



EMIR Implementation: Banking & Treasury Workshop – Summary Notes

August, 2013

DOCUMENT PURPOSE

This is a Document of Record of the “FOA EMIR implementation, Banking and Treasury” workshop. This document reflects the discussion that took place in the workshop and has sought to collate the information in a logical format.

The intent is for the document to increase awareness of the implementation challenges that exist and provide a basis for constructive dialogue to address some of these challenges.

An Executive Presentation of the findings and themes drawn from the 4 FOA Segregation and Portability workshops will be shared with Regulators.

DISCLAIMER

THIS DOCUMENT REPRESENTS THE FOA’S INTERPRETATION OF THE DISCUSSION POINTS FROM THE APPLICABLE WORKSHOP AND SHOULD NOT BE VIEWED AS BEING ENDORSED IN ANY WAY BY THE PARTICIPATING FIRMS.

1. EXECUTIVE SUMMARY –

Headlines	Implementation Challenges	<ul style="list-style-type: none"> - Significant implementation challenges exist based on variance of CCP models, an exponential increase in the operational requirements, and the breadth of system and process change this necessitates - EMIR's Segregation and Portability elements and the variance in segregation models being adopted by 15 CCPs will create a complex operational environment for Clearing Members and their clients.
	BAU Complexity	<ul style="list-style-type: none"> - A complex daily operating environment will require a stable platform if high levels of operational risk are to be mitigated. - There will be an increase in balance lines under administration from 15 per 5 major CCP's (3 currencies per CCP) to c9000. <p>Along with additional manual processing in using CCP GUI portals (Journaling). Limited information can be provided to clients at this point around account structure specifics and pricing (accounts cannot be set up in advance of disclosure from certain CCPs), which impacts on their ability to deal from the desired account structure. It is imperative that an achievable implementation timeframe is agreed to establish a stable operating environment.</p>
	Feasibility of existing EMIR implementation timeline	<ul style="list-style-type: none"> - For the industry to achieve EMIR objectives and set up to manage this complexity in the prescribed timeline, CMs need to work with Regulators and CCPs to: <ul style="list-style-type: none"> - Resolve open questions of interpretation with both ESMA and CCPs. - Gain clarity on key procedural issues from CCPs that will enable CMs to execute groundwork prior to their authorisation, thus starting to address some of the concerns around the overall EMIR Timeframe. - Discuss concerns on the perceived gap between CCP authorisation dates and CCP's technical capability to deliver a functional service. Presently no industry vendors or CCPs offer certain technical capabilities e.g. Street-side movements
Key changes required	Increase in client account numbers and resulting processing pressures	<ul style="list-style-type: none"> - EMIR implementation will lead to a manifold increase in the number of instructions that are processed across the ETD value chain. The Working Group estimate that for each CM there will be an increase from 15 to over 9000 balance management lines across 5 major CCPs. - This is based on each CM having 4/5 large asset management clients, each with 100-150 funds, with various currency accounts and each fund having an assumed presence across the 5 Major CCPs. A significant increase in balance management instructions will drive an exponential rise in processing and capacity requirements, which will need to be executed in a compressed timeframe (between 5a.m. and 10a.m.).
	Front-to- Back systems upgrade	<ul style="list-style-type: none"> - This would include system development to implement changes to: account setup procedures, the statement reconciliation process, recall of excess and collateral posting, and the ability to manage additional processing and liquidity risk.

