flat book, should not have significant foreign exchange or interest rate risks that require hedging. Any need to hedge risks should, therefore, only arise from the CCP's acceptance of collateral, a risk which should be covered by the CCP employing adequate haircuts. A prohibition on the use of derivatives by CCPs should not, therefore, have a material effect on the ability of a CCP to reduce the likelihood of its making a loss.

It is difficult to assign a specific monetary value to the cost and benefit mentioned above. In particular, it should be noted that there are uncertainties over:

- the degree to which CCPs have risks that need to be hedged and the degree to which such risks can be hedged through the use of derivatives;
- the quality of policies, procedures and risk management frameworks that CCPs would have in place to manage the risks associated with the use of derivatives;
- the amount of time required to be expended by regulators in monitoring the use of derivatives by CCPs and the risks associated with such use.

REVIEW OF MODELS STRESS TESTS AND BACK TESTS

(a) Should the type of tests to be performed by a CCP be specified in the draft RTS or it should be left to the CCP under a set of criteria?

Specific objective	The policy has an objective to ensure that CCPs conduct the types of tests that promote highly robust risk management.
Option 1	The specification of the types of tests a CCP undertakes takes the form of a criteria-based approach which CCPs should satisfy in performing their tests.
How would achieving the objective alleviate/eliminate the problem?	This approach ensures sufficient flexibility to cater for the wide range of products which may be cleared in the future, reflect differences in CCPs' business and risk management approaches and allow future developments and new risks to be dealt with.
Option 2	The specification of the types of tests a CCP undertakes takes a prescriptive approach detailing the tests to be conducted by CCPs.
How would achieving the objective alleviate/eliminate the problem?	This approach will provide a uniform and transparent method of testing across CCPs.
Which option is the preferred one? Explain briefly.	Option 1 is preferred as CCPs vary in size, risk appetite, ownership and strategy amongst many other things. A criteria-based approach allows CCPs to adapt their testing in a way that best suits their specificities.
Is the policy chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The policy response chosen is the responsibility of ESMA in consultation with other relevant Authorities (EBA) and with the members of the ESCB.

Impacts of the proposed policies:

Option 1	The specification of the types of tests a CCP undertakes takes the form of a criteria-based approach which CCPs should satisfy in performing their tests.
Benefits	A criteria-based approach provides for flexibility at the CCP to adapt its testing programmes, where necessary, in order to satisfy the criteria. The approach will ensure that CCPs are monitoring and managing the specific risks they are exposed to. The approach is adaptable to cater for any derivative products that may be cleared in the future and cover new developments and emerging risks. The approach is in line with CPSS-ISOCO and therefore ensures international consistency and reduces the possibility for regulatory arbitrage.
Disadvantages	Less transparency and comparability across CCPs
Regulator's costs	Greater supervisory checks would be envisaged as it would not be immediately apparent whether the criteria are respected and will require in-depth analysis to ensure compliance. This will use greater staff resource and time.
Compliance costs	It is envisaged that the compliance costs would be moderate as existing CCPs should already have a testing policy which promotes prudent risk management that can be easily adapted, where necessary, to satisfy the criteria-based test-

	ing regime. For new CCPs, the costs will be higher as there will be a cost to implement the necessary infrastructure regardless of the option chosen. It is not envisaged that there will be a substantial increase in the number of CCPs in the coming years.
Indirect costs	A criteria-based approach could result in varied testing standards across CCPs and therefore a lack of consistency and transparency. Additionally, there could also be differences in how CCPs calculate their resource coverage which could put a CCP at a competitive disadvantage.
Option 2	The specification of the types of tests a CCP undertakes takes a prescriptive approach detailing the tests to be conducted by CCPs.
Benefits	A prescriptive approach would provide for transparency, comparability across CCPs and harmonisation as it would be easier to demonstrate compliance. It is envisaged that the supervisory costs would be comparatively less as it would provide for clear and unambiguous standards to be met.
Disadvantages	Prescribing the types of tests CCPs should conduct to monitor and manage their risk exposure could create unmanaged and uncovered risk exposure and be detrimental in a default situation.
Regulator's costs	There is the risk of moral hazard because a CCP simply tests in the way prescribed without any prior assessment; this would put the onus on the competent authority. If the standards prescribed do not suit the business model or risks a CCP poses to its clearing members and the wider market, the competent authority may need to expend additional resources to more closely monitor the CCP (in comparison with requiring that a CCP adapt its test choices to better suit its business model and risk management approach).
Compliance costs	It is envisaged that the compliance costs would be significant as an existing CCP may need to expend additional resources amending its business model or risk management framework to comply with the standards prescribed in the standard where such are incompatible with the business model and risk management approach of the CCP. For new CCPs it is envisaged that the costs will be lower than for existing CCPs as there will be no need to amend existing testing models and/or business models. However it is not envisaged that there will be an increase in the number of CCPs.
Indirect costs	There could be risk exposures that have not been appropriately managed, due to excess reliance on the prescriptive standards. Amending the technical standard would require considerable resources (including time). If the prescribed standards were not to be amended, or were not to be timely amended, then the on-going viability of the CCP may be affected (which might impose a cost to the clearing members or to the market).

It would be very difficult to assign a specific monetary value to the cost and benefits specified above, however also in view of the outcome of the discussion paper and the consultation paper, it would be apparent that the net outcome is beneficial.

TRADE REPOSITORIES DRAFT RTS AND ITS

DATA TO BE REPORTED TO A TR

(a) What is the appropriate level of details to be reported to TR?

Specific objective	To ensure that the appropriate details of any derivative, including any modification or termination are reported to a TR in the EMIR-defined timeline.
Option 1	To limit the table of fields to the main characteristics of the contracts, including at least the parties to the contract, the beneficiaries, instrument type, underlying, maturity, notional, value, price and settlement date.
How would achieving the objective alleviate/eliminate the problem?	This approach would reduce the reporting burden on firms, and provide authorities with a limited set of transaction level economics.
Option 2	To require additional information, describing more granular the characteristics of the trade, such as traded instruments, clearing procedures, involved intermediaries etc.
How would achieving the objective alleviate/eliminate the problem?	Regulatory purposes would be easier achievable if the granularity of received data was higher than just reflecting the minimum characteristics of contracts and counterparties.
Which option is the preferred one? Explain briefly.	Option 2 is the preferred option as there is a need to ensure that the appropriate level of data is send to a TR in order for the mandate under EMIR to be effectively carried out.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	To limit the table of fields to the main characteristics of the contracts, including at least the parties to the contract, the beneficiaries, instrument type, underlying, maturity, notional, value, price and settlement date.
Benefits	This approach would reduce the reporting burden on firms, and provide authorities with a limited set of transaction level economics.
Disadvantages	Essential information required for different regulatory purposes will be missing in the table of fields. Some of these purposes will not be achievable by using limited data.
Regulator’s costs	Authorities will need to develop systems to effectively analyse the data, including for general systemic risk analysis.
Compliance costs	The reporting implementation costs will be reduced for market participants.

Indirect costs	The minimum level of information may not give competent authorities or other authorities the information they need in order to carry out their duties and therefore they may have to ask for ad hoc requests which could be frequent and burdensome.
Option 2	To require additional information, describing more granular the characteristics of the trade, such as traded instruments, clearing procedures, involved intermediaries etc.
Benefits	The main benefit of adopting a more granular approach than the minimal economic data as set out in EMIR relates to the likelier achievement of commitments made by the G20 and more broadly, the regulatory objectives as set out by the Financial Stability Board; (a) assessing systemic risk and financial stability; (b) conducting market surveillance and enforcement; (c) supervising market participants; and (d) conducting resolution activities. Furthermore, comprehensive reporting requirements may also increase the value of information maintained by TRs to ancillary service providers (e.g. those providing portfolio reconciliation or compression services).
Disadvantages	There may be increased costs for firms to report, and may involve the linking of multiple systems at the counterparty, which may increase the likelihood of errors or omissions in reporting.
Regulator's costs	Regulators would have to prepare their systems to deal with this granular data. Complex data that goes beyond the scope of MiFID transaction reporting data may need to be integrated in the systems to gain the full benefit of TR data for market surveillance purposes.
Compliance costs	The reporting implementation costs will be higher for market participants and TRs will need to develop systems that can receive and process the additional data.
Indirect costs	N/A

Quantitative impact assessement of the draft RTS on reporting under EMIR

According to the estimates provided by TRs which are already in operation, the cost of reporting the fields included in the draft technical standards are estimated to include one-off costs of €9–€15 million and on-going costs of €2.2–€4.6 million. The main difference with the data fields which are already collected by TRs is the reporting of mark-to-market data and collateral, and a seperate cost-benefit analysis has been performed for these fields.

The trading of exchange-listed derivatives has not previously been subject to uniform transaction reporting requirements, either by product or country (indeed some products have not hitherto been transaction reported). This situation is changing, making alignment with the evolving requirements MiFID 2 particularly relevant. Where there is existing reporting through the exchanges, much of the data set should be replicable without much additional spend.

