

**infoNet**

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Key concerns faced by  
operations executives

Can vendors keep pace with  
the new requirements?

How can CCPs help firms  
with implementation?

## **EMIR and its impact on the post-trade environment**



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## Welcome to FOA InfoNet



In the weeks after the event covered here was held, the industry was awaiting a decision on whether the European Commission would agree to the one-year extension asked for by ESMA before the exchange-traded derivatives industry had to begin reporting to trade repositories. As widely expected, the Commission rejected the request, citing concern that postponing the start date of the reporting obligation for ETDs would "hinder the achievement of a key objective of Regulation (EU) No 648/2012, that is, the identification, monitoring, assessment and mitigation of systemic risk arising from derivative contracts by almost one year, and therefore runs counter to the principle of ensuring the stability of the financial system and the functioning of the internal market for financial services as reflected in the Union financial legislation."

The irony in raising systemic risk concerns as the excuse has not been missed by the industry. For, in making this decision to press ahead with the deadline while there remains such a lack of clarity over what to report, how and who by, the regulators will, from 12 February, be receiving 'data' (intentionally in inverted commas) in respect of ETD, which is guaranteed to prevent them from assessing systemic risk.

In a similar way, the deadline for the implementation of the segregation and portability aspects of EMIR is proving to be challenging and could increase operational risk, at least in the short term, rather than reduce it. As with the trade reporting issue, firms are expected to prepare for changes which they may not be certain of at this stage. With all European CCPs and an unexpected 30 non-EEA CCPs having applied for authorisation, the regulators have got their work cut out to process these applications within the six-month period set out in the regulatory timetable. And while they are going through that process, they are putting a lot of pressure on CCPs to provide as much information as possible to clearing members now, so that clearing members can commence and/or complete their build.

It is clear in all this that many firms will not be ready to comply fully with key aspects of EMIR by the target dates set out by ESMA. Certainly, more time will be needed in relation to the technical build and to complete a scalable solution across accounting, banking, treasury, clearing, client reporting etc. FOA expects that full process to take until the end of 2014. To hurry it further could prove damaging.

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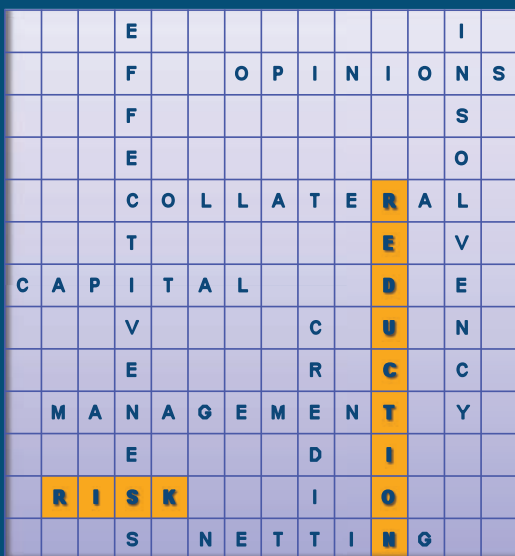
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## A report on the 17th FOA InfoNet: EMIR and its impact on the post-trade environment

### Moderator



**Mark Mills**  
Freelance  
consultant

### Panellists

**Hugo Jenkins**, Managing Director, FOA  
**Rory Cunningham**, Director of Public Affairs, LCH.Clearnet  
**Kate Evans**, Director – Stream GMI ETD Product Planning, SunGard  
**Anthony Fraser**, Executive Director, Clearing Operations, Goldman Sachs  
**Patrick Tessier**, Global Head of Exchange Traded Derivatives Operation, Citi  
**Paul MacGregor**, Managing Director, Product Strategy (Europe), FFastFill

**Hugo Jenkins** I'd like to update you on what the FOA has been doing regarding EMIR and give you an overview of some of the issues we've presented to the regulators recently.

With respect to reporting exchange traded derivatives transactions to trade repositories, I'm sure you are all aware of the somewhat confused picture that we face. Currently, the go-live for all five asset classes is 12 February 2014. That's assuming a trade repository for those asset classes is authorised by 7 November. If they're not, then that date will be pushed back further.

There are currently, we understand, six trade repository applications before ESMA; however, ESMA is looking at how the data aggregation needs to be handled across trade repositories and wants to resolve that before any of them are authorised. Therefore there's a chance that it will extend that timetable accordingly.

ESMA wrote to the European Commission to suggest that reporting for ETDs should be put back a year, and the commission has until 6 November to make a decision as to whether to accept that proposal.

Despite recent comments from Patrick Pearson, the Head of Financial Market Infrastructure at the Commission, it continues to maintain that no decision has been made as to whether to grant that extension, and ESMA maintains that there needs to be a delay until January 2015 for exchange-traded derivatives.

So, where does that leave the industry? Well, not in a great place, frankly, because firms are being told by the FCA they should be building for a reporting deadline of the 12 February. Yet no-one's quite sure what they should be reporting and what that build should look like. The FOA has written to the FCA and

other regulators to flag that the reality of the situation is, if firms are expected to build a reporting solution based on a set of technical standards that ESMA itself describes as lacking sufficient clarity, the resulting confusion is going to inevitably mean that some firms will not be in compliance with the 12 February deadline.

We hope that there will be some additional clarity forthcoming on this and we will certainly let you know, as and when we hear that. [NB: The European Commission rejected ESMA's recommendation that ETD TR reporting be delayed and so ETDs must now be reported from 12 February (4 TRs have now been authorised)].

In terms of disclosure documentation, under EMIR, firms have an obligation to disclose both the different levels of segregation and the protection that offers clients, and how different insolvency regimes would manage the investor protection element of those segregation models; and also you have an obligation to inform your clients of fees that will be applicable to the various services that you will be offering.

It clearly makes no sense for each individual firm to try to do that on their own, so we are working with ISDA to produce a standard industry disclosure. On the legal and risk considerations disclosure we are planning to adopt a fairly generic, high-level approach. We're not planning to try to compare and contrast a range of actual CCP models, but rather compare and contrast them at a generic level. The FCA is very keen for this disclosure to be client-friendly: not too long and legalistic. It has been very helpful in providing guidance to us on our approach in this area.

Clearing members can rely on the CCP's own insolvency analysis and disclosure documentation,

which we intend to lean on as part of the firm's obligation to make disclosures to clients; but firms will need to provide their own legal insolvency law analysis in the event of their own default. That's something we're also looking to provide.

In terms of fee disclosure, we and ISDA have been concerned about discussing this with members because there are obvious competition issues. However, the FOA's view is that the approach will be that firms will have to disclose the fees that are applicable to each specific CCP services and each specific product. Those fees can either be a range between X and Y, or can be a maximum sum that you would charge. The FOA does not believe that regulators are expecting firms to disclose an actual fee that would be applicable to a particular client.

Where there are add-on services, for example, collateral transformation, single-currency margining etc, there's no need to disclose specific fees but rather you should describe what criteria would apply in judging what fees would be applicable for services for a particular client. The same applies to any discount metrics, provided that you explain the criteria that determine the discounts that would be applicable.

With respect to obligations in terms of timeline, firms need to make these disclosures available to clients by the time each CCP gets their reauthorisation application granted.

As you may be aware, ISDA and FOA produced an OTC client clearing document that will sit on top of either an ISDA master or an FOA clearing agreement. The FOA is drafting its own clearing module to enable firms to continue to use standard FOA terms for listed clearing in the post-EMIR world. And we have designed that module so that it can also be used for OTC clearing.

With respect to documentation, we are producing a whole range of legal opinions on subjects such as close-out netting, collateral, CCP insolvency and also international accounting standards. Those opinions will allow firms to continue to offset financial positions on their balance sheet. So a major bank using SwapClear, for example, will be able to offset its exposures by something in the order of tens of billions. But they'll need these specific legal opinions on file, so we're producing those on behalf of the industry.

EMIR does present very significant challenges, particularly in the segregation and portability space.



**“The FOA is drafting its own clearing module to enable firms to continue to use standard FOA terms for listed clearing in the post-EMIR world.”**

**Hugo Jenkins, FOA**

The FOA was tasked with trying to identify what those challenges were and to try to communicate those to the regulators so that they would understand that, for firms to meet their obligations under EMIR, a number of key things would have to happen.

We've had meetings with the FCA and the Bank of England recently. The last one included the French and German regulators as well. We gave them a good understanding of the sheer scale and complexity associated with trying to build clearing solutions to a range of segregation models across the EU CCPs.

The dialogue has also been useful for clarifying certain areas of EMIR, including its geographical scope. For example, the FCA confirmed that a US FCM clearing through a European CCP would be caught by the segregation obligations in EMIR. Clearly that creates some issues for US FCMs, but nevertheless that's the sort of feedback we've had.

We also asked the regulators if there will be transparency in the CCP authorisation process. We were told that it'll be down to the FOA to contact the CCPs to find out exactly where their applications stand. However, the regulators are putting a lot of pressure on the CCPs to provide as much information

as possible to clearing members now that applications are in, so that clearing members can commence and/ or complete their build. They are keen to hear from the industry where there is detail that's missing, so that they can urge the CCPs to provide that.