	Dependency upon vendors and CCPs	<ul style="list-style-type: none"> - Presently the industry has two principal vendors that service 90% of the market. Across the industry there is no vendor or CCP which has the technical capability for services such as Street side movements. CM's are reliant on vendors and CCP's to fill this technology gap, both of whom will face a compression of usual development timelines.
Key Risks/ Challenges	Compressed EMIR implementation timetable	<ul style="list-style-type: none"> - As of 13th August, three CCPs have made applications for authorisation. With one month remaining for submission deadlines, this means that twelve CCPs are yet to apply. Assuming they meet the deadline, this means CMs face a large 'go-live' burden with 12 CCPs being authorised in March 2014.
	Unprecedented scale of implementation challenge	<ul style="list-style-type: none"> - As a reference point, the futures migration from LCE to ICE Clear took Members c6 months to implement for 1 CCP. Based on this conservative comparison [ICE Clear migration was less complicated] , the implication of extrapolating this timeline for 15 CCPs is that 3-4 years of project load (assuming a level of development overlap) are to take place in a 6 month period.
	Scarcity of skilled resources	<ul style="list-style-type: none"> - There is an expectation that CMs will face a significant recruitment challenge in finding the number of skilled resources required to manage and deliver change programme of this scale, intensity and complexity. This is a result of not just CMs implementing EMIR, but also the resourcing requirements of other regulatory compliance initiatives that are being executed simultaneously (Basel III, IAS 32etc)
	Challenges of increased processing volume	<ul style="list-style-type: none"> - Managing substantially larger volumes in a limited timeframe leads to an increase in operational risk, which would rise further if the implementation timeframe necessitates a sub-optimal target state to meet compliance deadlines. The volumes involved mean that any form of legacy workarounds or manual processing lead to operational risks
	Uncertainty over CCP systems development planning	<ul style="list-style-type: none"> - Questions remain on how ready CCPs will be to handle the projected significant increases in account volumes, which have the potential to impact CCP batch release times. The ramifications of CCP batches being delayed is that the 5-10AM processing window for CMs is narrowed further, resulting in the delay of internal batch runs and potential for negative client impact caused by reporting/funding delays.
	Model complexity and transit risk	<ul style="list-style-type: none"> - Where a client has half their business under the CASS setup and the remainder under TTCA, the number of balance movements to be managed will increase sizeably. The transit risk exists (and expands to the UK where previously this wasn't present) where certain CCP's do not separate house and client balance movements to a Target 2 bank account.
	Liquidity Risk	<ul style="list-style-type: none"> - Even if all clients were to choose client segregation, CCP's may still instruct only one balance movement across CASS and TTCA accounts, with the CM only permitted to settle through one bank account. - CCP pre-funding in this instance may be required for client account buffers/operational float. However even where pre-funding exists, Excess may not be able to move between CCPs to cover deficits. The liquidity risk occurs where CMs have to pre-fund the deficit, prior to client repayment

Implications: Client	Lack of client readiness and time for meaningful client engagement	- Without specific information on available account structures or pricing, CMs cannot advise their client base effectively on the appropriate choices. This could result in a situation where CCPs gain authorisation and ‘go-live’ but due to delays in account setup, clients will not have the ability to deal from their desired segregated account model. It could be compounded by delays from clients in both understanding and processing new documentation
	Potential capital burden increase	- Asset based segregation will mean restrictions on the collateral pool available to place at a CCP and could result in higher funding requirements for all clients across each CCP account
	Transit risks around timing	- This is exemplified where assets for deposit are received by the client after the CCP cut-offs, or where CMs get repayment from CCP in advance of being able to repay the client. Also, under the new regime, CCP’S co-mingle repayment of TTCA and CASS protected funds as a single movement which in turn creates transit risk that risk didn’t previously exist in the UK.
Implications: Operational	BAU Operational Risk	- Processing increased volumes in a compressed timeline is only one part of this operational implication. There is also the need to mitigate a lack of “off the shelf” technology in areas such as the processing of collateral. This will potentially lead to a high level of manual processing. CMs note there are restrictions such as limits to asset transfer if attempts are made to Offshore this work
	Major effort to ensure that CCPs and CM are synchronised for Go Live	- A sufficient window in the implementation timeframe must be factored in for testing new systems and the processing of the higher volumes, in the required timeframe to ensure readiness to deliver stable daily operations.
	Onboarding equality	- CCPs need to establish a system to ensure a level playing field so that no CM is prioritized unfairly over other CMs, and to have a transparent process for CM client onboarding completion
	CM OP Planning limited by lack of detailed propositions	- At present, a CCP ‘go-live’ timetable following authorisation is yet to be confirmed. As such, operational impact remains uncertain and hinders CM ability to plan. Despite this, CM’s have made best-efforts to prepare for implementation based on assumptions e.g. Treasury Preparation. Vendors have also commenced work around collateral tagging and client bucketing.
Key areas of uncertainty	<p>CCP Client Account Structures</p> <p>ESMA Authorisation approach</p> <p>Detail of some CCP propositions</p>	<p>A full set of questions for the Regulator and CCPs have been collated as part of this work. Key areas of uncertainty for CMs include:</p> <ul style="list-style-type: none"> - Uncertainty of these structures leads to knock on effects for all operational planning attempts. This limits the CM’s ability to: advise clients on structures, set up accounts, or prepare systems and processes. - ‘Go-Live’ timeline following authorisation, whether CCP implementation will be staggered or “Big Bang”. - There are gaps in certain key details from some CCPs such as: GUI capacity and account procedures (segregation buffers, money flows and trust letters).