The ability to discharge MiFID 2 and REMIT requirements through EMIR could also represent a benefit in the form of reduced costs to market participants. Whilst EMIR's reporting is more extensive than that currently proposed within MiFID 2, any savings would be subject to sufficient alignment of common data

fields and formats which is what we have attempted to do in the draft technical standards. Neverthless, it is noted that at present, MiFID 2's transaction reporting requirements have not been fully defined.

Separately, we are also mindful of a comparison to what the CFTC proposes with implementation in the USA anticipated to be in the current year. There are many similarities between the fields stipulated by the CFTC and by ESMA, such as reliance on Legal Entity Identifier (LEI), Unique Product Identifier (UPI) and Unique Trade Identifier (UTI)/Unique Swap Identifier (USI) codes. There are also areas of difference with ESMA requiring the following additional fields:

- Master agreement type and date are to be specified, where extant.
- Slightly extended reporting of exposures and collateral. This includes the nature of the collateral and a daily mark-to-market or mark-to-model of the contract's value. The CFTC requires only an indication of whether the contract is collateralised or not.
- Additional granularity on interest rate, currency and commodity derivatives is required, e.g. the frequency of payments on the fixed leg of an interest rate swap is to be specified.
- A modification log is to be made.
- Fields relating to compliance with ESMA, e.g. whether a trade meets the non-financial counterparties (NFC) hedging criteria or not (within the counterparty data requirements).

Non-financial counterparties

The cost impacts on some NFCs may be out of proportion to their activity levels since they are typically unused to financial supervision. This may mean that, in conjunction with other cost-drivers, the "entry cost" to acquiring a derivative contract rises. This will have, at least at the margin, an effect on volumes and the level of risk not hedged by such NFCs.

Most NFCs would prefer delegated reporting, where applicable, by the other counterparty, trading venue, a CCP or another third party vendor, and this option is provided for in EMIR. However there could be limitations upon this including:

- The compliance data required, e.g. knowledge of a trade's adherence to the hedging criteria;
- Where the other counterparty is an NFC in a bilateral trade (some of the larger NFCs provide liquidity to smaller NFCs in this way);
- Where the trade is an intra-group transfer.

(b) What is the best identifier for counterparties, CCPs, beneficiaries and brokers?

Specific objective	To ensure accurate identification of counterparties, CCPs, beneficiaries and brokers.
Option 1	Identification is done using a global entity identifier from the implementation of the reporting obligation.
How would achieving the objective alleviate/eliminate the problem?	All participants to a trade such as counterparties, brokers, beneficiaries and CCPs can be identified by one unique code, where the reference data attached to this code also contains additional information, such as name, domicile etc. The number of fields required can therefore be reduced by using this code. By requiring an entity identifier to be reported from the implementation of the reporting obligation, this will mitigate the need for TRs and

	counterparty systems to be changed to cater for the entity identifier once the global LEI system is implemented.
Option 2	Identification is done using Business Identifier Code (BIC)/Client Code until the global LEI is established.
How would achieving the objective alleviate/eliminate the problem?	BICs and client codes are already available in the systems of counterparties and regulators, because these codes are currently used for identification purposes regarding the reporting obligation under MiFID.
Option 3	Usage of an interim entity identifier solution until the development of the global LEI solution is complete. This interim solution would need to meet the technical criteria of the global LEI standard.
How would achieving the objective alleviate/eliminate the problem?	In the event a global LEI is not established by the time of the start of the reporting obligation, the additional work for reporting entities could be avoided by the use of an interim entity identifier when the reporting obligation starts.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred solution however option 3 will be taken if the global LEI is not adopted by the time the reporting obligation begins. If neither is available, option 2 will be taken.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Identification is done using a global LEI from the implementation of the reporting obligation.
Benefits	The number of fields required can be reduced by using this code. Uniform codes should ease the automation of reporting.
Disadvantages	Branches and individuals will not be inside the scope of this code, so at least for these market participants, additional codes will be required. If the global LEI system has not been implemented by the start of the reporting obligation, an interim entity identifier solution may be necessary for use in reports to TRs, which could create increased compliance costs and a risk of further fragmentation of the global entity identifier.
Regulator's costs	A new code will have to be implemented in regulator's systems and a link to the database containing the additional information will have to be established.
Compliance costs	A new code will have to be implemented in regulator's systems and a link to the database containing the additional information will have to be established.
Indirect costs	N/A
Option 2	Identification is done using the BIC/Client Code until the global LEI is established.
Benefits	BICs and client codes are already available in the systems of

	counterparties and regulators, because these codes are currently used for identification purposes regarding the reporting obligation under MiFID.
Disadvantages	TRs and counterparties will need initially develop systems to cater for BICs and client IDs, and then implement LEI identification, which is likely to increase complexity and risk errors in reporting. It will also reduce the ability of regulators to effective aggregate and analyse the data given the weaknesses in current counterparty identification systems.
Regulator's costs	Regulators will need to implement systems and procedures to be able to identify counterparties and aggregate data. This is likely to be quite complicated, particularly where relevant data is held across multiple TRs.
Compliance costs	Reporting entities have to design their systems in a way that BICs and client IDs are used for reporting purposes under EMIR and have to adjust their systems as soon as LEIs are available that would replace those codes.
Indirect costs	N/A
Option 3	Usage of an interim entity identifier solution until the development of the global LEI solution is complete. This interim solution would need to meet the technical criteria of the global LEI standard.
Benefits	In the event a global LEI is not established by the time of the start of the reporting obligation, the additional work for reporting entities could be avoided by the use of an interim entity identifier when the reporting obligation starts.
Disadvantages	Additional work might become necessary if the interim entity identifier does not meet the criteria of the final entity identifier in case the entity identifier characteristics have been changed since the interim LEI was developed.
Regulator's costs	Regulators would have to integrate in their systems an interim entity identifier and in a second step, replace this code by the final global entity identifier. As any interim solution should meet similar technical standards to the final global entity identifier, and so the transition from any interim identifier to a final identifier should not have substantial technical implications.
Compliance costs	Reporting entities would have to integrate in their systems an interim entity identifier and in a second step, replace this code by the final global entity identifier.
Indirect costs	N/A

(c) **What is the best solution to identify traded instruments?**

Specific objective	To ensure accurate identification of traded instruments
Option 1	Usage of a UPI to unequivocally identify the traded product.
How would achieving the objective alleviate/eliminate the problem?	The traded instrument and its specifications have to be identified in the report. The UPI provides a unique number for those contracts and gives additional information about product type, underlying etc. Other commonly used identification methods for the complete OTC market are currently not available.
Option 2	Establishment of an interim regional UPI solution of the use of existing product codes until the development of the global UPI solution is complete.
How would achieving the objective alleviate/eliminate the problem?	If an UPI is not available at the time the reporting obligation comes into effect, an interim UPI would provide a first idea of the contract's characteristics, although the interim UPI might not be as sophisticated as the final UPI.
Option 3	Establishment of an ESMA taxonomy other than UPI.
How would achieving the objective alleviate/eliminate the problem?	In case an UPI is not available the financial instrument could be identified by specifying the derivative type and the type of asset class underlying the derivative. This would give the basic information about the concluded contract without needing a UPI or further descriptions.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option as this code would be universal however if a universal UPI is not available, the use of existing products (option 2) would be permitted or in the case that there are not any relevant product codes, the use of an ESMA defined taxonomy (option 3) would be the next preferred option.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Usage of a UPI to unequivocally identify the traded product.
Benefits	The traded instrument and its specifications have to be identified in the report. The UPI provides a unique number for those contracts and gives additional information about product type, underlying etc. Uniform codes should ease the automation of reporting. Other commonly used identification methods for the complete OTC market are currently not available.
Disadvantages	An UPI might not be available at the time the reporting obligation comes into effect.
Regulator's costs	Regulators will have to integrate information about UPIs in their systems in order to understand the characteristics of traded instruments, especially in case of automated analysis procedures.
Compliance costs	Counterparties will have to integrate UPIs in their systems for each

	derivative contract they conclude and have to assure that the same code is reported by both counterparties.
Indirect costs	N/A
Option 2	Establishment of an interim regional UPI solution or the use of existing products codes until the development of the global UPI solution is complete
Benefits	If an UPI is not available at the time the reporting obligation comes into effect, an interim UPI or the use of existing product codes would provide a first idea of the contract's characteristics, although the interim UPI might not be as sophisticated as the final UPI.
Disadvantages	If contracts identified by an interim UPI are still outstanding when the final UPI comes into effect, the report already sent to the TR would have to be amended.
Regulator's costs	The amendment of outstanding contracts might cause additional costs for regulator's IT systems.
Compliance costs	The amendment of the original report in order to replace interim UPI by the final UPI would cause additional costs for counterparties and reporting entities.
Indirect costs	N/A
Option 3	Establishment of an ESMA taxonomy other than UPI.
Benefits	In case an UPI is not available the financial instrument could be identified by specifying the derivative type and the type of asset class underlying the derivative. This would give the basic information about the concluded contract without needing a UPI or further descriptions.
Disadvantages	Only basic information about the contract would be available. Supervisory tasks that need more granular information might not be reached, especially when it comes to more complex or bespoke contracts that need more granularity to allow a sufficient specification.
Regulator's costs	Regulators will have to integrate taxonomy information in their systems in order to understand the characteristics of traded instruments.
Compliance costs	Counterparties will have to integrate the taxonomy in their systems and specify for each derivative contract they conclude the type of derivative and underlying. This would increase the implementation costs for reporting to TRs.
Indirect costs	In the case of complex or bespoke derivatives that do not fit into clear taxonomy categories, more inquiries might become necessary to help regulators understand the specifications of the concluded contract.