One message we wanted to deliver to the regulators was what we think the industry can deliver by what date and the areas where the industry needs more time. At the last meeting we made a commitment to ensure that by the end of April 2014, house and client positions would be fully separated.

Obviously there's a lot of affiliate business currently sitting in house. Under EMIR affiliates must be treated as clients and therefore they would have to sit in a client account.

The FCA was happy with that deadline but wanted to see a phased implementation happen across the CCPs as they were re-authorised.

The second part was that by that date we could make the commitment that all clients would be sitting in an EMIR-compliant omnibus account, which is perhaps not an enormous task when most clients are sitting in such an account today; and all clients would be in receipt of the applicable EMIR disclosures and any applicable terms of business documentation.

Again, the FCA was happy with that but wanted to ensure that clients were receiving these documents as and when the CCPs were reauthorised. They weren't keen on firms sending clients one individual pack at the time that all CCPs have been reauthorised. So unfortunately they are keen to see firms receive this documentation in a piecemeal format.

Where we really need more time is in relation to the technical build and to complete a scaleable solution across accounting, banking, treasury, clearing, client reporting, etc. We've told them that we'll need until the end of 2014. That is a challenging timeline and the FCA has asked for more detail as to what the interim deliverables would be.

A major CCP system release takes many months to plan and implement. Here firms will be doing that across multiple CCPs, all at the same time. The migration challenge presented to firms and to CCPs is significant.

You can imagine that there will be many situations where clearing members will have to be prioritised in some way by CCPs, and clients will end up being prioritised because there will just not be the

possibility of moving every clearing member at the same time.

Finally, we said that we would commit to have on-boarded all clients who've chosen an individual segregated account by the end of Q1 2015. This would, again, be subject to CCP constraints and also to whether or not the estimates of individual segregated accounts take-up are accurate.

Now, I'll briefly cover the dependencies. Clearly, to separate house and client you need the applicable CCP account structures; multiple omnibus accounts so affiliate business doesn't sit in your client omnibus account. The CCP disclosures I mentioned need to be shared with the clearing member community and to be client-friendly. The FCA has told us that they're encouraging the CCPs to make them so.

So that clearing members can build scalable solutions clearly requires a certain level of automation; one point that we've really dwelt on with the regulators is that today, in the ETD world, clearing is a very high STP business. Most firms are clearing 99 per cent plus via STP. Many of the individual segregation solutions the CCPs are offering involve a lot of manual intervention, and it's inevitable that that STP percentage will drop resulting in the manual processing of thousands and thousands of trades. We've been highlighting to the regulator where there needs to be automation.

Depending on the take-up of individual segregated accounts, CCPs have got to be able to provide scalable solutions, and not all of them are able to do that based on the latest information we have.

We're going to focus this evening on the implementation challenges; the areas of documentation that need to be tackled; the banking and treasury challenges; funding issues, which really are very problematic; collateral management and how this will impact on clients; how give-ups and average pricing will have to be managed in the new Individual Segregated Account (ISA) world; and where technology really can play a big role.

We'll also cover the migration to go-live and the challenge that poses across multiple CCPs and how we might tackle some of the scheduling conflict issues.

Once we've transitioned all these clients into individual segregated accounts, what are the 'business as usual' challenges that firms must deal with? We'll discuss how this might impact on clearing members'

costs and their fee models, and how that might change over time. We'll ask whether this piece of legislation will actually put the industry in a better place than it's been before. Will it deliver on its objectives? Will a CCP be able to cope with a default when it's got, potentially, thousands and thousands of individual accounts to port?

And we'll cover some of the issues that CCPs and the industry are tackling at the moment in terms of the concentration of risk that now resides at CCPs and discussions on recovery and resolution that are taking place. Our moderator, Mark Mills, spent 30 years at Merrill Lynch and latterly Bank of America Merrill Lynch, most recently as European Head of Operations and Global Head of Client Services for ETD and Cleared OTC Derivatives. Mark has long been a huge contributor to the work of the FOA and has been providing much-needed assistance to the FOA on the issues to be covered this evening.

**Mark Mills** We'll address the key concerns facing operations executives tonight. Can vendors keep pace with the new requirements and what measures can CCPs deliver to help firms through the painful process of implementation?

I've got several areas for the panel to discuss: implementation; scale and scope; the impact of the day-to-day; go live; 'business as usual' and day one; the cost and fee models and finally, the outcome: will it be successful?

So, starting with the implementation, our current understanding is that the regulators have said that once CCPs have produced their models and have been authorised, that clearing members should be ready to offer those models to their customers. So, when are the first CCPs going to be authorised?

**Rory Cunningham** There's a timetable laid out in EMIR which runs out based upon the time that the supervisor decides that the application's complete. Until that is done in each case you cannot be completely clear. Another thing that's going on is that in addition to the European CCPs a number of non-European CCPs have also applied for recognition to ESMA. Apparently ESMA had been expecting six or seven applications but they got 34! So they're seriously concerned about the workload that they have on their plates.

A lot of discussion will take place between the regulators. We're used to having a number of



**"Some CCPs have been more transparent re: what they're planning. Some have come to us early on, while others are not quite so open."**

**Kate Evans, SunGard**

European regulators sitting around a table, but there are rules laid out to determine which supervisors can sit around the table for each CCP based on a whole range of considerations. For example, which platforms are served, which CSDs are being used etc.

**MM** Turning to the brokers, are you preparing to meet 15 new models in March? Or are you taking any advance action? Or do you expect a whole tranche to be delivered in one fell swoop?

**Anthony Fraser** The first thing we're geared up for is driven by Nasdaq OMX having applied significantly earlier than anyone else, back in April. Based on that timeline we're expecting that they should be authorised at some stage during November. That presents all of us with a problem because few, if any, clearing members will have the technology and fully rolled out processes in place to manage a scalable individual segregated model on that kind of timeline. We see ourselves as operating in two phases. One is to get over the initial hurdle of being able to handle a Nasdaq OMX implementation. The second is to consider the rest of the CCPs with the multiple models mentioned coming online in February or March.

**MM** You mentioned the various models. Are we facing 15 similar models, or are they very different?

**AF** There's a huge variety. As a clearing member you've got everything from the net omnibus structure that we know and love today in the listed world; the



gross omnibus that is pretty much standard across cleared OTC; LSOC models with and without excess, but essentially a position and value attribution model.

We're seeing a development of the position and value attribution into position and asset attribution. That's LSOC with specific attribution of assets to the end client. You've then got individual segregated accounts, based on individual position accounts and individual collateral accounts, and other different models. Some are NCM-type and some are sub-account-type models. Each one has a different clearing implication.

Then there's a fully segregated-type model, in some of which the clearing member is disintermediated for part or all of the flow. So it could be a quad-party model or a direct pledge model. There are various different blends. The bottom line is there's no one-size-fits-all solution for individually segregated accounts.

**Patrick Tessier** We've seen a lot of interpretations around these same issues. Ultimately to a client they may convey the same benefits, but they're not achieved in the same way from a regulatory perspective. There's a lot of detail behind the daily operation of those. I would like to also echo your comments about having to face the first re-authorised CCP as early as the end of November, early December.

There was a lot of to-ing and fro-ing with various CCPs during the summer. We saw some last minute changes to their applications. Through the FOA we were able to compare notes on them. But the CCPs are likely to have further questioning from local regulators. So what happens if they are made to make changes to their current designs? Are we safe to embark on developments based on what they filed, or do we have to assume that, in fact, there could be some changes? Can we get more transparency on potential changes to applications?

**RC** I hope very much the plans remain stable. There was a lot of contact with our regulators over the summer.

So, like you we hope very much that there won't be changes, but there is the risk that anything that we or other CCPs have done might not get through and be approved.

**PT** That is a real challenge. We have to look at our overall set-up to accommodate various types of accounts. Individual account segregation – especially an individual portable model – means we have to

make changes to the structure of our systems.

But once we've done that, if we judge it correctly, that's a feature that will be reusable across 15 CCPs. The challenge will be to then on-board each and every CCP and the changes that they are making to their systems and their APIs. Hugo was right to point out that in the course of a normal year, there are only about four major to medium-size upgrades and the vendors are in the same boat as us in terms of resourcing these parallel upgrades.

**MM** A question then for the vendors. At this early stage, how much information has filtered back so that you can start work on adjustments to your systems? Has information been provided to give you an idea on where you may have to go, or are you still waiting for more detail?

**Kate Evans** We were engaged quite early in this process. About a year ago, our clients asked us to take a view as to what this might require within the systems. At that point we didn't really have any information from any of the CCPs, although there are some CCPs whose existing models are, apparently, compliant under EMIR. So at that early stage, we had to take a view on any early developments we could look at doing to put us on the front foot with regards to a generic type of approach that could hopefully accommodate all the solutions that might come out of individual CCPs.

That has evolved over the past year. There have been more and more discussions. Some CCPs have been more transparent than others with regards to what they're planning. Some have come to us very early on while others are not quite so open.