2. WORKING ASSUMPTIONS

In order to provide the appropriate framework for discussion and analysis the group made a number of assumptions when working through issues across the various categories;

#	Assumption	Detail
1	Each CM has 1000 client accounts per CCP	<ul style="list-style-type: none"> Based on workshop discussion, fund managers were considered to most probably opt for the highest level of protection but smaller buy-side firms may opt for lower protection (Omnibus accounts) to have more margin flexibility. An ISA undertake will reduce RAW from 4% to 2% which could encourage uptake. Assuming each CM has 4-5 asset manager clients, each with 100 – 150 funds under management, this will result in an average 600 accounts per CM, per CCP for asset management clients alone. The remaining fund clients (hedge, pension, sovereign wealth) and HNW client base should bring that figure closer to 1000 a/cs per CM, per CCP. It therefore seems prudent from an operational planning perspective to assume that members will have 1000 client accounts.
2	LSOC Account Structure will not be approved for use under EMIR.	<ul style="list-style-type: none"> A second version of the LSOC structure has been submitted to ESMA by CCP's but potential hurdles remain and for operational preparation, members should plan on the basis that the alternative account structures will be chosen.
3	Only clearing member's assets will be held in the house account.	<ul style="list-style-type: none"> In line with the spirit and language of the regulation, all client accounts and assets will provide segregation and portability. This also implies a large increase in the number of transactions required between CM and client accounts, which members should prepare for.
4	CCP Interaction (Web-GUI's) will remain the same	<ul style="list-style-type: none"> Certain daily requests currently made using CCP web-based platforms, do not have capacity to deal with 1000 accounts. CCPs and CMs will have to address this challenge.
5	Client excess can move between CCP's – Margin not accounted for.	<ul style="list-style-type: none"> Members should consider a process for liquidity risk in this instance.



6	Increase of segregation buffers, potential for some client's interactions with CCP to move through non-segregated accounts.	<ul style="list-style-type: none"> • Obvious need to ensure segregation should potential arise for co-mingling
7	Excess will be valued 24 hours in arrears, with the figures of COB Margin + accurate collateral view.	<ul style="list-style-type: none"> • Seen as the best compromise to match the 'Real Time' regulation requirement.
8	Segregation provides protection but Transit Risk remains	<ul style="list-style-type: none"> • Clients will be advised that individual segregation provides protection, but is not risk free at the clearing level because Transit risk still remains while cash/assets being transferred.
9	In certain major areas such as excess, terms like 'without delay' 'real-time' Remain open to interpretation.	<ul style="list-style-type: none"> • Members will adopt a cross industry standard to satisfy the spirit of the regulation on a best efforts basis, 'as soon as is practically possible'.
10	EMIR covers how assets are held at the CCP and not the contractual relationship with the CM	<ul style="list-style-type: none"> • Members have received advice that in the event that the client contracts with CM under TTCA, then cash CAN flow via CM house bank account. This would also mean that funds coming back from the CCP for either initial margin, variation margin or excess can pass via house bank account..



Why these assumptions were important for the Workshop Discussion:




- Changes from the current CCP account structure, to the omnibus / segregated approach, will have significant impact on member's operational systems and processes. Taking maximum capacity requirement as the baseline will ensure no shortfall in operational capability.
- At the outset of the discussion assumptions around; CCP Account structure, client segregation and GUI access/request capability had to be made. This provided a basis for understanding where pinch points lie, the associated costs of operation and outstanding queries that remain to be resolved.
- Taking a front to back approach while working through 'run-book' example also distilled an operational approach to 'client preference for excess' and 'communication of transit risk', while highlighting uncertainties to follow up on.

3. REQUIREMENTS, CHALLENGES AND IMPLICATIONS

3.1 Workshop Summary – Headline themes and implications

 Major stumbling block
  Limited challenge

Key Area / Theme	Degree of Challenge	Implementation Challenge – Regulators can help address	Implementation Challenge – for the industry and partners to address	Client or wider market impact
Cash		<ul style="list-style-type: none"> • CCP cut-offs for cash movements result in a substantial increase in asset flows and processing burden. • ESMA could assist by highlighting to CCP’s the risks inherent in focusing processing into a smaller timeframe. 	<ul style="list-style-type: none"> • What previously took place over a full day will now be transacted between 5a.m. and 10a.m. • Substantial increase in payment flows and reconciliation requirements • Changes to operational systems and higher capacity requirements. • Cut-offs will reduce capital availability for CM’s intraday. • Heavily manual processing cannot be offshored due to operational restrictions. 	<p>Client Impact – Potential delays in client reporting (dependency on CCP file release) which has further impact for funding delays.</p>
Collateral		<ul style="list-style-type: none"> • Here the dependency lies with the CCP not the regulator. 	<ul style="list-style-type: none"> • Current systems do not provide scalability given the expected increase in account volumes. • Manual processing will introduce a level of operational risk (wrong amounts or accounts) along with an added compression of BAU Timelines. 	<p>Client Impact – Clients may face an increased funding burden in each currency to meet stricter collateral criteria.</p>