(d) What is the best option to identify the reported trade?

Specific objective	To ensure accurate identification of the reported trade
Option 1	The trade identifier (trade ID) is provided by the TR.
How would achieving the objective alleviate/eliminate the problem?	The trade ID can be provided automatically for each incoming report without any additional requirements or costs for counterparties.
Option 2	The trade ID is provided by the counterparties.

How would achieving the objective alleviate/eliminate the problem?	In the case of reporting to different TRs, it will be guaranteed that both reports contain a consistent ID.
Option 3	The trade ID is provided by an independent provider.
How would achieving the objective alleviate/eliminate the problem?	The trade ID can be provided automatically for each incoming report to ensure that trades are matched before they are send to a TR.
Option 4	There is a global UTI.
How would achieving the objective alleviate/eliminate the problem?	The trade ID would be unique and internationally harmonised.
Which option is the preferred one? Explain briefly.	Option 4 is the preferred option as it will improve the ability for reconciliation of trades both within a TR and between TRs. This would also reduce the likelihood of duplicate reporting, and assist regulators in avoiding double counting of contracts. However in the absence of a globally agreed unique trade ID, it should be the responsibility of the counterparties to a contract to generate a unique trade ID (option 2) which will enable aggregation and comparison of data across TRs.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Specific objective	To ensure accurate identification of the reported trade
Option 1	The trade ID is provided by the TR.
Benefits	The trade ID can be provided automatically for each incoming report without any additional requirements or costs for counterparties.
Disadvantages	If a trade is reported to different TRs, both TRs might provide a different trade ID for the same trade. A matching of both sides of the same trade would not be possible in this case.
Regulator's costs	N/A
Compliance costs	The reporting implementation costs will be reduced for market participants.
Indirect costs	In case of dissenting trade reports or reports to different TRs both reports will not receive the same trade ID.
Option 2	The trade ID is provided by the counterparties.
Benefits	In the case of reporting to different TRs, it will be guaranteed that both reports contain a consistent ID.
Disadvantages	This will increase the risks of double counting transactions, and may make it challenging for TRs to reconcile trades that were reported to two TRs without disclosing confidential information about the contracts.
Regulator's costs	N/A
Compliance costs	Counterparties have to face the costs of reconciling the trade ID while

	concluding the contract.
Indirect costs	N/A
Option 3	The trade ID is provided by an independent provider.
Benefits	There are middleware providers who are in a position to provide this information now.
Disadvantages	There may be costs involved in obtaining a trade ID from a middleware provider.
Regulator's costs	N/A
Compliance costs	There may be costs involved and it may be resource intensive for counterparties to obtain a trade ID from another provider.
Indirect costs	N/A
Option 4	There is a global UTI.
Benefits	In the case of reporting to different TRs, a unique and global UTI will guarantee that both reports contain a consistent ID.
Disadvantages	There may be costs involved in obtaining a unique trade ID and due to the necessary governance required in creating a global UTI, it may take some time for this option to be available.
Regulator's costs	N/A
Compliance costs	There may be costs involved and it may be resource intensive for counterparties to obtain a UTI.
Indirect costs	N/A

(e) Should fields related to the clearing obligation be reported?

Specific objective	To ensure that TRs can be used for the purpose of monitoring the compliance with the EMIR clearing obligation.
Option 1	Include a reporting field to note where a product is subject to the clearing obligation.
How would achieving the objective alleviate/eliminate the problem?	This field contains information on whether the concluded contract is subject to the clearing obligation under Article 4 of EMIR. The information given in this field can be used to monitor the clearing obligation exemption for NFCs under Article 10 of EMIR.
Option 2	Not include a reporting field for the clearing obligation.
How would achieving the objective alleviate/eliminate the problem?	No additional requirement will be introduced.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option to enable the monitoring of the clearing exemption.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Include a reporting field to note where a product is subject to the clearing obligation.
Benefits	This field contains information on whether the concluded contract is subject to the clearing obligation under Article 4 of EMIR. The information given in this field can be used to monitor the clearing obligation exemption for NFCs under Article 10 of EMIR. It should make supervision more straightforward and hence, save costs for supervisors.
Disadvantages	This information may not be stored in counterparties systems and so systems changes may be needed to report this information.
Regulator's costs	N/A
Compliance costs	The reporting implementation costs will be higher for market participants.
Indirect costs	N/A
Option 2	Not include a reporting field for the clearing obligation.
Benefits	There would be no additional reporting implementation costs for market participants.
Disadvantages	The exemption for NFCs under Article 10 of EMIR could not be otherwise easily monitored.
Regulator's costs	Regulators would need to analyse each contract traded to determine if it is subject to a mandatory clearing obligation, which may be challenging to do, particularly in the absence of a UPI to appropriately categorise contracts.
Compliance costs	N/A
Indirect costs	Regulators would have to get the information from other sources or directly from the NFC. Additional costs for both counterparties and regulators would arise from this procedure.

(f) Should the activity of NFCs be monitored through trade repository data

Specific objective	Ensuring the monitoring of compliance of EMIR obligations by NFCs.
Option 1	Include a reporting field for NFCs about direct link to commercial activity or treasury financing.
How would achieving the objective alleviate/eliminate the problem?	This field contains information on whether the concluded contract is directly linked to the commercial activity or treasury financing of the NFC. The information given in this field can be used to monitor the clearing obligation exemption for NFCs under Article 10 of EMIR.
Option 2	Not include a reporting field for NFCs about direct link to commercial activity or treasury financing.
How would achieving the objective alleviate/eliminate the problem?	There would be no additional requirement in that respect.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option to enable the monitoring of the clearing exemption.
Is the option chosen within the	The response chosen is of the sole responsibility of ESMA.

sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	

Impacts of the proposed options:

Specific objective	To ensure information is received on compliance with the EMIR clearing obligation.
Option 1	Include a reporting field for NFCs about direct link to commercial activity or treasury financing.
Benefits	This field contains information on whether the concluded contract is directly linked to the commercial activity or treasury financing of the NFC. The information given in this field can be used to monitor the clearing obligation exemption for NFCs under Article 10 of EMIR. It should make supervision more straightforward and hence save costs for supervisors.
Disadvantages	This is a piece of information that, while non-financial firms will need to determine on a trade by trade basis in order to determine whether they will be above the clearing threshold, this information may not be easily able to be incorporated into the systems of the counterparties. In the event a NFC delegated reporting to a third party, this is a piece of information that will need to be provided by the counterparty to the reporting firm for each and every trade, which may add further systems costs.
Regulator's costs	N/A
Compliance costs	The reporting implementation costs will be higher for market participants.
Indirect costs	N/A
Option 2	Not include a reporting field for NFCs about direct link to commercial activity or treasury financing.
Benefits	There would be no additional reporting implementation costs for market participants.
Disadvantages	The exemption for NFCs under Article 10 of EMIR could not be easily monitored by regulators, particularly on an on-going basis without collecting substantial amounts of ad hoc data from firms.
Regulator's costs	Regulators will need to undertake additional work and receive information from NFCs in order to confirm that NFCs are meeting their EMIR requirements.
Compliance costs	N/A
Indirect costs	Regulators would have to get the information from other sources or directly from the NFC. Additional costs for both counterparties and regulators would arise from this procedure.

(g) Should data on the clearing threshold be reported?

Specific objective	To ensure that TRs can be used for the purpose of monitoring the

	clearing threshold.
Option 1	Include a reporting field for NFCs above the clearing threshold.
How would achieving the objective alleviate/eliminate the problem?	This field contains information on whether the concluded contract is above the clearing threshold of the NFC. The information given in this field can be used to monitor the clearing obligation exemption for NFCs under Article 10 of EMIR.
Option 2	Not include a reporting field for NFCs above the clearing threshold.
How would achieving the objective alleviate/eliminate the problem?	There would be no additional requirement in this respect.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option to enable the monitoring of the clearing exemption.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Include a reporting field for NFCs above the clearing threshold.
Benefits	This field contains information on whether the concluded contract is above the clearing threshold of the NFC. The information given in this field can be used to monitor the clearing obligation exemption for NFCs under Article 10 of EMIR. It should make supervision more straightforward and hence save costs for supervisors.
Disadvantages	NFCs would need to keep track at all times of whether they are above the threshold at which the clearing obligation will apply to them, and report this information to a TR. Collecting this information in a form that would allow it to be sent to a TR on an on-going basis might be difficult for counterparties.
Regulator's costs	N/A
Compliance costs	The reporting implementation costs will be higher for market participants.
Indirect costs	N/A
Option 2	Not include a reporting field for NFCs above the clearing threshold.
Benefits	There would be no additional reporting implementation costs for market participants.
Disadvantages	The exemption for NFCs under Article 10 of EMIR could not be easily monitored.
Regulator's costs	Regulators will need to undertake additional work and receive information from NFCs in order to confirm that NFCs are meeting their EMIR requirements.
Compliance costs	N/A
Indirect costs	Regulators would have to get the information from other sources or directly from the NFC. Additional costs for both counterparties and regulators would arise from this procedure.