We've been asking them to let us know their general thinking. Are their plans likely to be similar to the other CCPs, for example? The response has been variable. We're only just getting information from certain major CCPs on their likely models.

**MM** Do you agree, Paul?

**Paul MacGregor** CCP transparency is the biggest frustration for a technology build. It's only quite recently when the CCPs knew their applications are in that they've been willing to tell us what they've actually applied for. Up until now there has been a lot of guesswork.

Some CCPs have done things relatively simply to try to get through the application process and allow their customers to go EMIR-compliant quite quickly. ICH

have done something quite sensible in that they've gone for the simplest possible offering, with a view to adding the complexity later.

When you look at some of the other offerings it looks a little bit like liquorice allsorts. They've gone for everything they possibly can and interpreted on top of that as well.

And you ask yourself how clearing members could ever properly explain the differences between all these models to their customers. It will take them a lot longer to get all their clients on boarded for EMIR, and it makes a technology company's job much more complex because they have to work a lot more closely with the clearing members to set up all these account types.

In hindsight it would have been helpful if some CCPs hadn't tried to make this competitive or an opportunity to try and show how clever they are. It would have been better to go down the simple route to get through this very difficult period with a view to introducing the competitive elements towards the end of next year.

**MM** So does that mean, for example, we have to guess what 'excess' means? Is there a definition of how excess is meant to be handled? Do the brokers here have a simple definition of what excess means? Is it just, simply, twice initial margin goes to CCP or P&L? What's the current working theory at the moment for excess?

**AF** You're wrestling with what is mandatory excess and what is voluntary excess. There has been a degree of difference of interpretation there. The ESMA Q&A pointed heavily towards excess meaning the difference between the actual obligation called by the CCP and any margin called by the clearing member. So largely it's a multiplier that the clearing member might impose.

If you look at how a clearing member might want to manage one of these accounts, if you ran an individually segregated account at a CCP with that mandatory excess definition day-on-day you would have to true up and down every single day every single account, just to keep yourself to that strict definition. And the funding challenges would probably require us all to have clients, where possible, pre-funding, and therefore able to lodge voluntary excess on those accounts. The definitions are not simple.

due to regulations that are meant to be favourable to them. As a client, you may want to have enhanced protection but you may not want to be inconvenienced with daily margin calls where, until now, you were leaving an excess with your broker and you were quite happy for him to report to that excess to you, whilst managing your cash positions on individual markets as they were going up and down.

There's a risk that we might tie the clients down to some very strict criteria. You could argue that under EMIR you should not be doing multi-currency margining for a client because it is his assets that you should be posting down to the CCP. I do not think that fund managers will really want to have an extra float of every currency in which they are dealing available to be pledged at the CCP beforehand. That is not practical.

**MM** What do you think the scale of the uptake on individual segregated accounts is from end-customers of the clearing members?

**RC** It is possible that clients change their minds or possibly go for an individual account first and then for various reasons switch back to an omnibus account, or vice versa? We must be prepared for a fair amount of jockeying and changing of minds.

**PT** Each customer will have to look at his own position. It might be imposed upon them by the structure of their legal status. Do they need to acquire the best-possible protection everywhere where it is offered, regardless of cost? You might have an interest based on your CRD IV Basel III calculations depending if you stand to benefit much or not by clearing with guaranteed portability. We will be supporting the offering, but we will be entirely client-driven.

**AF** We just don't know. Paul makes a very good point that it's hard enough trying to explain to clients what the models are. As nobody knows the costs, they can't really give a fully informed decision as to which way they want to go.

We all know that if two or three large asset managers ask for individual segregation accounts across every CCP for all of their beneficial owners, you'd suddenly be looking at, maybe, 1,000 accounts to manage at every CCP. The tipping-point comes really early on as to what you can manage manually, or with spreadsheets and GUIs before you have to build something complex to manage any more.

**PT** Our reference point is the migration to



## “What do you think the scale of the uptake on individual segregated accounts is from end-customers of the clearing members?”

Mark Mills, Moderator

mandatory clearing for OTC in the USA which resulted in several thousand accounts being opened by FCMs, and that wasn't in a product as widely distributed as futures. That certainly gives us an indication.

**HJ** The assumptions that the FOA has been working to when we've spoken with the regulators, is that each clearing member will need to set up 1,000 individual segregated accounts.

The basis for that is we assume that there will be a certain number of asset managers that firms will have as customers who will require several hundred individually segregated accounts. Then there will be a percentage of other financial institutions as Patrick outlined that will require individually segregated accounts. On that basis we've come up with a figure of 1,000.

The FCA did ask us to provide a little more granularity as to the basis for those assumptions. But as Anthony highlighted it's very difficult to do that today.

It's clear to me, based on conversations I've had that there will be clients requiring hundreds of accounts each, who are going to opt for individually segregated accounts, perhaps across, multiple CCPs.

**MM** Let's move on to the impact on day-to-day operations. The first thing that comes to mind is having to ensure the revised terms for existing customers and also new documents for future

customers. You then have to keep track of them and from a clearing broker's perspective this adds workload to the management of the documentation. Are you adding staff for this?

**PT** Definitely. We asked this question to the FCA. It is really about going to each and every client, explaining the terms as long as they are known and what has been filed by the CCPs has not changed. It would be helpful, if sooner rather than later we could have the disclosure documents from the CCPs. I know NASDAQ have released theirs.

From an operational perspective we're still finessing the day-to-day operation of these accounts so we can represent this accurately to our clients and draw attention to the benefits and drawbacks on particular CCPs. As a one-off on-boarding exercise it's a lot of work. Looking at the US experience, you also have to factor in whether the CCPs will be light on the documentation on their part or whether they are going to require lots of documentation, in which case you can multiply this exercise. It's no longer just you facing off to your customers, it is also you being in a queue at the CCP.

**MM** Rory, from the LCH perspective, are customers having to sign tripartite documents? I know CCPs are asking. In LCH's case is that a requirement?

**RC** Currently, there are no triparty documents between LCH.Clearnet, clearing members and clients.

**AF** There are many clients who don't simply sign the document you give them. There's a requirement to negotiate, and the pool of people who can do that is limited. All clearing members will be challenged to ensure there's a big enough pool of people in place to do that.

On the disclosure side, this is not a one-off exercise. It's an ongoing requirement to disclose available models and associated levels of protection and cost. We need to find a vehicle to maintain that information flow to clients and, where possible, make it easy for people to know that they can change their choices and update them in a way that is not as laborious as, historically, documentation has been.

There may well be scope for collaboration across the industry, some use of automation that takes feeds from CCPs and from clearing members and uses that.

**MM** Yes, but there is nothing of that ilk at the moment. Paul, what do you think?

**PM** There is going to be a big challenge in post-

trade risk management. The whole industry faces a massive scaling up. If a lot of clients take up individual segregated accounts there is obviously a scaling issue.

You also have the potential for increased complexity issue where clients take individually segregated accounts on one CCP and then put themselves in an OSA (Omnibus Segregated Account) on another. Then they decide to move around, as well. You have to offer the ability to do that, and then in real time you manage their trades throughout the day and try to manage the collateral. It's very complicated and I think the industry needs top-of-the-range tools to manage that from a middle office point of view.

So before it arrives in the back office you're going to face this issue of intra-day risk. How do you communicate internally and externally with your customers regarding their positions? What do their postings need to be?

**MM** We've talked about the documentation. Every broker must send out statements on a regular basis. The peculiarity of this legislation is that there will now be an absolute link between the balance that customer has and that customer's account at the CCP. That presents many problems for the brokers and the systems providers that present those statements. Kate, what have you done to try to identify the balances and are you close to completing that work yet?

**KE** The complexity of things like servicing

**"You can't really apply one codebase to absolutely everybody in the back office and hope it works across all these different models."**

**Paul MacGregor, FFastFill**



clients wanting an ISA on one CCP and an OSA on another was a big part of our thought process as to how that would need to be held within the database and then presented on any client reporting. We could have said that individual accounts are the way forward. You have to have individual accounts per CCP per customer. Clearly that's not workable, so we had to assume one account and multiple different types of account configuration per CCP.

We're dealing with systems here that have been around for something like 20 years. They've been constructed over time to support the traditional segregation, customer versus house. Having to unravel that and determine how to expand it to accommodate these additional types of account was very much the initial challenge.

Our fundamental approach to what we would offer for segregation of funds and things like that was an extension of our approach to existing CCPs globally where firms already need to segregate currencies. Once we presented that to clients it allowed them time to consider that approach and see if it was workable. Through ongoing discussions with the clients we're now getting into the finer detail of that.

Once you've got the data segregated in the database – and that in itself is not straightforward – there are obviously implementation impacts; static data and maintenance impacts, for example. But once you've got that how's it going to be presented? And if you're going to present individual balances per currency per CCP, clearly your statement suddenly increases tenfold.

It all comes back to the potential take-up. You could decide to design it just for a handful of accounts and ensure it doesn't negatively impact the rest of the business. You can't just decide to apply all of the changes to the whole system, it needs to be an add-on. But equally you can't produce a solution that is only designed around just a small handful; it has to be scalable, which brings additional challenges.

