



# A Guide to Commission Sharing Arrangements (CSAs) in the United Kingdom and Client Commission Arrangements (CCAs) in the United States - May 2007

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# INTRODUCTION

The purpose of this paper is to provide guidance to investment institutions interested in setting up CSA type arrangements in order to pay for research and other services provided by EuroIRP and Investorside members. EuroIRP is the Europe wide trade association for independent research providers. This paper is published in cooperation with Investorside, our sister organization in the USA. Although these arrangements have now been in use for some time, most of the guidance on CSA / CCA arrangements thus far has come from the global investment banks. One of the purposes of this document is therefore to give a different perspective, less biased towards the interests of those banks.

#### **KEY RECOMMENDATIONS**

# **EuroIRP & Investorside Opinion**

We highlight material issues regarding CSAs that need to be addressed, including:

- CSA administration is causing cashflow and accounting issues for independent research firms
- Contractual terms and pricing that disadvantage independent research firms
- There is a need for wider CSAs to increase competition on the execution component
- The practice of pre-funding of "proprietary" (internal investment bank) research is inconsistent with the principles of unbundling and commission sharing
- CSA/CCA executing brokers enjoy asymmetric pricing knowledge on research

# **EuroIRP & Investorside Recommendations**

- The industry develops best practise standards, and the FSA endorses this process. These should include:
  - Payment for research must be made "promptly", as mandated by the SEC. Neither investment banks nor money managers should be able to sit on commission pots
  - Equal treatment of "proprietary" and third party research by the executing broker no first take for its internal research
  - o No deductions from the research component for execution
  - Transparency on agreements to avoid onerous terms, especially on pricing, being imposed on IRPs
- Money managers work to reduce unnecessary payment delays due to their evaluation and reconciliation process, recognising the damage this causes independent research firms.
- Money managers maintain at least one CSA relationship with a pure execution provider, which serves as a check on global broker execution pricing.
- Money managers ensure sufficient diversity in their CSA lists, encouraging competition and ensuring they generate appropriate commissions across all the markets and sectors in which they need to buy research.
- Money managers ensure they are not signing CSAs which automatically pay the executing broker the first portion (e.g. 20%) for research or specifying that its research department is paid first.

#### **BACKGROUND**

Institutional clients familiar with the regulatory background to commission arrangements in the UK and US may wish to move straight to the section on Structure.

The fallout from the tech bubble, the resulting Spitzer investigation in the US, and the Myners Report on the responsibilities of institutional investors in the UK, have focussed attention on the need for unbiased investment research and the role which independent providers can play. Historically, research has been perceived as 'free', i.e. bundled with execution services by the investment banks. Not only did this give rise to the recognised conflicts of interest, but it made it extremely difficult for independent research providers to compete, since they had to recover the costs of their activities while the research divisions of banks could, and did, cross-subsidise their research from other activities.

In the US, the global settlement negotiated by Elliott Spitzer included provisions to subsidise for a limited period the development of independent research. The UK has given more emphasis to seeking a market solution by establishing a level playing field.

The UK debate began from broader problems of cross-subsidy from client commission and in particular the question of 'soft commission'. The FSA, following the Myners Report, expressed unease that '... payment for a transactional event is used to pay for other goods and services that need not have any direct connection with that event. This practice lacks transparency and creates conflicts of interest for fund managers in their relationships with clients and brokers...' The major investment banks strongly resisted moves towards such transparency, arguing that the transaction value chain could not be broken down into identifiable separate segments. But the FSA insisted on narrower definitions of services which might be accepted as part of soft commission arrangements and enhanced disclosure of the components of commission payments.

There was concern that an effect of these proposals would be to make life still more difficult for independent research providers, who had derived significant revenues from soft commission arrangements. Most institutions have a very limited budget for fees and subscriptions. The FSA has made clear its commitment to a level playing field for independent research and has therefore made specific provision for an approved mechanism that would allow institutional investors to use commission payments to purchase research/sales resources from outside vendors.

The SEC has likewise made it clear that it wants to make it as easy as possible for money managers to pay for independent research. A structure similar to the UK CSA, known as Client Commission Arrangements, has now been approved. On both sides of the Atlantic, the objective has been to narrow the general scope of soft commission type arrangements while clarifying the acceptability of independent research as a proper subject for client commissions.

# • CCAs under 28(e)

In the USA, the SEC refers to all payment structures utilizing investor commissions to fund the purchase of research services under the section 28 (e) Safe Harbor, including proprietary (bundled) arrangements and third party independent arrangements, as Client Commission Arrangements (CCAs). Because, among other reasons, the SEC does not allow broker-dealers to share commissions with non broker-dealers, the term "Commission Sharing Arrangement" (CSA) is not used by the SEC to refer to payments by broker-dealers to research vendors who are not themselves broker-dealers. To emphasize this point, the SEC inserted the following footnote in the July 24, 2006 final release:

"To avoid confusion that may arise over the usage of the phrase "soft dollars" in this release, the Commission uses the term "client commission" practices or arrangements to refer to practices under section 28(e). Similarly, to minimize confusion with the phrase "commission sharing arrangements" as used in the United Kingdom to refer to unique arrangements in that market place, we refer to arrangements under section 28 (e) as "client commission arrangements or "Section 28(e) arrangements".