(h) Should information on intra-group transactions be reported?

Specific objective	To ensure information is received on compliance with the EMIR mandatory clearing obligation and requirements for non-centrally cleared trades.
Option 1	Include a reporting field for counterparties to state whether the contract was concluded within the same group of undertakings (intra-group transaction).
How would achieving the objective alleviate/eliminate the problem?	This field contains information on whether the conclusion of the contract is considered to be an intra-group transaction under Article 3 of EMIR. This information can be used to monitor the clearing obligation exemption for counterparties under Article 10 of EMIR.
Option 2	Not include a reporting field for counterparties to state whether the contract was concluded within the same group of undertakings (intra-group transaction).
How would achieving the objective alleviate/eliminate the problem?	There would be no additional reporting implementation costs for market participants.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option to enable the monitoring of the clearing exemption.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Include a reporting field for counterparties to state whether the contract was concluded within the same group of undertakings (Intra-group transaction).
Benefits	This field contains information on whether the conclusion of the contract is considered to be an Intra-group transaction under Article 3 of EMIR. The information given in this field can be used to monitor the clearing obligation exemption for counterparties under Article 10 of EMIR. It should make supervision more straightforward and hence save costs for supervisors.
Disadvantages	Counterparties would need to incorporate information about intragroup trades into their trading systems.
Regulator's costs	N/A
Compliance costs	The reporting implementation costs will be higher for market participants.
Indirect costs	N/A
Option 2	Not include a reporting field for counterparties to state whether the contract was concluded within the same group of undertakings (intra-group transaction).
Benefits	There would be no additional reporting implementation costs for

	market participants.
Disadvantages	The exemption for counterparties under Article 10 of EMIR could not be easily monitored.
Regulator's costs	Regulators will need to undertake additional work and receive information from counterparties in order to confirm that counterparties are meeting their EMIR requirements.
Compliance costs	N/A
Indirect costs	Regulators would have to get the information from other sources or directly from the counterparty. Additional costs for both counterparties and regulators would arise from this procedure.

(i) Should trades with non-EEA counterparties be specifically identified?

Specific objective	To ensure trades with non-EEA counterparties can be identified
Option 1	Include a reporting field giving the information that the contract was concluded with a counterparty not located within the EEA.
How would achieving the objective alleviate/eliminate the problem?	The information can be used to monitor systemic risk that could be building up between non-EU and EU entities and to identify trades in which only one side is expected to report to a TR within the EU.
Option 2	Not include a reporting field on whether the contract was concluded with a counterparty not located within the EEA.
How would achieving the objective alleviate/eliminate the problem?	There would be no additional reporting implementation costs for market participants.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option to enable the monitoring of systemic risk under the mandate of EMIR.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Include a reporting field giving the information that the contract was concluded with a counterparty not located within the EEA.
Benefits	The information can be used to monitor systemic risk that could be building up between non-EU and EU entities and to identify trades in which only one side is expected to report to a TR within the EU.
Disadvantages	The reporting implementation costs will be higher for market participants.
Regulator's costs	N/A
Compliance costs	The reporting implementation costs will be higher for market participants.
Indirect costs	N/A
Option 2	Not include a reporting field on whether the contract was concluded with a counterparty not located within the EEA.

Benefits	There would be no additional reporting implementation costs for market participants.
Disadvantages	The exemption for NFCs under Article 10 of EMIR could not be easily monitored.
Regulator's costs	Regulators will need to undertake additional work and receive information from NFCs in order to confirm that NFCs are meeting their EMIR requirements.
Compliance costs	N/A
Indirect costs	Regulators would have to get the information from other sources or directly from the NFC. Additional costs for both counterparties and regulators would arise from this procedure.

(j) How should beneficiaries be identified and reported?

Specific objective	To ensure the beneficiary of a contract be identified and reported.
Option 1	Where the transaction is executed by a structure (fund, trust, etc.) representing a number of beneficiaries, the field beneficiary should identify the structure and not all the beneficiaries.
How would achieving the objective alleviate/eliminate the problem?	The information would give general information about the beneficiaries of a contract and give regulators useful information for supervisory purposes.
Option 2	Where the transaction is executed by a structure (fund, trust, etc.) representing a number of beneficiaries, the field beneficiary should identify all the beneficiaries including all the investors of a fund.
How would achieving the objective alleviate/eliminate the problem?	This option would provide near-complete information about the beneficiaries of a contract to regulators, which would allow regulators to get a complete picture of where the risk lies for a particular derivative contract.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option as it is at the management company level where decisions impacting systemic risks are taken.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Where the transaction is executed by a structure (fund, trust, etc.) representing a number of beneficiaries, the field beneficiary should identify the structure and not all the beneficiaries.
Benefits	This would allow authorities access to information about the general structure of beneficiaries and the exposure of funds and other entities that may be at risk in derivative transactions.
Disadvantages	This would not give a complete picture of exposures and risks, and may allow for counterparties to hide the final beneficiary to a trade using trusts and other structures.

Regulator's costs	Regulators may need to undertake additional work to identify the final beneficiary of contracts, if not included in the TR.
Compliance costs	Firms will need to determine at which level to report beneficiaries and then will need to report on their behalf. This may add complexity where there are multiple funds or sub-funds entering into contracts.
Indirect costs	N/A
Option 2	Where the transaction is executed by a structure (fund, trust, etc.) representing a number of beneficiaries, the field beneficiary should identify all the beneficiaries including all the investors of a fund.
Benefits	This would give regulators a picture of the true beneficiaries of a particular contract and where the risks are borne.
Disadvantages	This option may result in the requirement to reports large amounts of information, particularly in large retail funds where there may be large number of investors. This could also produce large amounts of data for regulators to interrogate, which may add complexity to the use of TR data.
Regulator's costs	Regulators will need to develop large and scalable systems to analyse the information from TRs.
Compliance costs	The compliance costs for counterparties are likely to be substantial as they will need to report information for a large number of beneficiaries and ensure this information is kept up to date.
Indirect costs	N/A

(k) Should the formal confirmation of a trade be reported?

Specific objective	To collect information in relation to the formal confirmation of a trade.
Option 1	To include a field in relation to the confirmation of a trade.
How would achieving the objective alleviate/eliminate the problem?	The information given in this field can be used to monitor the timely confirmation requirements under Article 5 of EMIR.
Option 2	To not include a field in relation to the confirmation of a trade. It will be more difficult to monitor the timely confirmation requirements under Article 5 of EMIR.
How would achieving the objective alleviate/eliminate the problem?	It will be more difficult to monitor the timely confirmation requirements under Article 5 of EMIR.
Which option is the preferred one? Explain briefly.	Option 1 is preferred as it enables the monitoring of the timely confirmation requirements under Article 5 of EMIR.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	To include a field in relation to the confirmation of a trade.
Benefits	Trades will be reported to TRs on a timely basis and prevent firms from not reporting trades due to a lack of timely confirmation of the trade.
Disadvantages	Counterparties will need to ensure trades are reported to TRs possibly prior to confirmation, which will add to costs. It will also potentially result in trades being reported that are not eventually confirmed.
Regulator's costs	N/A
Compliance costs	Counterparties will need to ensure they can report the details of trades to TRs potentially before the trade is confirmed, which may require certain systems changes.
Indirect costs	N/A
Option 2	To not include a field in relation to the confirmation of a trade. It will be more difficult to monitor the timely confirmation requirements under Article 5 of EMIR.
Benefits	This will probably provide a clearly defined time for the reporting of trades to TRs.
Disadvantages	To the extent trades are not confirmed on a timely basis, regulators will not have access to a complete picture of the contracts to which counterparties are liable.
Regulator's costs	N/A
Compliance costs	Likely to be lower as information can be reported to TRs once electronically confirmed and in an automated manner.
Indirect costs	N/A

(l) Should exposures be reported?

Specific objective	To ensure the data fields meaningfully show the exposures of counterparties to other counterparties.
Option 1	Include fields which would provide an indication of the exposures between counterparties including information on collateral and mark-to-market or mark-to-model valuations.
How would achieving the objective alleviate/eliminate the problem?	Information on the exposure of an entity's exposure to each of its main counterparties is widely seen as an important tool in the tracking of systemic risk. It follows that additional data on exposure should be beneficial to the monitoring of systemic risk (indeed, even a requirement for it).
Option 2	Do not include fields on exposures.
How would achieving the objective alleviate/eliminate the problem?	There would be no additional reporting implementation costs for market participants.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option as monitoring exposures and systemic risk is a specific mandate under EMIR.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be	The response chosen is of the sole responsibility of ESMA.

informed or consulted?	