<p>Client Profiling</p>		<ul style="list-style-type: none"> • CCP's are unlikely to disclose account structures (especially pricing) until authorisation • EMSA could assist in highlighting the operational risks associated for CM's by CCP's lack of disclosure. 	<ul style="list-style-type: none"> • Inability to advise clients on account choices, along with undefined timelines for new account opening on 'go-live'. • Without account structures, CM's cannot prepare systems and processes for 'go-live' accordingly. • Client will have a preference for excess treatment, which will have operational implications to be resolved. 	<p>Client Impact – May result in inability to trade should accounts not be opened in time.</p>
<p>Client Money Regime</p>		<ul style="list-style-type: none"> • Queries remain about the eligibility of ISA proceeds moving through a CM house bank account. Until these queries are resolved, CM's cannot adequately prepare operational systems. • ESMA can confirm items outlined at the FCA forum. 	<ul style="list-style-type: none"> • CM's have a need to ensure accurate tracking and segregation of client asset flows where appropriate • Without clarification about appropriate segregation and control of asset flows, CM's will lack the required knowledge to plan banking account structures accordingly for each client. • Processes should also be in place to advise clients of remaining transit risk with the ISA approach. 	<p>Client Impact – Exposure to transit risk remains.</p>
<p>Excess</p>		<ul style="list-style-type: none"> • Regulation calls for excess to be moved in 'real time' and 'without delay'. Technology does not presently exist to meet the real time requirement and 'without delay' lacks clarity to plan for sufficiently. • ESMA can provide clarification on the 'real time' requirement and its meaning, along with definition of 'without delay' 	<ul style="list-style-type: none"> • Challenge is to ensure excess is released quickly by CM. Which requires two calculations per account, (1000 accounts) representing increased system demands. • Current technology solution not available to resolve 'real time' requirement. Added risk of two calculations per client account and varying CCP cut-off times for instructions. • Liquidity Risk arises where CM recalls excess but not received in sufficient time to re-invest. 	<p>Operational Risk – Current technology solution not available to resolve 'real time' requirement. Added risk of two calculations per client account and varying CCP cut-off times for instructions.</p> <p>Liquidity Risk – Where excess not received in sufficient time to re-invest.</p>

3.2 CASH: Requirements and implications

<p>CASH: SECTION SUMMARY</p> <ul style="list-style-type: none"> • Cash movements for margin, collateral or excess are fundamental to the entire process. The major implications of EMIR with regards cash include: <ul style="list-style-type: none"> - Increase in transaction volumes: Funding calls (up to 1000 accounts, per CCP) will mean much larger transaction volumes. For example NASDAQ will require one payment per account (1000 accounts) each with a sub reference. - Significant operational changes to accommodate increased volumes and compressed timings. All statements must be reconciled by market open, treasury will be required to understand funding across a much larger number of pools, and recalls (limited by CCP GUI capability) must be instructed by CCP cut-offs or CM’s risk assets not being re-invested. This focuses what today is 15 hours’ worth of processing into a window between 5am and 10am.
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Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Cash	Reconciliations	<p>Requirement:</p> <ul style="list-style-type: none"> • CCP Statement reconciliation must take place vs vendor programs for IM/VM across every client account once released in manual format from the CCP <p>Challenge:</p> <ul style="list-style-type: none"> • Reconciliations require completion by 7-8am prior to market open, which will create a large capacity burden while adding operational risk (breaks and follow up actions to resolve) 	<p>Banking & Treasury will liaise with clearing to gauge operational capacity requirements to handle increased statement volume.</p> <p>Two options identified to address the reconciliation challenge;</p> <ul style="list-style-type: none"> i) Manual Recs (1 FTE per 50 accounts) ii) Automated reconciliations of detailed balances and calculations supported by vendors using CCP API’s. 	<p>Operational Risk – Arising from substantial increase in the reconciliation requirement.</p>	<p>High – CCP’s must release files to CMs on a timely basis daily.</p>

Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Cash	A.M. Processing Demand	<p>Requirement:</p> <ul style="list-style-type: none"> • Increased processing capacity. Given CCP cut-offs, a sizeable processing burden will exist between 5a.m. and 10a.m. (depending on when CCP statement reconciliation is completed) with numerous actions having to take place during this window; Exch margin call, client margin calls, bookings, placement of excess, monitoring of client funding receipt, all prior to currency cut-offs. <p>Challenges: -</p> <p>Meeting CCP funding calls in a timely fashion</p> <ul style="list-style-type: none"> • Assumption that EUREX will require at least 1 to maximum 3 pools of payments. This will require journaling activity via the EUREX GUI. • Assumption that NASDAQ will require 1000 payments (assumption of one for each a/c) with sub references -> High impact and operational risk due to potential 'fat finger' errors. <p>Large manual processing requirement (Note - Use of offshore resources may not be feasible due to location constraints E.g. Eurex or an inability to transfer assets if processing offshored)</p>	<p>Cut-off Times - Enter into dialogue with CCPs on cut-offs to reduce focus on processing risk in the short window between 5a.m. and 10am.</p> <p>FOA will highlight this focus to CCP's.</p>	<p>Operational Risk – Arising from substantial increase in journaling, both in CM books and at CCP E.g. NASDAQ will have 1 VM call but IM calls will be individual, which is potentially 1000a/cs. All focused into a short morning timeframe. Heavily manual processing cannot be offshored due to restrictions.</p> <p>Operational planning and capacity to accommodate BAU Cut-offs – What previously took place over a full day will now be transacted between 5a.m. and 10a.m. This seems to create unnecessary bottlenecks.</p>	<p>High - ESMA and CCP's must realise the level of processing risk focused between 5a.m. and 10a.m.</p>