**PM** Kate's made some very good points. You can't really apply one codebase to absolutely everybody in the back office and hope it works across all these different models. You're going to have some branching.

It goes back to the point we made at the outset that clients need to tell us how their customers want to be segregated in the new regime. They haven't been able to do that yet because CCPs have only just put their authorisations in. So now we're running up against a



very tight timescale.

But, we just have to knuckle down. There's no point in complaining too much. It's there, it's in front of us, and we've got six months or less, to achieve it.

**MM** So we're getting to an outcome of a very complex statement now, with many different currency balances. Anthony and Patrick, how are you going to manage those? I suppose you're presenting balances that the customer assumes he has with the CCP and you've got to make sure that that is kept in line.

**AF** You do need to give the client complete transparency of the balance on the CCP. When you show them what that balance is they'll have transparency of what the CCP is showing as well. Those CCPs will either report direct to clients or at least make reporting available to them.

And that leads to a very interesting challenge. How do you derive the margin figure that you call a client for, each day on your individually segregated accounts? Do you wait until a CCP produces its figures, put a hold on all of your batches, change your client reporting SLAs, consume that figure and guarantee you give the client an accurate figure? Or do you calculate your figures internally, as I imagine we all do today, for listed derivatives?

Then report that to clients and run the risk that they then say that it's different, that's not what the CCP was calling for? Do you have to then build a reconciliation process between what you called for and what the CCP called for? The challenge for client services teams will be significant in managing that communication flow.

**MM** So that implies then – and I know Rory will say the clearing house will make one call to the clearing member – that the amount of the individual balances you will have to look after each day, as a broker, Patrick, will be enormous. You then have to manage all those balances as an interaction between yourselves and the CCP.

**PT** It means that the mornings in operations will never be the same! We used to have a process whereby you had 20-50 balances to monitor. There will now be the task for back-office personnel to come in and check a couple of thousand accounts to see what the actual calls on these accounts are in the morning, because these numbers play into what you are ultimately calling your client for.

We used to run these processes in parallel. You

would have a client services or margin team that was scaled up to the number of client accounts that you had, but the CCP side was very basic. It would have, say, 15 CCPs and six currencies. Perhaps there were a couple of hundred payments and for most of those you would just see what the Protected Payments System (PPS) amounts were and fund them. You had to do this early in the morning but it was not the most challenging of activities.

Now you will have a sort of race within a race, which is to work out, even if these remain net amounts at the CCP level, each client as a mini-balance sheet in his own right where you have a liability to the client account but he has got a series of individual assets. Technically you have to find a way of representing the client almost as his own bank, calculating cash amounts held in different currencies. There will be more granularity in the daily margin call process tomorrow than there was before.

**PM** But there are tools in the marketplace that hold CCP calculations and can replicate them in real time, including brokerage fees. Brokers can provide those tools to customers so that they can do their reconciliations at the same time as you. Of course they need to be scaled, and we're talking about many thousands being used in the marketplace today.

**PT** This is a new activity, though. Today a member is margined to flat by the CCPs: you can elect to block some foreign currencies, or you can block some collateral as a precaution against daily swings. Tomorrow a client could well be net to you in credit, and in practice up and down across ten CCPs. So your margin call to the client is good news: "No call, you are five million in excess"; and in practice you have to make sure that you make all these up and down payments or recalls.

In future, you will no longer necessarily be margined to flat depending on the choice of the client, who may say that he prefers to leave excess – whatever qualifies as excess. But the client could also say that unless he reaches a certain amount of cash over his initial margin, he wants that to stay with the CCP.

And most CCPs might get into the habit, as we're seeing in the US, of calling you for the deficit, client by client, and making it a condition that you have met all these deficits before they allow you to make the releases. So you still have to be agile and work out that 'net net' by client.



**“Securities provide a challenge when they come from the client because you’ll have had to pre-fund that margin call with cash first thing in the morning.”**

**Anthony Fraser, Goldman Sachs**

This is not something new to us because we practise this discipline in the US where you have four regulatory regimes under which you can hold currencies for the same client based on what exchanges he transacts on with you: the domestic CCPs ‘segregated’; the foreign CCPs ‘secured’; the domestic OTC CCPs ‘sequestered’ and every thing else is ‘non reg’.

So we already know the mechanism whereby a client could be overall in margin excess, but have a deficit in his secured and an excess in his sequestered and segregated balances. So we know how to net down these up and down balances behind which there are only four bank accounts.

Tomorrow if you have ten to 15 CCPs and the client has chosen an individual account on each of them you will have to do the same across all the currencies and CCPs, not just across four banks: it will be across all the currency balances at each CCP. So it is a new activity.

**AF** The way the CCP does those transactions can also have other impacts. We anticipate in most places that CCPs will aggregate transactions by account type. That means we’ll make one movement by account type but we’ll need to journal that out internally as well as allocated at the CCPs; so double-your-money activity for the clearing member.

There are also CCPs who are planning to aggregate

or net transactions to a single transaction across account types. For example, netting all variation margin into one movement. That causes you another problem because many of these accounts are handled under different client money treatments and you’re forced to use a single money transaction flow, which as a clearing member is something we shouldn’t be dealing with today.

**MM** We’ve talked mostly about cash so far. But does the same potential headache exist for securities? Or is it simpler dealing with stocks or bonds?

**PT** It’s a little bit more difficult to move collateral these days on CCPs. Securities don’t move as fast as cash which, as Anthony mentioned, is completely fungible.

It’s very complex. The collateral moves more slowly, probably too slowly for the clients because they may end up having to immobilise more collateral than they would want at each CCP, precisely to counter-balance the slowness of the movement.

So any solution where we might have quad- or tri-partite solutions may be more palatable to the clients down the line. But I do not think that many CCPs will go live straight away from day one upon recognition with these advanced collateral solutions.

**AF** Securities provide a challenge when they come from the client because you will have had to pre-fund that margin call with cash first thing in the morning. So in order to avoid overnight exposure you’re reliant on the client pledging you securities sufficiently quickly that you can identify them, move them on up to the CCP, and call back your proprietary margin in the same time window. The likelihood of doing that within the existing CCP reallocation windows is small.

**MM** Patrick, you raised the question of single-currency margining surviving in the new model. Is the complexity of managing the cash the reason that there is some doubt as to whether all brokers would want to continue with single-currency margin?

**PT** The system still forces the clearing member to meet the margin call ultimately. As long as it is the member’s cash that goes out first to the CCP in the event that the account is overdrawn, there’s no saying that the client will want to fund in exactly the same currency at a later point. And what if the client lodges a currency with you after the cut-off for that particular currency from the CCP’s perspective?

So in practice, it is something to factor into the agreement with your customers. You offer some kind of flexibility and lay out what is going to happen in various cases. For example, if a client has an individually portable account which is non-segregated, that means that the assets on the account are still protected from the default of the clearing member which is a good thing; but if the CCP deems this a non-segregated solution the cash that transits back from that safe haven is actually transiting through a firm account.

There is nothing wrong with this and each client would factor in their risk appetite for that particular clearer's credit risk; but it's not completely intuitive that you would expect cash to come from a protected location into a non-protected 'nostro'. There is a lot of explaining to do.

**MM** If a multitude of ISAs are held at the CCPs do we think our current clearing architecture can handle the allocations to or from all of these? Paul, do you think it's scalable?

**PM** Yes, I do. All of our architecture is not on client sites; it's in data centres. We've always operated on a cloud base so we don't face the complexity of rolling out; what we face is the complexity of scaling up within our own data centres. Our biggest challenge at the moment is nailing down our customers to tell us what they actually want per CCP. Then we can go away and deliver it.

Yes, there is a challenge across the industry with the amount of accounts and the money flows but as a technology provider we try to break it down and keep it simple. If clients can tell us what they want, what their account flow is per marketplace, then we can set it up on existing platforms.

**AF** Trade and position management is an area where there is a good degree of scale. What worries us is that things we manage relatively simply now may become more complicated. For example, average pricing is relatively easy to do across different beneficial owners, but becomes problematic when those beneficial owners are on individual segregated accounts unless that average pricing is provided by the exchange.

**MM** And are there many doing it in this region?

**AF** There are not.

**MM** So will you have to discuss with the customer whether it's a choice of ISA without average pricing

or stay in the omnibus with average pricing, or will you have to look at a new way of creating that average price?

**PT** It will leave the asset managers, the biggest users of this functionality, with a conundrum: how do I get best protection, and still fulfil my obligation to be fair and equal across all my funds when there's no solution supported by the CCP, or exchange, for that matter?

**AF** Reallocation will also be a problem when there's been an error, unless we ask customers to trade in and trade out, every time you reallocate. We're used to moving positions around on exchange GUIs; we're not used to calculating and moving cash in the same way with every single reallocation. At the moment there's no automation to support that.

**MM** That sounds pretty frightening. Every time you move a trade from an OSA to an ISA you've got to move collateral. Every time you move from one ISA to another you've got to consider making a compensating collateral move to make sure it's in balance.