Impacts of the proposed options:

Option 1	Include fields which would provide an indication of the exposures between counterparties including information on collateral and mark-to-market or mark-to-model valuations.
Benefits	These fields would give an indication of the exposures between counterparties. This would allow regulators to get a complete picture of the positions of firms with each other, including the collateral exchanged and the mark-to-market or mark-to-model valuation of the contract. This would provide a substantial ability for regulators to get a full view of the market and undertake analysis to identify market risks. The valuation of derivative contracts is an essential element to allow regulators to fulfil their mandates, in particular when it comes to financial stability. The mark-to-market or mark-to-model value of a contract indicates the sign and size of the exposures related to that contract, as opposed to the notional amount, which has a far more limited informative content. The valuation data is the only means by which the relevant authorities can extract meaningful, precise and updated information to assist them in monitoring risks and taking actions to mitigate them
Disadvantages	This information will be more complex for counterparties to report and therefore more expensive. It can be argued that systemic risk is not particularly time-sensitive: the supervisors will require timely data but this does not need to be in, or even near to, real-time. However, collateral tends to be considered by market participants on a portfolio basis. A reporting requirement based on a trade by trade basis would require the development of bespoke algorithms to deconstruct (and then possibly reconstruct) such data. To alleviate this cost, when counterparties manage their collateral on a portfolio basis, they can report only the total amount of collateral posted for that portfolio, and are not required to affect it to each reported transaction.
Regulator's costs	Regulators will need to develop more complex systems to analyse this data.
Compliance costs	The reporting implementation costs will be higher for market participants.
Indirect costs	N/A
Option 2	Do not include fields on exposures.
Benefits	There would be no additional reporting implementation costs for market participants.
Disadvantages	Regulators would not be able to determine the true exposures between counterparties and would instead need to rely on imprecise measures such as notional exposures and trading volumes.
Regulator's costs	Regulators would need to develop systems to convert notional exposures to true exposures, and would need to rely on incomplete information to undertake risk analysis.

Compliance costs	Lower compliance costs given the reduced amount on information that will need to be provided to regulators.
Indirect costs	N/A

Quantitative analysis on exposures reporting

1. Collateral

An important aspect of accurately measuring exposures is the extent and nature of its collateralisation. The technical standards presented in the CP required data on the collateral posted such as type and amount. More specifically, the reporting requirement on collateral was initially based on a trade by trade basis. In the event that counterparties manage their collateral on a portfolio basis, this would have required the development of bespoke algorithms to deconstruct (and then possibly reconstruct) such data. Whilst firms may already be involved in bilateral collateralisation, the standards to automate such trade by trade collateral reporting efficiently do not currently exist.

The costs that would have been implied by such a requirement are explained in details below. The resulting costs proved unduly burdensome, which explains why ESMA reviewed its draft RTS in order to allow counterparties to report collateral on a portfolio basis, should they not report trade by trade collateralisation. With this final option, the costs will be much lower, given the fact that counterparties will only have to link a limited number of fields to the TR reporting fields which are likely to be already available (total amount of the collateral).

Cost estimation for reporting collateral on a trade-by-trade basis (option of the CP)

- Large financial counterparties: two groups were considered, the largest 14–15 dealers (with around 200,000 open positions at any time) and medium-sized players (50 firms with approximately 25,000 open positions). Various estimates for the construction cost of capturing collateral data in a form suitable for it to flow into reporting have been analysed. We considered an estimate of 20–30 man years as required for the largest participants, implying a one-off cost of €1.5–€2 million each (i.e. up to €30 million across all of the largest firms).
- Medium-sized financial counterparties should incur lower costs but not in strict proportion to the difference in size: we estimate 5-10 man-years, implying one-off costs of €18.5–€40 million across all of these firms. Spending on such infrastructure normally attracts on-going “maintenance” costs. These can typically be 25–30% of the initial cost.
- Larger NFCs: we understand that some of the largest and busiest NFCs are likely to develop own build solutions. Again, we estimate 5–10 man years as being required for this, with a population of 40–50 NFCs (being energy firms and the very largest multi-nationals). Our estimate of one-off costs is €14.5–€40 million, with on-going costs at again about 25–30% of this level (i.e. €3.7–€12 million).
- Small financial counterparties: we believe that other participants would seek to outsource this activity as being the most practical option (we assume that this would not be cost-effective for larger participants.) Collateral management services incorporate some reporting and can have an annual cost of €37,500–€50,000 for a smaller market participant. These costs involve more than reporting: 20% of this figure has been considered as a reference point for the value of the reporting per se, although it is also acknowledged that vendors do not currently provide reporting as a discrete offering.

Our estimate for the population of other financial market participants is 1,500–1,800, of which 50–60% are currently using collateral management services, leaving 600–900 requiring additional services. This implies on-going costs of €4.5–€9 million.

These estimates suggest a combined one-off impact of €48–€109 million and an on-going impact of €16.4–€41.8 million for all market particpants to report collateral.

€m	Build Cost		On-going cost	
	Low	High	Low	High
Large FC	14.4	29.3	3.6	8.8
Medium sized dealers	18.5	40.0	4.6	12.0
Other FC			4.5	9.0
Large NFC	14.8	40.0	3.7	12.0
Total (€m)	47.7	109.3	16.4	41.8

Table 15: Estimated costs to report collateral on a trade by trade basis

Cost estimation for reporting collateral on a portfolio basis (final option of the draft RTS)

With this option, counterparties no longer need to build systems to deconstruct the collateral, instead they should link the total value of the collateral portfolio to the reporting system. Under the assumption that counterparties do not currently have any system in place to monitor their collateral management, the costs would be roughly the same than with option 1 (trade by trade basis).

However, ESMA believes that this is highly unlikely to be the case, and that most FCs, as least the most sophisticated ones, do already have collateral management systems in place which enable them to monitor the level of collateral they hold with a given counterparty on a portfolio basis. Therefore the main costs would consist of extracting information from those systems and linking it to a TR reporting system. We have therefore made the assumptions that on average, the costs for large FC would be 2-3 man-years, and 0.5-1 man-years for large NFC and medium sized dealers. For smaller FCs using external services for collateral management, we have estimated the costs to be 50% lower than with option 1.

The results are shown in the following table.

€m	One-off Cost		On-going cost	
	Low	High	Low	High
Large FC	1.4	2.9	0.4	0.9
Medium sized dealers	1.9	4.0	0.5	1.2
Other FC			2.3	4.5
Large NFC	1.5	4.0	0.4	1.2
Total (€m)	4.8	10.9	3.4	7.8

Table 16: Estimated costs to report collateral on a portfolio basis

These estimates suggest a combined one-off impact of €4.8–€10.9 million and an on-going impact of €3.4–€7.8 million for all market participants to report collateral.

2. Daily valuation

ESMA's draft technical standards require a daily mark-to-market reporting. This reporting requirement would apply only to those firms required under EMIR Article 11 (2) to apply daily valuations as part of their risk mitigation techniques. NFCs below the clearing threshold would not be required to report collateral. Our focus is upon the incremental impact of *reporting* such data rather than acquiring it *per se*.

First we consider the population likely to be affected. Reporting a daily valuation of exchange-listed derivatives would be straight-forward given the more ready availability of the pricing data so our focus is upon OTC markets. Here the most active market participants, both financial and non-financial, are likely to be using mark-to-market already, albeit not routing this information to trade reporting functions. However we understand that a number of end-users, again both financial (e.g. a pension fund) and non-financial, do not currently seek daily valuations, being instead satisfied with monthly, or less frequent, valuations. We need to identify those NFCs that would not be required to report mark-to-market valuations in order to exclude these from the total:

- We took BIS data on the share of counterparties (which identify "reporting dealers", "other financial institutions" and "NFCs") variously in OTC FX, commodity, equity, rate and credit derivatives. Since this data relates to positions, we adjusted these shares downwards to reflect better the share attributable to NFCs.

- ISDA's Operations Benchmarking Survey 2012 provides data on the global number of "events". An event can be the novation or modification of a trade, as well as the original transaction. Again, we made adjustments for these factors. The ISDA data is global: we took 50% as a reasonable estimate of the proportion with at least one leg in Europe.

- We have assumed that 20–30% of the activity by NFCs would be attributable to those players not currently doing daily valuations and likely to be able to continue in this fashion post-EMIR. We could not find an estimate to support this therefore, we have simply been forced to apply a variation of an 80:20 style rule (the 30% is striving for conservatism).

The result of this is that we believe 98–99% of OTC trades would be included already. We then estimate the impact as follows, using the population estimate excluding the trades attributable to the excluded NFCs:

- We consider the reporting of transaction reports through Approved Reporting Mechanisms (ARMs) to be the most suitable proxy for this cost. This can be as low as 0.1 cents per trade but can also be a magnitude or more above this. We have adopted 0.25–0.5 cents per trade. Derivatives' valuations would need to be updated daily throughout the contract (or at least until re-traded). We are not aware of data on the typical holding period of an OTC derivative and therefore we have conservatively adopted 50–100 days[39]. This would mean that reporting the daily valuations of affected trades would cost 12.5–50 cents per trade.

- We estimate that financial institutions and affected NFCs would incur on-going costs of €1–€5.1 million.

(m) Should information on master agreements be reported?