		<p>Depending on the CCP models, the VM/IM call will be netted. The challenge for CMs will be identifying which client this relates to in order to:</p> <ul style="list-style-type: none">i) Increased segregation buffers due to non-seg client assets possibly moving into seg pools (also need to confirm whether 2 calls are raised by CCPs i.e. Is there a seg call and non-seg call or do they both go through the same bank account pool).ii) Proprietary trading affiliates will most probably fall into the non-seg call, thus clients may not be satisfied to commingle their call with them.iii) Make internal entries/bookings (intraday journals) to resolve the co-mingling issue which will increase the complexity of the Client Money calculation. It will also increase the need to have a higher client buffer which is against the FCA's Client Money principle			
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Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	External dependency
Cash	A.M. Processing Demand (Continued)	<p>Requirement</p> <ul style="list-style-type: none"> Once reconciliation complete, Treasury will be required to understand CM and Client funding requirements across a much larger number of account pools Recall instructions. Can be instructed once funding is confirmed. CM needs to confirm the amount of recalls for all clients and location for placement, before the cut-off time otherwise CCP's will not reinvest it. At this point, journaling activity will take place. Further complications need to be taken into account if the client's trade on other markets i.e. APAC. <p>Challenge</p> <ul style="list-style-type: none"> Based on current CCP infrastructure, this is a heavily time consuming exercise. Clarification is required from CCP's on the API scalability and capability to deal with increased daily query volume Possible system upgrades may be required along with improved CCP transparency. 		<p>EMIR Timelines – This complex operating environment will result in greater costs to CM's and clients. Should system change be required, CM's are unable to plan accordingly without CCP clarification on GUI capabilities.</p>	
	Liquidity	<p>Requirement:</p> <ul style="list-style-type: none"> Future rules will mean all CM and client cash is to be moved prior to CCP cut-offs each morning. <p>Challenges:</p> <ul style="list-style-type: none"> CCP morning cut-offs could result in a liquidity risk because available capital levels may be lower during the day as some excess/assets may not arrive until late afternoon, should they be delayed for any reason. 	Staggering cut-offs would result in a more equal distribution of liquidity throughout the day and reduce dependency on cash moves completing. FOA to encourage CCP's to facilitate this.	<p>Liquidity Risk – Proposed approach would have implications for reduce capital available to CM's intraday.</p>	<p>High – The systematic risks inherent to this approach must be communicated to ESMA..</p>

3.3 Cash: A.M. Cash Processing Run-book - as created by FOA Members:

During the discussion on Cash, attendees considered the Cash Processing Run Book. The purpose was to highlight the number of calculations and cash movements that will have to take place on a daily basis in the a.m. The diagram provides an insight into complexity faced in the banking& treasury sphere under EMIR.

Run book example to be included

What the projected [and hypothetical?] Cash Processing Run Book tells us:

- The diagram illustrates the complexity of daily payment flows across Omnibus and segregated accounts, where the payment burden across each CCP is funded by the CM.
- Segregated account balances in deficit along with Omnibus deficits, must be funded by the CM as part of the shortfall call by each CCP.
- Liquidity risk to the CM is also highlighted resulting from margin calls to the same client across multiple CCP's.
- Queries still remain about the ability of CM's to re-direct excess with client permission.

3.4 Collateral: Requirements and implications

COLLATERAL: SECTION SUMMARY

- The main EMIR driver in this area is the need to instruct collateral prior to CCP cut offs, on a manual basis. The main implication for CM’s is;
 - **Increased account volumes.** Under EMIR segregation, CCP systems which are capable of handling today’s low account volume, do not provide scalability for an estimated 1000 accounts per CCP.

Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Collateral	Lack of automated collateral instruction via CCP GUI.	<p>Requirement:</p> <ul style="list-style-type: none"> • CMs must instruct collateral movements on a daily basis prior to CCP cut-off. <p>Challenges:</p> <ul style="list-style-type: none"> • Current systems do not provide scalability given the expected increase in account volumes. • Manual processing will introduce a level of operational risk (wrong amounts or accounts) along with an added compression of BAU Timelines. 	<p>Some vendors plans to develop by October a functionality whereby an exchange code is assigned on each collateral booking. This means collateral can be assigned across each account to facilitate the single margin process.</p> <p>However systems development will still be required by CCPs to provide scalability.</p>	<p>Operational Risk – Processing errors, resulting in breaks, funding gaps and further compression of BAU Timelines.</p> <p>Client Impact – Clients may have to pre-fund buffers/excess/float to mitigate the risk of operational delays.</p>	<p>Medium – CCP system development will be vital to provide scalability from current to new account structures.</p>

3.5 Client Profiling: Requirements and implications

CLIENT PROFILING: SECTION SUMMARY

- The account structure choices that a client makes will have inherent implications for how their business is conducted on a daily basis in terms of account management, fees paid and ability to trade. The EMIR implications in this area are;
 - Operational risk** arises around the client’s preference for how their excess is treated. This has an impact on system demand and the agreed approach.
 - Requirement Uncertainty** - CCP’s are yet to confirm account options and potential choices for the treatment of excess, thus CM’s cannot advise clients (**Client impact**) on how to prepare for ‘go-live’ trading but upon doing so ISA features (remaining transit risk), will be highlighted.

Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Client Profiling	Client Communication on ISA’s	<p>Requirement:</p> <ul style="list-style-type: none"> CM’s must fully advise clients as to the implications of their account choice. <p>Challenges: CM agreed approach The following information needs to be communicated to clients who opt for the ISA model:</p> <ul style="list-style-type: none"> Transaction cost (example - NASDAQ requires \$25 repayment to return excess) Reduced flexibility (margin) and increased operational processes (Impacting not only CMs but also buy side) ISA comes with a “transit” risk (this can be alleviated by the usage of a Sponsored Model whereby the client deals directly with the CCP) 	Operationally capable to deliver.	Client Impact – May not be aware how increased segregation will affect operations or that transit risk remains.	Low – Client must simply be advised and can make decision based on information provided.

		<p>Note - Seg accounts come with added complexity e.g. NASDAQ will be required to do 1 individual payment per IM, per account at 6am > thus expecting 1000 instructions. Should the payment be incorrect the margin will sit at in unallocated client account.</p>			
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Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Client Profiling	Account Setup Delays	<p>Requirements:</p> <ul style="list-style-type: none"> CM's must advise clients on available account options but cannot do so until CCP's disclose this information (including pricing). <p>Challenges:</p> <ul style="list-style-type: none"> CCP's unlikely to provide this information until they obtain authorisation. Should CCP authorisation and 'go live' take place on adjacent days, this places large burden on the CCPs vis-a-vis account setup turnaround times. CCPs would face an influx of new account setups (1000 client accounts per member) <p>Note - For account setup this assumes the that an ISA will need to be opened by legal entity. i.e. in the case of a fund manager/advisor client requiring ISAs, there will be one ISA per fund and not at advisor level).</p>	<p>CCP's should disclose account options as soon as possible to allow for CM's to begin repapering and client onboarding.</p> <p>If CCP's do not plan to disclose prior to authorisation, (as members interpret is the current approach) client impact will be highlighted by FOA.</p> <p>Members would prefer ESMA to instruct CCPs to release this information prior to go live</p>	<p>Client impact – Without full information prior to CCP go-live, clients will be unable to select the appropriate accounts. This will cause a significant influx of new applications to CCP's upon authorisation and may result in clients lacking ability to trade until accounts are opened.</p>	<p>Medium – CCP disclosure of account options required before planning can begin.</p>

Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Client Profiling	Client Preference for Excess	<p>Requirement:</p> <ul style="list-style-type: none"> Excess is defined as the difference on a CCP level as to what CM's have been called for versus what has been received from the client. Excess to be moved without delay - Presently process will differ between CCP's as to how they handle excess. Some CCPs will automatically send back (NASDAQ) others will provide the option to send back (EUREX). This may lead to client confusion and a query exists as to whether clients can set preference for how their excess is to be handled by the CM (in the form of a static data instruction). <p>Challenges:</p> <ul style="list-style-type: none"> The client will have a preference for the allocation of the excess. For example a client can have a default preference "always move excess on X CCP" or "default a percentage split across a number of CCPs". A risk arises where the client wants to move excess and the CM doesn't have an accurate collateral picture. 	<p>2 options for client excess preference challenge:</p> <ol style="list-style-type: none"> Auto-pay instruction to move cash / collateral to meet the cut off times (Eurex has this customer preference) -> this will require configuration of client accounts at account level Dynamic models whereby vendors need to align the customer preferences to CCPs <p>Agreed approach - If client wishes to change the original instruction for treatment of excess, CM will take a minimum of 24 hours to process. Assuming a batch run has taken place and accurate collateral picture is available.</p>	<p>Operational Risk – Where the client may instruct their preference for excess and then wish to change that, the process should be conducted under the agreed approach.</p> <p>Client Impact – New excess treatment will add complexity to client operations, static instructions would reduce this.</p> <p>Requirement uncertainty – Yet to be confirmed whether client can have a default preference for excess.</p>	<p>Medium – Clarification still required from CCP's around whether client preference for excess can be acted upon from a static instruction.</p>

3.6 Client Money Regime: Requirements and implications

CLIENT MONEY: SECTION SUMMARY	
<ul style="list-style-type: none"> Segregation and portability represent two of the main impact areas of EMIR, including the need to advise clients about the impacts of their account choices. For Banking & Treasury the implications are; <ul style="list-style-type: none"> Operational Risk – Increased complexity around the client money calculation introduces significant operational burden for members in terms of capacity. Client Impact – Transit risk remains with ISA model and CM has duties when informing clients of the implications when choosing various account structures. Cash flows will alter depending on TTCA or CASS contract choice. 	

Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Client Money Regime	Transit Risk	<p>Requirement:</p> <ul style="list-style-type: none"> Client account choice between various options, including the ISA approach. <p>Transit risk being defined as the sum expected to move between a CCP, CM and client on a given day when one of more of the CM’s bank or process lines sit outside of client money structures. Also arising where CCP collateral cut-offs are missed by client and assets sit with CM until the next morning.</p> <p>Challenge:</p> <ul style="list-style-type: none"> CM’s should recognise and highlight to clients that even if they select the ISA approach, they are still not fully protected from all clearing risk. Dependant on how assets flow accounts, a transit risk remains. 	<p>Agreed Approach – Client will be informed by CM of potential transit risk upon account setup.</p> <p>Where a Sponsored Model is available (client dealing directly with the CCP) this risk could be alleviated.</p>	<p>Client Impact – A potential transit risk remains despite individual segregation</p>	

Client Money Regime	Client Money Calculation	<p>Requirement:</p> <ul style="list-style-type: none"> • Client Money Flows. New structures mean client accounts and cash/asset flows across omni net/gross, client seg/non-seg accounts, will be separated. <p>Challenges:</p> <ul style="list-style-type: none"> • Both technical and risk systems to be revised to handle increased complexity, depending on responses from CCP around buffers (, segregated accounts and potential rolls up for client accounts. Regardless of outcome, complexity around client money calculation is greatly increased. The regulator is also to confirm the assumption around acceptable flow of assets through the house account. 	Procedural discussions will take place once regulator confirms assumptions.	<p>Operational Risk - Increased complexity of the Client Money calculation</p> <p>Client Impact – Cash flows alter depending on contract either under TTCA or CASS</p>	Medium - ESMA to confirm queries around implications of TTCA vs CASS.

3.7 Excess: Requirements and implications

SECTION SUMMARY

- The treatment of excess should now be clearly defined across client and CCP. These changes are intended to improve segregation and portability in the result of CM default. The implications for Banking & Treasury are;
 - **Requirement Uncertainty** – Calls for movement of excess to take place in ‘real time’ and ‘without delay’, terms which require clarification and definition respectively.
 - **Operational Risk** – Regulatory requirements around excess movement cannot be fulfilled by current technology. An increase in payment flows and variation in release times (VM/IM) will result in significant systems burden and the associated risk of higher transactions volumes.
 - **Liquidity Risk** - Delay between margin call being paid and excess being received by CM could result in liquidity risk.

Topic	Area	Implementation requirements and challenges	Options for addressing challenge	Headline Implications	Level/type of external dependency
Excess	Margin Calculation	<p>Requirement:</p> <ul style="list-style-type: none"> • Some clearing members believe that movement of excess is required to take place in ‘Real Time’ and ‘Without Delay’. <p>Challenges:</p> <ul style="list-style-type: none"> • Consensus among them was that is not realistic request. Margin is calculated once a day so it isn’t practical that excess moves in real time. • Technology does not currently exist to fulfil actual 'Real Time' collateral value pictures in order to calculate margin. • Margin has to be valued ‘at a point in time’ (COB Yesterday) otherwise the CM holds a repayment/liquidity risk until the excess/assets received (caused by the cash advance prior to client payment, substitution of assets and recalls) 	Members will adopt a cross industry standard to satisfy the spirit of the regulation on a best efforts basis, ‘as soon as is practically possible’.	<p>Operational Risk – Technology does not currently exist to fulfil requirement</p> <p>Liquidity Risk – Until excess/assets received by CM.</p>	N/A