**PT** You can easily do an allocation correction across clearing accounts today. We can do this inside our internal system but we leave the clearing house untouched, because fundamentally the right trades are in the client omnibus. If tomorrow each of these accounts are mirrored on the exchange system we then have a new task, which is to go on the Exchange system and effect the matching movement so that the books and records are in line with the statement. This is a new activity; we do this today.

**MM** It sounds like reconciliations will be a problem in this new world; well, there may be a lot more of them but are there going to be an awful lot more?

**AF** I'm not sure that everybody will go down the same model of continuing to handle these myriad accounts within a single account structure, and as soon as you start creating new accounts you create new reconciliations we don't have today. That's going to be a challenge for many of us.

**PT** The FOA Working Group has produced a heat map of what we think the various CCPs are offering and gaps not covered. That seems to have hit a raw nerve because some of the CCPs in their member clearing forums have subsequently taken the page out of the book and given their response. But the theme around this is that there are gaps with regards

to scalable exchange of data when it comes to recall of funds on an individual client basis; switching of collateral versus cash in the afternoon, etc.

Clearly the CCPs can dictate that the bulk of the work remains with the members. They plan a net payment and send the member the underlying detail in reports for them to work out what the gross breakout is. Or conversely, the CCP will take in whatever the member wishes to pledge as long as the member's staff goes on the exchange system and key it manually for them. We will be doing that at go-live with the CCPs but I think quite a few CCPs have got phases two, three, four, laid out in the next months, years, to be able to plug some of these gaps. So, the snag at the launch is the extra effort to run manually some functions that clearly have not been that challenged for years before.

**MM** I understand from Hugo that in some of the markets we operate on in this region, 60 per cent of the business is executed by one house and given in to another. What do you think is the impact, then, of these regulations on execution-only flow? Some of the legal conversations I've had suggest the terms won't change but perhaps the data references might have to if you're clearing to a new ISA. Is writing to the marketplace for every customer choosing an ISA something you are considering?

**PT** It could be an exchange of references, yes, until we find the right model.

**MM** With respect to the go-live, with all these clearing members, Rory, how are the CCPs going to prioritise their customers?

**RC** We'll have some intense discussions. Frankly, it's got to be the biggest and most complex firms that we consider first. Not that they necessarily will be first, but we need to ensure we come up with a programme that fits in with their plans with all the other CCPs and across all the markets they serve.

There will be some difficult discussions with some firms who want to go earlier. But we'll be as transparent as we can and make sure that lines are open and we can be nimble.

**MM** Let me ask the same question of the vendors. You're going to have the same issue. If we end up with this very tight timetable how do you move all the customers onto the new versions?

**PM** It's a very long week-end!

**AF** I think the regulators had a very optimistic

view, but I hope they don't have it any more, that every client who wanted individual segregation might be migrated to a new structure over the authorisation weekend.

**KE** And it's not like the normal on-boarding of new products and new markets stops while this is going on. We'll continue to roll out software for other initiatives, and there are potentially conflicts and dependencies between those releases and what needs to be rolled out for EMIR.

A big factor here is the testing effort that will be put on both the vendors and our customers. Some of the fundamental structures and processes are being changed significantly and that means that some of the core processes of the system will be changed significantly. In some cases it is almost like a full-on system upgrade in order to accommodate just the basic changes that are needed.

Add to that all of the CCP-specific changes such as to data files and to APIs that then need to be rolled out and it's going to be a huge challenge.

**MM** That's an indication that it's not just clearing member/CCP testing; it's probably clearing house/clearing member, and the major clients that want to go to the ISAs. What does it take currently to build one of these big switching projects? How long was the last LCH project in gestation, Rory?

**RC** Something like six to eight months, I would estimate.

**MM** So that has to happen 15 times over in two months?

**PM** Yes, and there are several steps here.

**PT** Exactly. We have to change the overall structure of our systems and then conform to 15 CCPs. Then we need to conform to clients, and depending on how far reaching the change to the structure of the main system is, we may have to re-conform with clients who may not apply for an individual account

In the US the regulation on mandatory clearing allowed people to trade from the origin into new accounts and perform some back-loading of bilateral trades into them. But, a lot of our clients were very proactive and chose to backload not necessarily on the last day, at the last minute. We are not afforded the same structure by the market here and all clients will have pre-existing positions. They will not all wish to spread at their own cost into the new accounts. The CCPs need to come up with a fair answer for clients





**“There will be some difficult discussions with some firms who want to go earlier. But we’ll be as transparent as we can.”**

**Rory Cunningham, LCH.Clearnet**

to have a level playing field when it comes to the migrations.

There is a huge pre-existing set of positions and clients out there. This is not a new product that is electing to clear into new sector accounts from a set date in the future.

**PM** Going back to the earlier point I was making about CCP complexity, why make it more difficult than it already is? The CCPs who’ve managed to keep account structures relatively simple will have a much easier time in making their customers EMIR-compliant than those who’ve decided to be very clever at this early stage.

They’ll have problems with testing because they’ll be testing multiple different account types with their clearing members, with their technology providers, and with their clearing members’ customers. Then possibly those customers might ask to try this different account today and that one tomorrow to see how the numbers work out.

**HJ** We’re hearing a lot of comment about complexity and how difficult it’s all going to be. On a positive note the FCA have been really good at engaging with us and other trade associations on the challenges of EMIR, and they’re keen to understand the challenges and what the solutions are. I don’t recall a situation where we’ve had such an open, constructive dialogue with a regulator about a piece of legislation like this.

They’re doing whatever they can to ensure that they have a good understanding and they’re also encouraging other European regulators to engage and get a good understanding. Ultimately if the industry is given more time to implement these account structures it has to be with the agreement of the other continental authorities through the ESMA process.

It’s only a small light at the end of the tunnel but it is encouraging that the regulator is engaging in that way.

**MM** To close on the go-live, it seems we need a huge amount of co-operation in the marketplace to avoid this being a very competitive event among CCPs and brokers. There must be some concern about the lack of co-ordination on that. Let’s talk about what will look different in the ‘business as usual’ sense. Patrick, you spoke about the complexity in the banking. Will you have to completely change the way you do that?

**PT** There will be a premium to all the activities that can be done from the time the batch is run, the statements arrive from the CCPs and the margin calls are issued. There will be a very small window to be able to work out what you have to pass on to the customers.

But, very importantly, the CCPs are not offering, at this point in time, to change their own cut off times when it comes to withdrawing excess. That is linked in part with their own procedures and in part with the fact that they have to go and tap into the repo market, and there’s no suggestion that the timing of liquidity in the repo market is going to be pushed back to two o’clock in the afternoon just because it’s convenient for everyone.

So we’re all navigating a very tight window between the time when we have to pay; the time we get paid; and the time we ask for recalls.

**MM** Given that everything will be compressed time-wise and not much is expected to change from the CCP side, but, nonetheless we’ve got more accounts, payments and journals to manage: does that mean that from a systems perspective you’re more sensitive to bigger volume days? Will we be in a situation where we are even more squeezed for processing time?

**PT** We’re very interested to see what the CCPs do. All of our organisations have managed retail-type structures with many thousands of accounts. But the people that have never managed tens of thousands of



**“The people that have never managed tens of thousands of accounts... are the CCPs. If there is an untested area on that front, it’s the CCPs.”**

**Patrick Tessier, Citi**

accounts – and I stand to be corrected – are the CCPs. If there is an untested area on that front, it’s the CCPs.

**MM** Regarding costs, everything that’s been described here will affect the unit cost models of banks, brokers and systems providers. There is so much change that they probably will have to be reanalysed, probably sooner rather than later, because one of the factors you have to explain to your customers is your cost base and the benefit of segregation models. I’m sure business heads will be on to operations to explain the cost of providing all this.

**AF** Very soon we’ll need to be out communicating the various disclosure obligations, including costs, and working out the different components of those costs; the CCP’s charges, operations and technology support costs, development costs, legal costs etc. Do you end up with a ‘cost-per-trade’ model, as most do today? Do you end up charging clients based on services for which they need a different blend of services depending on their model and the CCP’s model?

**PT** We’ve got to help clients understand the costs to them as well. We mentioned the obligation to perhaps leave more excess across 15 CCPs on different segregation models than a client might otherwise have had to clearing the same 15 CCPs on the old omnibus model.

That’s a cost that you do not incur as an FCM, but it’s a cost on the client’s side, depending on the

solution that he chooses; it’s not just our costs.

**MM** Rory, if a lot of customers do take up individual accounts, you’ll have to look at the cost of managing those and that could be an increased cost you’ll pass on. I know many CCPs have shied away from being too prescriptive about what they’ll be doing. If there is a deluge of customers wanting the ISA, it’s going to require some support from your side as well, isn’t it?

**RC** That is true, although, actually, I couldn’t say anything more than that.

**MM** Let’s get to the final question of the evening. How will the next default look? Is it all going to work smoothly next time?

**AF** These rules have been written to increase chances of portability and reduce the risk of trapped assets in the event of default. Although you can’t guarantee the portability aspect, CCPs for their own risk management reasons may well end up liquidating positions and assets.