Specific objective	To receive information about the type and date of a master agreements applying for counterparties to the transactions.
Option 1	Include information on a master agreement.
How would achieving the objective alleviate/eliminate the problem?	Regulators would be able to obtain full information about the terms of the derivatives contract.
Option 2	Not include information on a master agreement.
How would achieving the objective alleviate/eliminate the problem?	Regulators would need to rely on information in the table of fields and from bilateral requests to obtain full information about derivative contracts.
Which option is the preferred one? Explain briefly.	Option 1 is preferred due to the increased information available to regulators against a relatively low cost to counterparties.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Include information on a master agreement.
Benefits	This field would provide further details of the contract agreed between the two counterparties. This would allow authorities to obtain meaningful information about contracts, which will help to increase the understanding of the contracts traded and any potential risks that may result from that.

[39] The holding period could, of course, exceed a year: our estimate reflects the point that much of the affected trading will be for speculative purposes and consequently have a short holding period before being re-traded.

Disadvantages	Counterparties will need to provide this information to TRs in a form that is usable by the TRs.
Regulator's costs	Regulators will need to develop systems to analyse the master agreements in place across the derivatives contracts.
Compliance costs	The reporting implementation costs will be higher for market participants.
Indirect costs	N/A
Option 2	Not include information on a master agreement.
Benefits	There would be no additional reporting implementation costs for market participants.
Disadvantages	Regulators would not have full visibility of the terms of the derivatives contracts traded.
Regulator's costs	Regulators will need to make ad hoc requests of counterparties in order to analyse the full terms of a derivatives contract.
Compliance costs	N/A
Indirect costs	N/A

(n) Should TRs be required to reconcile data?

Specific objective	To ensure the data reported by two counterparties matches each other when reported to different TRs.
Option 1	There is no requirement for data to be reconciled between TRs.
How would achieving the objective alleviate/eliminate the problem?	Allows the market to use solutions deemed to be most effective to ensure data is matched and reconciled. Would avoid placing an additional burden on market participants which could produce a limited improvement in the quality of data.
Option 2	To require the counterparties to reconcile the data of a trade report when they report to different TRs.
How would achieving the objective alleviate/eliminate the problem?	Reconciliation would be expected to reduce the number of un-matched trades across TRs. EMIR states that data needs to be aggregated and compared across TRs so that a number of authorities can access this data. However, this would be impractical and potentially costly for each counterparty to communicate and confirm the details of every transaction with the other counterparty before it is reported to the TR.
Option 3	To require TRs to reconcile the data of a trade report when the counterparties are reporting to different TRs.
How would achieving the objective alleviate/eliminate the problem?	It would be more practical for TRs to perform this role after the data is reported to the TRs. Furthermore, some TRs are already in a position to offer matching services to their clients.
Which option is the preferred one? Explain briefly.	ESMA has determined that reconciliation of data should be the responsibility of TRs (option 3) and that TR applicants should provide information on the procedures they have in place to ensure that data can be reconciled between TRs if counterparties report to different TRs.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to	The response chosen is of the sole responsibility of ESMA.

be informed or consulted?	

Impacts of the proposed options:

Option 1	There is no requirement for data to be reconciled between TRs.
Benefits	Allows the market to use solutions deemed to be most effective to ensure data is matched and reconciled. Would avoid placing an additional burden on market participants which could produce a limited improvement in the quality of data.
Disadvantages	If data held by TRs relating to the same trade does not match, it will be difficult for regulators and other users of TR data to obtain an overview of systemic risk. If there is no requirement for reconciliation, counterparties may report data that does not match for each trade. An inability to accurately aggregate data due to unmatched and non-reconciled trades would reduce the value of the TR data.
Regulator's costs	Regulators may need to take additional steps to ensure data is accurate and that data analysis is not providing inaccurate results due to non-reconciled data.
Compliance costs	N/A
Indirect costs	If the risk of unmatched trades crystallises, then regulators will have to intervene directly between TRs and counterparties to reconcile trades which could be time-consuming and costly.
Option 2	To require the counterparties to reconcile the data of a trade report when they report to different TRs.
Benefits	Reconciliation would be expected to reduce the number of un-matched trades across TRs. EMIR states that data needs to be aggregated and compared across TRs so that a number of authorities can access this data. However, this would be impractical and potentially costly for each counterparty to communicate and confirm the details of every transaction with the other counterparty before it is reported to the TR.
Disadvantages	Counterparties would need to reconcile every transaction with the other counterparty. This would be costly for counterparties, especially smaller firms, and could prolong the time taken to report.
Regulator's costs	Regulators would have to ensure that counterparties have reconciliation processes in place and TRs would have to ensure that reconciliation is being carried out effectively.
Compliance costs	This would be impractical and potentially costly for each counterparty to communicate and confirm the details of every transaction with the other counterparty before it is reported to the TR.
Indirect costs	Regulators may have to revisit the technical standards if counterparties are unable to reconcile trades in an effective manner.
Option 3	To require TRs to reconcile the data of a trade report when the counterparties are reporting to different TRs.
Benefits	It would be more practical for TRs to perform this role after the data is reported to the TRs. Furthermore, some TRs are already in a position to offer matching services to their clients.

Disadvantages	This would be costly and complex for TRs. There would need to be a UTI to allow TRs to compare data without breaching confidentiality.
Regulator's costs	Regulators would have to take part in the creation of a UTI. Regulators would also need to ensure the TRs are effectively reconciling data without breaching confidentiality requirements.
Compliance costs	There will be costs involved for the TRs to develop a system to reconcile contracts, for example by developing a message or communication service between the TRs.
Indirect costs	N/A

(o) What it the most appropriate date for the entry into force of the reporting obligation?

Specific objective	To ensure the start of the reporting obligation is appropriate and proportionate to ensure adequate implementation for both market participants and ESMA.
Option 1	The reporting obligation should start at a fixed period after a TR is authorised to receive trade reports for a particular asset class.
How would achieving the objective alleviate/eliminate the problem?	This would allow the industry (TRs and counterparties) to have sufficient time for implementation, while still ensuring that there will be at least a TR available and authorised to receive transaction reports for that asset class. It would also avoid direct reporting to ESMA, who will not have the necessary operational and IT structures in place to appropriately deal with receiving potentially large numbers of complex trade reports that no TR would be dealing with.
Option 2	The reporting obligation should start at a fixed period after the adoption of EMIR and the technical standards.
How would achieving the objective alleviate/eliminate the problem?	This option would allow TRs and counterparties to have sufficient time for implementation. This option would give market participants, as well as TRs and authorities, the legal certainty that reporting is going to start at a specified point in time. Having in place the resources needed for implementation at this point in time, it would be much easier than a moving target, which would be the case under option 1.
Which option is the preferred one? Explain briefly.	A combined approach is preferred whereby a fixed date is set based on the registration of a TR with the earliest start date of 1 July 2013, however with a ultimate deadline of no more than 2 years, after which reporting will be sent to ESMA.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	The reporting obligation should start at a fixed period after a TR is authorised to receive trade reports for a particular asset class.
Benefits	This would allow the industry (TRs and counterparties) to have sufficient time for implementation, while still ensuring that there will be at least TR available and authorised to receive transaction reports for that asset class. It would also avoid direct reporting to ESMA, who will not have the necessary operational and IT structures in place to appropriately deal with receiving potentially large numbers of complex trade reports that no TR would be dealing with.
Disadvantages	If there are delays in the authorisation of TRs, then reporting may begin later than intended if there is no back-stop date by which reporting has to begin. This option could also result in a relatively short notice time for counterparties in the event that the reporting obligation commences a short period of time following the registration of a TR.
Regulator's costs	During the time between entry into force and authorisation of a TR (which might be a long period), no reports will be sent to TRs. Regulators would need to get the information they need to fulfil their supervisory tasks from other sources (in case there are any).
Compliance costs	If regulators need to receive this information from other sources counterparties could face further costs by having to report trades in another way before the TR becomes authorised.
Indirect costs	N/A
Option 2	The reporting obligation should start at a fixed period after the adoption of EMIR and the technical standards.
Benefits	This option would allow TRs and counterparties to have sufficient time for implementation. This option would give market participants, as well as TRs and authorities, the legal certainty that reporting is going to start at a specified point in time. Having in place the resources needed for implementation at this point in time, it would be much easier than a moving target, which would be the case under option 1.
Disadvantages	If there are delays in the authorisation of TRs, there may not be sufficient time for TRs and counterparties to finalise reporting arrangements before the reporting start date.
Regulator's costs	In the event there is not a TR registered in a particular asset class by the start date of the reporting obligation, ESMA will be required to receive reports, which will result in a systems and administrative cost to ESMA.
Compliance costs	It may be difficult for counterparties to put reporting systems in place before a TR is authorised.
Indirect costs	N/A

(p) Should the date of application of the reporting obligation be the same for all counterparties?