Excess	Timing & Excess Calculations	<p>Requirements:</p> <ul style="list-style-type: none"> • Excess Interpretation. Some CM's interpreted Excess as the amount separate and on top of the IM/VM movements and the risk multiplier provided by the clients. <p>Challenges:</p> <ul style="list-style-type: none"> • Excess can only be released at T+1. For NASDAQ: VM excess can't cover the IM shortfalls. VM excess will be returned to the Clearing Members (but not the IM excess). It is important to equalise the IM excess across CCPs. In the case of Eurex, excess will cover IM shortfalls. • From a CM perspective the challenge is to quickly release the excess from CCP's in order to repay internal accounts (cover initial funding). • To do this, 2 calculations are required per client (assumption is that there will be 1000 a/cs); <p>1) Check margin requirement 2) Calculate the client's margin multiplier to confirm the excess. Margin multiplier is treated as an asset that is passed to the CCP</p> <ul style="list-style-type: none"> • Variation currently exists across CCPs as to release times of VM/IM, which will impact how quickly excess can be released. • As a knock on effect, liquidity risk arises if CM pulls back excess but then may not physically receive cash/assets in time to re-invest them. 	Procedural discussions to take place once CCP questions have been resolved.	<p>Operational Risk – Volume of calculations requirement prior to excess release.</p> <p>Liquidity Risk – From excess movement where cash not received in good time.</p> <p>Client Impact – Today clients receive on common margin call but will now receive by CCP leading to a double funding implication. Use of a default instruction would help mitigate this impact.</p>	Variation across CCP needs to be clarified so that procedural preparations can be made accordingly.
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4. OUTSTANDING QUESTIONS FOR REGULATORS AND CCPs

4.1 Questions for the regulator

#	Question Area	Question
1	Authorisation	With regards to cash and collateral, assuming all approvals take place in one day, will there be a staggering of operational roll out by CM, CCP, Instrument?
2	Collateral - Asset vs Value Model	Is there a requirement to hold all the client assets in CCP or equivalent value? What are the impacts to single currency margining?
3	Client Money Regime	EMIR covers how assets are held at the CCP and not the contractual relationship with the CM. Does this mean that; In the event that the client contracts with CM under TTCA, then cash CAN flow via CM house bank account? This would also mean that funds coming back from the CCP for either initial margin, variation margin or excess can pass via house bank account?
4	Client Money Regime	Regulator to confirm that the excess is linked to the margin requirement of individually segregated account for that client.

Implications if these Questions remain outstanding:

- A major impact for 'go-live' timelines is affected by whether or not the CCP actually receives authorisation. ESMA are still to outline the approach should a CCP not receive authorisation i.e. Will it be allowed to continue operation? Assuming so, this would lead to an exceptionally complex operating environment where the CM must run two divergent operating systems for EMIR Approved/Non-Approved CCP's.
- Should multiple CCP's be authorised, this will lead to a highly congested implementation timetable. An implementation schedule should be agreed with CCP's to allow a CM testing phase to Iron out any operational problems. Without a co-operative approach, CM's will struggle to meet EMIR timelines.
- The regulation remains open to interpretation around issues of client money flow vs segregation and exact definitions of 'excess' and terms such as 'without delay', leading to an inability to confirm operational planning.

4.2 Questions for the CCPs

#	Question Area	Question
1	Terminology Definitions	How are CCPs treating VM / excess?
2	Cash	Are there any plans to improve GUI access to handle increased usage for requests?
3	Cash	Will detailed CCP balances be available through an API/GUI?
4	Cash	Liquidity - How will PPS accounts offer a scalable solution to pay instructions?
5	Collateral	Where a client has segregated and non-segregated accounts with the CCP for different activity, will collateral be dealt per client or per account?
6	Client Profiling	Can client define where Excess is to be paid? Can this be setup as auto-pay at NASDAQ or auto-request at Eurex?
7	Client Profiling	Are exchange fees deducted from house account or ISA?
8	Client Money Regime	Will 2 calls be made by CCP for seg/non-seg account mix? Will both calls go through the same bank account pool? If seg/non-seg accounts are mixed then a transit risk is present, even if they opt for client level protection and segregation, because there cannot be segregated target 2 accounts/ central banking accounts.
9	Client Money Regime	Buffers in segregated accounts - Will CCP have a Chinese wall throughout – How many will support separate bank account structures (this also applies to separation of margin calls)?
10	Client Money Regime	NASDAQ and Eurex have provided response but will each CCP have trust letters in place? Will they go through the trust bank account or a segregated/non-segregated account and how many pools will they have for this?
11	Excess	Is Eurex putting a process in place to monitor voluntary excess across client accounts on top of the IM Requirement?
12	Cash	Does ICE have 1 net call or multiple calls? Are journals required for each client?

Implications if these Questions remain outstanding:

- CCP's have been reluctant so far, for reasons of competition, to share their account models (including pricing). Without this, CM's are unable to advise clients on the best structures to use but of equal importance is the inability to then prepare in-house systems for the introduction of new methods. An agreed implementation schedule, allowing time for operational testing would significantly reduce operational, client and liquidity risk while enabling all industry participants to more closely meet EMIR timelines.
- In some cases there are question marks over whether certain CCP GUI's will be capable of hosting an increased volume of daily account requests. Coupled with a divergent approach in daily operation between CCP's, this creates potential for processing bottlenecks while adding cost and complexity not only to CM's but clients also.