Those assets will go straight back to the customer and not into a client money pool for a lengthy unwinding process. I think there will be a positive outcome for clients, for those willing to take some of the challenges that come with the models.

**RC** As Anthony said, clearly there should be greater transparency from CCPs about what they can do and what the risks of the various services we provide are.

There’s obviously a bit of a tension between CCPs. In the old days it was not very transparent about what a CCP might do if there was a default. We’d say, look, everything’s different and all the circumstances are new each time, so we can’t be too predictable as to what we might do.

It’s clear that, these days, the pressure from firms and from customers to be more transparent about what we might do is there. But don’t let us forget that LCH.Clearnet will do all we can to preserve and protect customers and their assets, and allow them to continue to do business.

But EMIR does still give us the right to close out and liquidate everything and return it to the clients. That is, ultimately, a sanction we still have.

**MM** So, on that optimistic note, I guess that every customer will say they want the ISA, and not to stay in the OSA. So, just be very wary that you have an awful lot of accounts to set up and manage. ■



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## Surviving implementation

The implications of regulatory change have been immense for clearinghouses, clearing firms and market users alike. FOA InfoNet recently discussed those implications and the measures that CCPs can deliver to help firms through the painful process of implementation with Phil Simons, Head of OTC Derivatives Business, and Matthias Graulich, Executive Director, at Eurex Clearing.

### How is the implementation of EMIR impacting you and your clearing members?

**PS** All the work of the past years with our clearing members has been about preparing for Dodd-Frank and EMIR. Client clearing for OTC derivatives didn't exist before so we've been building the necessary models, especially with the ambition to deliver a STP solution.

With different segregation regimes being planned by clearinghouses, clearing members have been extremely busy adjusting their systems and processes to get ready to on-board clients who need various features such as their own position and collateral accounts.

In Europe, the new regulation will apply to exchange traded businesses which already have large books of clients in a net omnibus account model. They have to migrate all of this into the new regulatory world where clients who have traditionally operated under an omnibus type segregation model will be offered an individually segregated account model by their clearing member.

In addition, most major clearing members recognise that they need to bring together their listed and OTC businesses, which up to now have been separate, to take advantage of cross margining opportunities and there is a lot of effort involved in that.

**MG** A major part of our work has been on the legal side, especially with respect to portability. A key feature of our Individual Clearing Model is that, provided the client presents us with an alternative clearing member willing to pick up the portfolio, then we guarantee portability. We say we have all rights and powers to take the positions and collateral and transfer it where the client wants.

To do that a CCP must ensure it has the legal powers and is not exposed to claims from an insolvency administrator. That requires us to do a legal review,

not only in Germany, but also in the country of the clearing member, the country of the client and every combination thereof.

This review is absolutely necessary because if the CCP takes on a risk over the transfer of billions of collateral, it must have legal certainty. It's a massive effort and we've now covered at least eight of the major European jurisdictions and each month we are adding more.

### What are, or will be, the biggest areas of change once the process is complete?

**PS** The biggest change will be in completely automating the processes that go with the individual segregation model. To make it operationally efficient and scalable between clients and clearing members there will need to be continuous enhancements over several years, particularly on the collateral management side.

With clearing members servicing multiple asset managers each with hundreds of collateral accounts, the major challenges are in managing thousands of collateral accounts in the event of a major clearing member default and in developing a default management process which would work, in particular, with respect to porting client positions.

Following extensive consultation and design, Eurex Clearing is in a privileged position compared to other CCPs by allowing Non Clearing Members / Registered Customers five days (as an Interim Participant) during

**“The biggest change will be in completely automating the processes that go with the individual segregation model... there will need to be continuous enhancements over several years, particularly on the collateral management side.”**



which time positions and collateral can be transferred to another technical clearing member. Some clearing houses have a 36-hour porting and liquidation process. If you have a thousand clients who hold collateral at their custodian and you have 36 hours to port those clients to another clearing member, that's a major challenge.

With all of that collateral sitting at the custodian you need to automate the process to make it operationally efficient, instantaneously accessible and fully capable of straight-through processing.

#### **What opportunities do you see for Eurex Clearing?**

**PS** We strongly believe that clearing with Eurex Clearing not only significantly enhances the safety of the overall market through risk mitigation, but as one of the largest clearing house in the world we see an opportunity for clients to benefit from the potential for cross margining between our dominant listed products and the OTC products coming into the cleared environment.

This is already underway with EurexOTC IRS clearing, which we rolled out in November 2012 and promises greater capital efficiencies for our clients.

The key thing is that we are a cross asset class CCP, covering cash equities, cash bonds, listed derivatives, OTC, repos etc.

We'll be enhancing our already industry-leading technology with the roll out of our new clearing IT infrastructure C7 next year, which will be on a single architecture with a common risk management engine and one margining methodology, which is consistent with the default fund calculation.

Our major advantage is that we have had our segregation model since 2011. We've had a lot of time to finesse it and address some of the issues that clearing members have raised such as operational efficiency and issues around double funding.

#### **How closely are you liaising with your members as you implement changes?**

**PS** We have a number of product committees; the OTC product committee, the derivatives clearing committee, a buy-side working group and a risk committee, all of which meet quarterly.

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**“The challenge for the industry is to ensure that risk processes are robust and that the market doesn't make the mistake of mandating clearing for instruments which are not sufficiently liquid.”**

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Additionally, for example, we have a working group combining buy- and sell-side participants, on inflation swaps. It's absolutely critical that we develop products which both clearing members and end clients want. The inflation swaps product needs to be developed so that clearing members could maintain an element of control, for example, taking position limits into account.

#### **When this process is complete, do you think the results will leave us with a stronger, more secure environment for derivatives?**

**PS** The challenge for the industry is to ensure that risk processes are robust and that the market doesn't make the mistake of mandating clearing for instruments which are not sufficiently liquid. If there is a huge default and the clearing house has to unwind positions on illiquid instruments and cannot do so because there is no depth in the market then we'd be in a very bad position.

**MG** There are elements which will make the system safer. Looking at segregation regimes, then the higher the level of certainty of portability, the less stress will be caused to the market in the event of a clearing member default. If you could not port you would have to liquidate, causing stress to the market because positions would have to be offset and collateral liquidated.

I would also say that with segregation regimes relying on cash or value equivalent basis like LSOC to determine value, you would have to go into the market to liquidate collateral. In order to port you would have to liquidate. And for asset managers with completely directional portfolios, with billions of collateral at the CCP, liquidating that amount in a short time would cause huge stress to the market.

## **“The main outstanding issue for clearing members in individual segregation is client clearing documentation and the FOA and ISDA are addressing that.”**

**PS** You are creating stress in a market when those clients are not in stress. Liquidating the firm’s risk would not necessarily cause stress but if you had an enormous client book and you had to liquidate that it would create huge stress which needn’t be the case.

### **How prepared are different parts of your customer base?**

**MG** We can now say that all of our major clearing members are ready for the new regulatory landscape. They have confirmed their readiness to us and also to the outside world. They can now start onboarding clients in various different segregation regimes.

**PS** The main outstanding issue for clearing members in individual segregation is client clearing documentation and the FOA and ISDA are addressing that. Looking further down the chain, the second/third tier banks have only just woken up to the fact that through the Basel III and CRD IV directives, there is a major question regarding capital they have to address. From a capital point of view how much does it cost them to clear through an existing listed broker versus becoming a direct clearing member?

Depending on the credit rating of the bank and who they are clearing through they’ll work out the answer to that. We’ve seen a huge flurry of second/third tier banks becoming direct clearing members in the last six months of this year. You can divide the big buy-side firms into those caught by Dodd-Frank and have had to start complying and those that are not and haven’t had to.

The former have had all their resources focused on solving the US issues just like the major FCMs had to. Now they are over that hump they are focusing on onboarding and going live in Europe. Although whether they will actively clear all or part of their book is a question yet to be answered.

The smaller buy side firms are finding themselves way down the pecking order with the major clearing

firms because the industry hasn’t really solved the problem of indirect clearing and EMIR doesn’t address the situation very well. I think a lot of smaller firms will struggle to find a clearer unless this issue can be addressed.

**MG** As a CCP we can contribute to that but the core solution must be in the relationship between the clearing member, the clearing agent and the end client. The solution might be similar to the existing relationship between clearinghouse, clearing member and client. If a clearing member defaults the client has the option to go to another clearing member or to be an interim participant with the CCP.

So perhaps, if the client of a clearing member defaults, they could have an arrangement whereby the client of that client becomes a direct client of the clearing member or has a porting option.

What we can do is provide the functional infrastructure and segregate the margin requirement. However, the legal structure would have to be at the level below the CCP because otherwise the CCP would need to manage relationships down to a second level client. That would be far too complex.

### **What are the chief concerns of end users and will they reduce their activity because of increased costs and risks?**

**PS** Their concerns are driven by what they would call the “unknown costs”. They appreciate that costs will increase but as long as increases are reasonable they will continue to use the markets to hedge. The uncertainty at the moment stems from a feeling that they are, for now, a little in the dark.