Specific objective	To ensure the start of the reporting obligation is appropriate and proportionate to ensure adequate implementation for market participants.
Option 1	The start date of the reporting obligation should be the same for all

	counterparties.
How would achieving the objective alleviate/eliminate the problem?	It was considered too complex to determine which types of firms should have a phased in reporting approach. Under this option, all trades will have to be reported from a particular date, regardless of the counterparty. This would result in data being provided to TRs on the most timely basis and will allow authorities to rapidly start analysing a complete market data set.
Option 2	The start date of the reporting obligation should differ according to the counterparty and could include certain transitional periods.
How would achieving the objective alleviate/eliminate the problem?	A distinction could be made between FCs and NFCs which could allow NFCs or smaller corporates to have a slightly longer implementation period. This would give these counterparties a short additional time period to ensure their systems are able to submit accurate and timely details to TRs.
Which option is the preferred one? Explain briefly.	Option 1 is preferred to ensure reporting of contracts by all counterparties in a consistent manner.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	The start date of the reporting obligation should be the same for all counterparties.
Benefits	Under this option, all trades will have to be reported from a particular date, regardless of the counterparty. This would result in data being provided to TRs on the most timely basis and will allow authorities to rapidly start analysing a complete market data set.
Disadvantages	Counterparties may have differing abilities to report based on their size and business profile. Meeting the reporting deadline (in particular for older contracts) may be a particular challenge for smaller market participants.
Regulator's costs	N/A
Compliance costs	Smaller counterparties may be faced with a compliance timetable that is difficult to fulfil.
Indirect costs	The reduced ability for authorities to undertake systemic and prudential risk assessment is likely to result from a start date that is later than it would otherwise be.
Option 2	The start date of the reporting obligation should differ according to the counterparty and could include certain transitional periods.
Benefits	A distinction could be made between financial and NFCs which could allow NFCs or smaller corporates to have a slightly longer implementation period. This would give these counterparties a short additional time period to ensure their systems are able to submit accurate

	and timely details to TRs.
Disadvantages	There would be less certainty for counterparties. Not all trade data would be available at the initial start date. There may be confusion about the reporting date between FCs and NFCs.
Regulator's costs	Under this option, trades between FCs and NFCs would not be reported consistently.
Compliance costs	Counterparties may require guidance on which start date they should use.
Indirect costs	N/A

(q) Should the date of application of the reporting obligation be the same for all derivative asset classes?

Specific objective	To ensure the start of the reporting obligation is appropriate and proportionate to ensure adequate implementation for market participants.
Option 1	The start date of the reporting obligation should be the same for all derivative asset classes.
How would achieving the objective alleviate/eliminate the problem?	It could be considered too complex to determine which asset classes should have a phased in reporting approach. Under this option, all trades will have to be reported from a particular date, regardless of the type of asset class. This would result in data being provided to TRs on the most timely basis and will allow for authorities to rapidly start analysing a complete market data set.
Option 2	The start date of the reporting obligation should differ according to the derivative asset class.
How would achieving the objective alleviate/eliminate the problem?	A distinction could be made between more standardised asset classes, for example credit derivatives and interest rate derivatives than for asset classes which are less standardised, for example commodity derivatives. This would give these counterparties a short additional time period to ensure their systems are able to submit accurate and timely details to TRs.
Which option is the preferred one? Explain briefly.	Option 2 is preferred to ensure that sufficient time is given to both market participants and the TRs to develop systems which are capable of sending and receiving the various derivative asset classes.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	The start date of the reporting obligation should be the same for all derivative asset classes.
Benefits	Under this option, all trades will have to be reported from a particular date, regardless of the asset class. This would result in data being

	provided to TRs on the most timely basis and will allow for authorities to rapidly start analysing a complete market data set.
Disadvantages	Counterparties may have differing abilities to report based on their size and business profile. Furthermore, there is increased operational risk for TRs in being able to accept all asset classes by all counterparties when the reporting obligation begins.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	The reduced ability for authorities to undertake systemic and prudential risk assessment is likely to result from a start date that is later than it would otherwise be.
Option 2	The start date of the reporting obligation should differ according to the different asset classes.
Benefits	There would be less operational risk to the TRs of being able to accept all derivative asset classes from all counterparties when the reporting obligation begins.
Disadvantages	Not all trade data would be available at the initial start date for regulators to begin accessing and analysing.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	N/A

(r) What is the best approach to record that clearing took place?

Specific objective	To ensure that details of a contract which is cleared by a CCP is reported appropriately.
Option 1	Any clearing will be included as an amendment to the trade report.
How would achieving the objective alleviate/eliminate the problem?	This would be simple for counterparties and would prevent duplication of data.
Option 2	If clearing occurs, a new trade report should be sent.
How would achieving the objective alleviate/eliminate the problem?	This may more accurately reflect the CCPs outstanding contracts, and may improve the ability to assess the risk position of the CCP.
Which option is the preferred one? Explain briefly.	Option one is preferred to ensure that the original contract between the two counterparties is maintained.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Any clearing will be included as an amendment to the trade report.
Benefits	This would be simple for counterparties and would prevent duplication of data.
Disadvantages	This may slightly increase the complexity of TR data and the ability to undertake a risk assessment using the data. It would also potentially provide an inaccurate reflection of the outstanding notionals at CCPs, as CCPs may net individual trades down, thus meaning there would not be a one-to-one relationship between original trades executed and positions held at CCPs.
Regulator's costs	N/A
Compliance costs	Counterparties would need to report clearing as an amendment. In the event reporting is delegated to a CCP, the CCP may need to obtain additional information from a counterparty in order to provide all the necessary information to a TR.
Indirect costs	N/A
Option 2	If clearing occurs, a new trade report should be sent.
Benefits	This may more accurately reflect the CCPs outstanding contracts, and may improve the ability to assess the risk position of the CCP.
Disadvantages	This will make using TR data on cleared trades for market abuse purposes more challenging as the information on the original trade will be decoupled from the information on the cleared trade. It will do this without adding any meaningful data to the database.

Regulator's costs	Regulators will likely need to undertake additional processing of TR data in order to identify the original trades where a trade is entered into and then later novated to a CCP. This may result in additional costs for regulators.
Compliance costs	It is unlikely that the reporting of an amendment versus the reporting of a new trade should have a substantial impact on compliance costs, although reporting of a new trade may have a slightly higher cost due to the need to cancel a report and then resubmit two new reports.
Indirect costs	Having differences between the information reported to a TR and the information in counterparties and CCPs own systems could result in the need to maintain and reconcile two distinct databases, which could increase administration costs.

REGISTRATION OF TRADE REPOSITORIES

(a) What is the relevant information to be submitted to ESMA?

Specific objective	To ensure the relevant documentation is submitted to ESMA to enable a thorough and robust assessment of a TR's application for registration.
Option 1	To include only the minimum information required for the registration of TRs.
How would achieving the objective alleviate/eliminate the problem?	This option will be simpler for TRs to prepare the documentation that they consider sufficient to achieve compliance with the EMIR requirements, but it may be problematic under EMIR, having in mind the experience with the ESMA registration of CRAs and ESMA may have to require additional information throughout the application process.
Option 2	To request more detailed information in the registration of TRs.
How would achieving the objective alleviate/eliminate the problem?	This would assist in harmonising the level of information a TR is required to send for the registration process.
Which technical option is the preferred one? Explain briefly.	Option 2 is the preferred option as additional relevant information may ensure a more thorough and robust assessment of a TRs application.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	To include only the minimum information required for the registration of TRs.

Benefits	This may give the market more time to prepare the information that is required, if it is clearly specified early on that no relevant development of the RTS is expected. It would also allow the TRs to leverage their existing internal procedures and documentation with the submission of information during the application process
Disadvantages	The information may not enable a thorough assessment of a TR's application. The information may contain significant gaps which may delay the registration process. The TR operator may be unclear on whether there is a need to elaborate further the information to be submitted. The TR operator may be uncertain on how its application is going to be processed by ESMA.
Regulator's costs	This option may entail less costs initially, however the costs may increase during the assessment of the application as ESMA might be required to send a number of additional information requests to the TR operator.
Compliance costs	This option may entail fewer costs in the initial delivery of the information to ESMA. However, it may increase the costs during the assessment of the application as ESMA might be required to send a number of additional information requests to the TR.
Indirect costs	N/A
Option 2	To request more detailed information in the registration of TRs.
Benefits	It may address any weaknesses identified and enhance the quality and effectiveness of the RTS. The consistency of the applications could be enhanced, therefore the treatment of the TRs in the registration will be harmonised which will foster a level playing field. The registration timeline could be reduced; therefore, the cost of registration would decrease for all market participants.
Disadvantages	This might not allow the TR operator to leverage off its current internal documentation as the information required in the RTS may be wider in scope.
Regulator's costs	Overall, this may mean that more information is required to be submitted to ESMA. However, this may reduce the cost as it may allow a faster revision of the applications.
Compliance costs	Providing more documentation to ESMA is likely to incur increased compliance costs.
Indirect costs	N/A

(b) **What is the appropriate timeline for a business plan to be included in the information to be provided for registration?**

Specific objective	To ensure that TRs provide a business plan for an appropriate time period.
Option 1	Request a business plan over a 3 year time period.
How would achieving the objective alleviate/eliminate the problem?	A 3 year business plan would provide ESMA with a view of a TR's shorter term business plan to be taken into consideration during the registration assessment.
Option 2	Request a business plan over a 5 year time period.
How would achieving the objective alleviate/eliminate the problem?	A 5 year business plan would provide ESMA with both a short term and a longer term view of a TR's business plan which would be taken into consideration during the registration assessment.
Which technical option is the preferred one? Explain briefly.	Option 1 is the preferred option with a timeframe of 3 years as it will enable ESMA to make an assessment on the TR's current business model strategy and capabilities and whether/how this would change which could affect the TR's ability to provide TR services to market participants.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Request a business plan over a 3 year time period.
Benefits	A 3 year business plan would provide ESMA with a view of a TR's shorter term business plan to be taken into consideration during the registration assessment.
Disadvantages	This would not provide ESMA with a longer term view of the strategy of the TR.
Regulator's costs	N/A
Compliance costs	It has marginally reduced costs.
Indirect costs	N/A
Option 2	Request a business plan over a 5 year time period.
Benefits	A 5 year business plan would provide ESMA with both a short term and a longer term view of a TR's business plan which would be taken into consideration during the registration assessment.
Disadvantages	TRs may not have a view of their longer term business plans.
Regulator's costs	N/A
Compliance costs	The business plan could take longer to be completed.
Indirect costs	N/A