**MG** If the leverage ratio as currently proposed was to go through, that might impact business, but in order to achieve the objectives originally set out by G20 I hope regulators are listening to the marketplace and will scale this back.

**PS** We are very focused on costs, including funding costs, and are addressing the costs of clearing and segregation so that they are not prohibitive.

Eurex Clearing has an unparalleled range of eligible securities for use as collateral, including government

bonds, corporate bonds, sovereigns, selected equities and gold certificates. We are also looking at high-quality index-linked inflation bonds, which are widely held by pension funds.

This is particularly attractive to a fully invested asset manager who will wish to use the collateral that he naturally holds in abundance in his fund to effectively remove the drag on portfolio performance. Furthermore, we don't charge clients hosting securities as collateral.

Another major funding issue is the double funding associated with initial margin. Today the clearing house calls the clearing member overnight for the initial margin, they direct debit that and then call their client for payment and the client posts securities but the clearing member doesn't get that cash back until the next morning, resulting in a funding cost which is passed on to the client.

We are extending cut-off times for the return of cash until later in the afternoon, which means that members can get their cash back and don't have the double funding cost. The only alternative is to pre-fund and that again will cost the client unless he can lodge securities sitting in his portfolio, because collateral transformation also has an associated cost.

Traditionally, the clearing client gives the collateral to the clearing member who gives it to the CCP. It's a double movement with a lot of processing and associated transaction fees. We now have a direct delivery service which cuts half of that out and it puts the cost firmly back to the client rather than the clearing member.

Capital costs are a major concern. Clearing members have never had to pay for capital for clearing because it's 0 per cent under current rules. As of January 2014 new capital costs will kick in from the Basel Committee on Banking Supervision (BCBS).

There is considerable uncertainty about capital charges for clearing and we are working very hard with various legal firms to determine whether we can

help with efficiencies in a responsible way. We are also working on the charges for collateral posted, which are likely to depend on the level of fellow customer risk, if it's segregated, it's portable or if it's a non-qualified CCP.

The other major cost is the default fund. Clearing firms are concerned that individual segregation penalises them because of the default fund contribution. We are trying to work out what we can do to alleviate some of these costs.

Hopefully, although costs for OTC derivatives will increase as a result of the new regimes, they will be reasonable and affordable.

We have a fee waiver until 2016 for clients signing up by the end of this year. This should help them get over the initial cost hump while we continue to automate the processes. We also have no individual segregated account charge. If a fund with 100 funds wants 100 individually segregated accounts there is no extra charge.

### **Have you an idea of the extent of the take up of segregated accounts by the buy side?**

**PS** Our traditional asset manager clients are showing a strong preference for our full segregation model. One major firm thinks that 80 to 100 per cent of its clients will opt for individually segregated accounts because they want the added protection. Furthermore, clients of clearing members with less sturdy balance sheets are demanding individual segregation because they want the protection.

But larger firms are also looking to add services to the omnibus model, which clients may well like. In my opinion, both models will continue to exist.

**MG** Initially the buy side said they'd like individually segregated accounts and the sell side said "no chance", you won't be able to pay for them. Nobody looked at what really makes up the cost of individual segregation. It's a major change to how clearing members managed collateral in the past so it does require a one off investment to change the operational processes.

Now people have started to think that the individually segregated model might be cheaper than other segregation models because it should bring additional security to the market and therefore be less expensive than other models like LSOC where collateral has to be liquidated, attracting additional risk. ■

**"Now people have started to think that the individually segregated model might be cheaper than other segregation models."**



## Providing agile tools for a challenging time

By Paul MacGregor, Managing Director, Product Strategy (Europe), FastFill

The market has breathed a collective sigh of relief: A creation of the Dodd Frank legislation, Swap Execution Facilities (SEFs) – intended to be ‘lit’ venues for Swaps – executed their first trades successfully on 2 October.

The US swaps market did not grind to a halt and no major technical issues were reported (despite the US Government shutdown and CFTC staff consequently being 90 per cent lighter). However, SEFs have not been fully stress tested yet: mandatory SEF execution does not come into effect until December 2013, and debate about ‘futurisation’ of swaps in the US rages on.

So can we hope for a similar, relatively smooth introduction of European Market Infrastructure Regulation (EMIR) in Europe? Possibly.

EMIR is broader in scope than Dodd-Frank, as it encapsulates changes to the reporting and clearing of exchange traded derivatives (ETD) products, in addition to their OTC counterparts. “Foul!” cries the whole European ETD market; isn’t the point of the new post-crisis regulation to change the way the OTC markets behave?

Why are the regulators additionally focusing on the centrally cleared, independently regulated, lit markets on exchanges, when they performed perfectly well during the crisis? Surely this is some kind of mistake?

There has been no mistake. EMIR is designed to enforce new stringent reporting, clearing and client account segregation rules across the European financial marketplace, encompassing both OTC and ETD products.

This is ahead of the potential creation of a European SEF equivalent, the Organised Trading Facility (OTF), which is not expected to come into being until

early 2015. Clearly there is a lot of work to be done before that.

Many customers have approached us requesting an input on the potential impact of the account segregation requirements of EMIR on the middle office and back office post-trade functions, and the range of tools available within ION.

At the time of writing, assessing the impact of EMIR transaction reporting for ETDs is subject to some outstanding feedback from the European Securities and Markets Authority (ESMA), leaving this issue in a somewhat vague state, whereas rules governing client asset segregation have been in circulation for longer.

So what are the key short-term requirements, and when are they due by? Starting with what we know for certain, all central counterparties (CCPs) applied to be re-authorised by ESMA on or before 15 September 2013. It is anticipated that ESMA will be approving the CCPs, based on the products they will be offering for clearing (both OTC and ETD), their risk and pricing models, and their client asset segregation rules.

ESMA took on an enormous job here. At least 15 European CCPs applied for re-authorisation. Admittedly, not all are clearing the massive volumes and breadth of products of LCH.Clearnet, Eurex or ICE Clear, but nevertheless each application will need to be scrutinised and evaluated on its individual approach to risk management.

And now for the first controversial part. The ESMA regulation requires, under Article 39, that the CCPs should offer their Clearing Members – as a minimum – the ability to record positions and assets (cash and securities) of their clients, separately from their own, in:

- Omnibus segregated accounts (omnibus segregation: OSA)
- Individual segregated accounts (segregation for individual client: ISA)

One of the drivers for this legislation was to ensure that in the event of a member default the CCP would be committed to triggering procedures for the transfer of assets and positions of the

**“EMIR is designed to enforce new stringent reporting, clearing and client account segregation rules across the European financial marketplace, encompassing both OTC and ETD products.”**



defaulting Clearing Member's clients (this is known as portability).

As a result of the minimum requirement of OSAs and ISAs, some of the CCPs will be offering additional segregation facilities in order to differentiate their offering from that of their competitors. Some CCPs have suggested that they could hold individually segregated accounts for each underlying client; others have proposed multiple omnibus accounts to differentiate customer business.

The concept of Legal Segregation with Operational Co-mingling (LSOC), introduced initially for the swaps market, may become widespread for ETD. Indeed, as details start to emerge, it is clear that some CCPs have taken this 'opportunity' to its logical conclusion; no less than six derivatives of OSAs and ISAs have been submitted in some applications (aside from House business, so technically seven segregation options in total).

The practical impact is potentially huge. Should the majority of clients opt for a version of an Individually Segregated Account – thereby seeking the greater safety and portability of assets in the case of a default – it will affect the processing of trades and payments and could result in a substantial multiplication of reconciliations.

Given that Clearing Members are obliged by ESMA to offer all CCP options to their customers – and explain the mechanics behind the potential intra-day movements of collateral associated with each – the whole market is faced with a huge change in post-trade processing, and assessment of post-trade risk management.

The FOA has estimated that each clearing member may be required to 'scale up' processing of margin calculations and the associated movements of collateral, by up to 9,000 times.

But are we getting over-excited about what could turn out to be a largely theoretical exercise? Will Clearing Members price fully individual client segregation in an appropriate manner – that is, reflecting the additional costs of all the associated

**“Flexible, modern tools, exist on the marketplace today, which relieve some of the pressure on Clearing Members and their customers; technology... agile enough to cope with the potentially huge uplift in data complexity associated with EMIR.”**

processing? Or will there be a 'race to the bottom', where Clearing Members attempt to attract each other's client base, by offering 'under-priced' versions of ISAs?

Equally concerning, will CCPs feel obliged to compete by lowering initial margin requirements, and find ever more tenuous product off-set relationships to reduce margin requirements? Will all the multiplicity of possible outcomes grind the European markets to a halt?

Thankfully, flexible, modern tools, exist on the marketplace today, which relieve some of the pressure on Clearing Members and their customers; technology designed in the 21st century, and therefore agile enough to cope with the potentially huge uplift in data complexity associated with EMIR.

At ION, there are a range of post-trade solutions available, including SEALS, a tool for the middle office.

### SEALS: the middle office revolution

So to summarise the problem: How to perform real-time post-trade risk management in an era where customers may have chosen a selection of multiple ISA and OSA variations, across differing CCPs?

One key area to address is the real-time allocation process for direct and indirect Clearing Members across account allocation complexities.