(c) **What is the best approach to ensure that TRs have appropriate financial resources**

Specific objective	To ensure that TRs have the appropriate and prudent level of financial

	resources enabling it to cover its operational costs.
Option 1	A TR should hold an unspecified amount of financial resources.
How would achieving the objective alleviate/eliminate the problem?	EMIR provisions do not state the specific amount of financial resources that a TR should maintain. Therefore the RTS should not offer any specific guidance on how ESMA will assess its sufficiency.
Option 2	A TR should hold 6 months operational expenses.
How would achieving the objective alleviate/eliminate the problem?	A TR's financial resources should be consistent with other market infrastructure and therefore should hold enough financial resources to cover a 6 month period.
Which technical option is the preferred one? Explain briefly.	Option 2 is the preferred option as the TRs will not hold client assets and will not be exposed to counterparty risk. The main risks of a TR will be operational and 6 months of operational expenses is considered sufficient level of financial resources for business continuity purposes.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	A TR should hold an unspecified amount of financial resources.
Benefits	Less costly for TRs and will enable the TR to adapt the level of its financial resource to its particular business profile.
Disadvantages	It would be almost impossible to enforce and to promote a level playing field.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	An unlevel playing field might cause TRs to general hold less capital therefore leaving TR operators under-capitalised.
Option 2	A TR should hold 6 months of operational expenses.
Benefits	TRs will be assisted in maintaining a minimum level of financial resources to adequately perform their regulatory function. It will possibly allow TRs to anticipate the level of financial resources that ESMA will demand. It might create a level playing field for the TRs. It may facilitate international convergence and compliance with international standards.
Disadvantages	It may prevent TRs from entering the market and being authorised by ESMA if they do not hold sufficient financial resources.
Regulator's costs	N/A
Compliance costs	Any requirement to hold financial resources will incur costs and it may take time for sufficient funds to be raised.
Indirect costs	N/A

(d) What is the appropriate information to ensure the operational reliability of a TR?

Specific objective	To ensure the operational reliability of a TR
Option 1	The RTS should specify some minimum content of the information that the TR operator should provide on its operational reliability (such as the need of a secondary business site).
How would achieving the objective alleviate/eliminate the problem?	This would increase the business continuity of a TR.
Option 2	The RTS should allow the TR operator to present documentation showing the compliance with EMIR operational requirements.
How would achieving the objective alleviate/eliminate the problem?	Less costly for TRs.
Which technical option is the preferred one? Explain briefly.	Option 1 is the preferred option as TR will be required to maintain an appropriate level of business continuity at all times.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	The RTS should specify some minimum content of the information that the TR operator should provide on its operational reliability (such as the need of a secondary business site).
Benefits	Increases the chances that a TR can operate under adverse conditions. This will foster a level playing field and will encourage international convergence. This option will facilitate the assessment of the application.
Disadvantages	This will incur costs over a longer term period.
Regulator's costs	N/A
Compliance costs	This will incur costs over a longer term period.
Indirect costs	N/A
Option 2	The RTS should allow the TR operator to present documentation showing the compliance with EMIR operational requirements.
Benefits	Reduces costs for a TR.
Disadvantages	There is an increased risk that a TR will be able to operate if the primary site is experiencing adverse conditions.
Regulator's costs	N/A
Compliance costs	Reduces costs for a TR.
Indirect costs	N/A

(e) Should a compliance officer be required?

Specific objective	To ensure compliance with the adequate policies and procedures required in order to follow the EMIR regulation.
Option 1	Require a compliance officer or a person responsible for compliance.

How would achieving the objective alleviate/eliminate the problem?	Ensure that someone is able to have a centralised view of whether the requirements are being met.
Option 2	No requirement for an individual to be responsible for compliance.
How would achieving the objective alleviate/eliminate the problem?	Possibly less costs involved in hiring staff.
Which option is the preferred one? Explain briefly.	Option 1 is the preferred option as there are a number of compliance requirements that TRs will have to meet at all times. Having an individual responsible for the overall compliance will increase the likelihood that the requirements are met.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	The response chosen is of the sole responsibility of ESMA.

Impacts of the proposed options:

Option 1	Require a compliance officer or a person responsible for compliance.
Benefits	It facilitates the exercise of the compliance function, key under EMIR. Ensures a centralised view of compliance and a single contact point. Fosters an unbiased, independent view vis-a-vis the TR board of directors, its senior management and other staff.
Disadvantages	N/A
Regulator's costs	N/A
Compliance costs	Costs to recruit qualified staff.
Indirect costs	N/A
Option 2	No requirement for an individual to be responsible for compliance.
Benefits	A compliance officer is not required if senior management are already involved in compliance. TRs are essentially a database and its applicable rules are not complex to understand.
Disadvantages	The independency of the compliance function would be compromised. The compliance function would not be centralised and possibly less efficient.
Regulator's costs	N/A
Compliance costs	N/A
Indirect costs	N/A

PUBLIC DISCLOSURE

(a) What is the appropriate timeframe for the publication of data by TRs?

Specific objective	To ensure that the public have access to TR data which is up to date.
Option 1	Annual publication.
How would achieving the objective alleviate/eliminate the problem?	This would ensure a consolidated data set, while not being out of date over a 5 year series. The consolidation of data is relevant since a system where correlations would only be possible by individual downloads would be very difficult to use. This is particularly the case where these downloads correspond to daily files. An annual publication would enable the public to aggregate 5 files (1 per year) rather than a higher number of files (e.g. 365 per year, if reports were only daily).
Option 2	Monthly publication.
How would achieving the objective alleviate/eliminate the problem?	This would enable a consolidated view while keeping a more balanced view of the data.
Option 3	Weekly publication as a minimum.
How would achieving the objective alleviate/eliminate the problem?	This would enable some consolidation while keeping a more balanced view of the data, enabling a TR to publish even more up to date data on a voluntary basis.
Option 4	Daily publication.
How would achieving the objective alleviate/eliminate the problem?	This would ensure the most up to date data. Real-time publication would not be possible under the reporting timeline of EMIR (T+1).
Option 5	Variable frequency.
How would achieving the objective alleviate/eliminate the problem?	This option would aim to cater for any liquidity concerns.
Which technical option is the preferred one? Explain briefly.	Option 3 is the preferred option since it offers the most balanced approach: up to date data within the EMIR deadlines and the public interests while keeping costs low for TRs instead of daily publication.
Is the option chosen within the sole responsibility of ESMA? If not, what other body is concerned / needs to be informed or consulted?	This technical response is the sole responsibility of ESMAs.

Impacts of the proposed options:

Option 1	Annual publication.
Benefits	Consolidation would require less reading time for the public and a TR will have fewer costs in publishing the data.
Disadvantages	Data would not be meaningful since it could be out of date.

Regulator's costs	Throughout the year, regulators could be asked for data which is more up to date.
Compliance costs	Throughout the year, TRs could be asked for data which is more up to date.
Indirect costs	Entities using public data (i.e. for studies) would not benefit from more up to date data.
Option 2	Monthly publication.
Benefits	There would still be a level of consolidation.
Disadvantages	Not sufficiently up to date for some stakeholders.
Regulator's costs	Possible requests for more up to date data.
Compliance costs	Possible requests for more up to date data.
Indirect costs	Entities using public data (i.e. for studies) would not benefit from up to date data which is published on a regular basis.
Option 3	Weekly publication as a minimum.
Benefits	The benefits include, consolidated data, up to date data as per stakeholder feedback and the possibility of TR to publish even more up to date data on a voluntary basis.
Disadvantages	Low trading activity may be further impeded by such disclosure which may discourage participation.
Regulator's costs	N/A
Compliance costs	There would need to be arrangements in place to publish data weekly, although this should be a one-off set-up cost.
Indirect costs	N/A
Option 4	Daily publication
Benefits	An up to date level of information is provided.
Disadvantages	There are costs for all the parties concerned, including recipients, due to the volume of reports.
Regulator's costs	Difficulty in supervising the accuracy of the high volume of public data. There could be possible multiplication of requests by stakeholders over a short timeframe.
Compliance costs	There could be processing costs and errors given that the daily publication would coincide with the reporting timeline (T+1).
Indirect costs	N/A
Option 5	Variable frequency.
Benefits	This could cater for different product-specific or trading scenarios/events in availability of data (e.g. less liquid assets published less frequently).
Disadvantages	Not predictable, less transparent and more complex.
Regulator's costs	Possible clarification requests.
Compliance costs	Possible clarification requests.
Indirect costs	N/A