SEALS is a middle office application, already adopted by major clearing firms worldwide. SEALS is delivered via the Cloud, and comes with connectivity to over 60 exchange trading and clearing APIs (including all those impacted by EMIR).

It receives trades in real-time via clearinghouse APIs, and facilitates account allocations through an import/export service from multiple trade execution systems, mapping on trade references.

Therefore, each trade reference can be mapped to different clearing account ISA/OSA variations across multiple clearing houses; indeed fields within SEALS can be used to capture Unique Trade Identifiers, Unique Product Identifiers, and Legal Entity Identifiers, if identified at the point of trade.

SEALS operates with the following clearing workflows:

- **Electronic Order Matching:** Electronic Order Matching imports filled orders from a trading system or exchange FIX drop copy and trades via the clearing house API, into SEALS. These orders and trades are matched against each other to cross check the validity of the data.
- **Virtual Order Matching:** Virtual Order Matching uses a manual feed for orders and trades, and is typically used when there is a Non-Clearing Membership to a clearinghouse.

As with Electronic Order Matching, orders and trades are matched against each other to clear. This workflow is used when a clearing company does not have a direct relationship with the clearinghouse, and requires SEALS Matching Rules to be configured.

Due to the web-based delivery of SEALS, Virtual Order Matching is also available for clients of Clearing Members, who can keep their own record of matched and allocated business and therefore perform their own post-trade risk management (thereby creating another re-conciliation checkpoint and reducing the burden on the Clearing Member).

- **Electronic Trade Mapping:** Electronic Trade Mapping imports trades into SEALS via a clearinghouse API, and free format fields and trade details are used to map to the correct client. Hence multiple client trade allocation to multiple account types (ISA/OSA variations) can take place in real-time, and may be edited and adjusted in real-time.

This function will greatly increase the Clearing Member's ability to anticipate required collateral

transfers, ahead of calls by CCPs, particularly if their risk platform calculates potential variation margin outcomes in real time.

SEALS also enables Clearing Members to create multiple 'rules' to perform post-trade actions on behalf of clients, including acceptance rules, instruction rules, matching rules and rule dependencies.

Therefore trades can be automatically mapped to give up/give in accounts, via multiple rule acceptance criteria.

As above, the end customer, having their trades allocated to them in real-time, can anticipate and have ready the required collateral transfers across multiple clearinghouses, ahead of the collateral call

This avoids the dreaded 'batch process' where both the customer and the Clearing Member are forced to wait for trade allocation and hence an updated variation margin position, at certain pre-defined points of the trading day.

So the new account segregation rules under EMIR may cause a major scaling up in data processing for CCPs, Clearing Members and their customers. The multiplication of choices offered by CCPs may ultimately lead to a step change improvement in client asset protection; but to achieve that goal, Clearing Members need the tools to manage post-trade risk in real-time; additionally, customers of Clearing Members need equally effective tools.

At ION, we believe SEALS, already widely used by Clearing Members and their customers, removes a major problem with regards to post-trade matching and allocation, and therefore facilitates a solution for those who are grappling with the potential operational complexities of EMIR. ■

**“The multiplication of choices offered by CCPs may ultimately lead to a step change improvement in client asset protection; but to achieve that goal, Clearing Members need the tools to manage post-trade risk in real-time.”**

## FOA news

### Responses to regulatory papers and position papers

<b>October 2013</b>	Response to FCA's Consultation Paper CP 13/5 – Review of client assets regime for investment business
<b>October 2013</b>	FOA letter to Basel re: New Liquidity Requirement for Client Cleared Derivatives
<b>September 2013</b>	MiFID Article 59 – Definition of the Hedging Exemption

FOA responses and position papers can be found on the FOA website

### News

November 2013 – FOA Power Trading Committee announces successful calendar migration for UK power.

## FOA events calendar

### ■ Compliance Forum - Thursday 28 November

Topic: Benchmark Regulation in the Commodity Markets

### ■ FOA's Clearing & Technology Gala Dinner incorporating FOW's Clearing & Settlement Dinner Thursday 28 November ~ The Pavilion at The Tower of London

New for 2013 – the Dinner will provide networking opportunity for the futures industry's clearing, operations and technologies communities.

The evening will, additionally, provide a forum to raise funds for Futures for Kids.

Sponsorship opportunities and table reservations available for both FOA & non-FOA members.

### ■ Power Trading Forum

**Thursday 12 December – Reed Smith**

The Forum will discuss Ofgem liquidity and the treatment of physical forward contracts under MiFID.

### ■ Compliance Forum

**Thursday 30 January 2014**

Topic and venue to be confirmed

### ■ IDX 2014

**Tuesday 10 & Wednesday 11 June - The Brewery**

The FIA and FOA are pleased to present the seventh International Derivatives Expo with. Last year's event welcome over 1,000 delegates, over 40 exhibits showcasing the latest in products, services and technology for the derivatives industry and 20+

sessions with high-profile speakers, information-packed workshops and valuable networking opportunities.  
**Opportunities are available for Partnerships, Sponsors and Exhibitors**

### ■ IDX Gala Dinner 2014

**Wednesday 11 June –**

**The Pavilion at the Tower of London**

The IDX Gala Dinner will once again be held in aid of Futures for Kids. The Dinner also provides a valuable networking opportunity for those attending IDX and the wider international financial community.

**Sponsorship opportunities and table reservations available for both FOA and non-FOA members.**

### ■ THE NEXT INFONET

**Getting to grips with the new world order for derivatives**

**Tuesday 14 January 2014 – Grocers Hall,  
Princes Street, EC2R 8AD**

An enhanced InfoNet event with a full afternoon and evening programme and networking opportunities for operations, IT, risk and compliance professionals in the industry. The discussion topics will look at how market participants are responding now that, after all the analysis, debate and raft of consultation papers, legislation has arrived/is arriving.

### Who can attend?

This event is open to executives at FOA member firms and to specially invited guests of the FOA and InfoNet Sponsors.

For more information on all events, please contact Bernadette Connolly on [connollyb@foa.co.uk](mailto:connollyb@foa.co.uk) or +44 20 7090 1334.

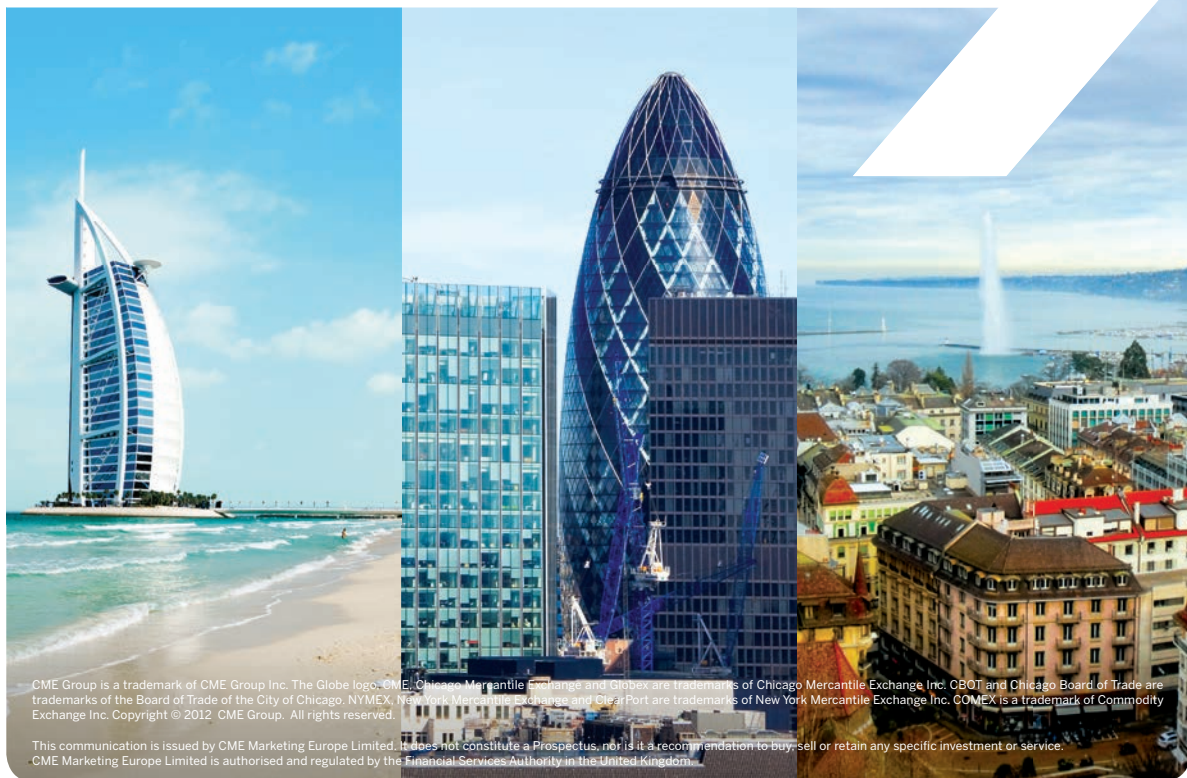
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