Euro IRP made two submissions to the SEC on the subject of its published guidance regarding client commission practices under section 28(e) of the Securities Exchange Act of 1934, the first of which encouraged a consistent approach to global regulation regarding commission arrangements

(<u>http://www.sec.gov/rules/interp/s70905/euroirp112405.pdf</u>). In our more recent submission we were positive about the SEC modifying its interpretation of "provided by" and "effecting" <sup>1</sup>under section 28(e) (http://www.sec.gov/comments/s7-13-06/s71306-4.pdf)

In light of changes in market structure and submissions following its 2005 release, the SEC looked at the "effecting" and "provided by" terminology, and in its July 2006 release introduced considerably more flexibility. For clarity on this, please see p. 50-54 of "Commission Guidance Regarding Client Commission \_Practices Under Section 28(e) of the Securities Exchange Act of 1934" published on July 24, 2006 (<a href="http://www.sec.gov/rules/interp/2006/34-54165fr.pdf">http://www.sec.gov/rules/interp/2006/34-54165fr.pdf</a>). With the changes in the "provided by" interpretation, there is a new option allowing the broker-dealer to create a pool of research dollars, funded by commissions paid by managed accounts, to pay for research services as instructed by the money manager. This type of client commission arrangement (CCA) is similar in many respects to the UK CSA payment structure. Indeed, the SEC introduced this flexibility in part due to submissions from UK organizations, suggesting that unbundling has been influential. The SEC has made it clear that it wants to make it as easy as possible for money managers to pay for independent research.

#### • The SEC's "no-action letter"

Subsequent to the SEC's July 2006 guidance on client commissions under section 28(e), the Staff of the Commission's Division of Market Regulation issued a "no-action letter" on January 17, 2007 to Goldman, Sachs & Co which confirmed that research firms who are not broker-dealers may be compensated for providing research services to their money manager clients through payments from a "commission pool" set apart in a client commission arrangement under section 28(e) without registering as broker-dealers. The payment structure described in the no-action letter is very similar in structure to a UK CSA. The SEC Staff noted that the following factors must be present for a non-broker-dealer research firm to be compensated from a "commission pool" set aside by an executing broker-dealer:

- The money manager must be responsible for independently determining the value of the research services under SEC 28(e), although the money manager's good faith determination may be based on input from the research firm.
- The broker-dealer may not be involved in determining the value of the research services to the money manager.
- The research firm must receive payment from a pool of commissions that, by agreement between the broker-dealer and the money manager, is set aside for obtaining research services.
- Payment to the research firm may not be conditioned, directly or indirectly, on the execution of any particular transaction or transactions in securities that are described or analyzed in the research services.
- The research firm may provide the research services in return for payment from a pool of commissions, but may not perform other functions that are typically characteristic of brokerdealer activity (e.g., soliciting brokerage transactions by disseminating quotations, accepting or handling customer orders, introducing or carrying customer accounts, receiving or holding customer funds or securities, etc.).

The no-action letter clarifies that research firms who receive payments from commission-generated pools of funds do not have to be registered broker-dealers under certain conditions. The Staff's position appears to be based on the proposition that the pools lose their character as "commissions" when they are used to compensate a research firm for research and the research firm does not perform broker-dealer functions.

#### **STRUCTURE**

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<sup>&</sup>lt;sup>1</sup> "Effecting" and "provided by" are terms from the statute, which the SEC is interpreting. "Effecting" refers to some involvement in the execution, clearance and settlement of the transaction. "Provided by" means responsible for providing research, either preparing the research itself, or entering into an agreement with a third party provider to deliver that third party research.

# • FSA's position on Commission Sharing Arrangements

The FSA has not specifically endorsed the use of CSAs, or any particular CSA structure, rather indicated that it sees them as one way for investment managers to meet its new requirements for greater transparency and accountability in the use of dealing commissions.

The FSA has outlined its understanding of CSA structures put in place by the industry as follows: "In a CSA, the executing broker agrees that part of the dealing commission it earns will be redirected to one or more third parties, nominated by the fund manager, as payment for research services, that they have provided to the manager." (PS04/23). It has subsequently stated that CSAs "have the potential to form part of the market-led solution" (CP 05/05) and has given more specific guidance to market participants in meetings.

CSAs take two main forms, "pooled" and "individual";

#### • CSA - Pooled

In a pooled CSA, whilst the provision of research is subject to arrangements between the money manager ("client") and research provider, the commission split for execution and research is negotiated between the money manager and the executing broker.

Only a "participation letter" exists between executing broker and research providers.

The institutional client entering a CSA agreement will usually do so from a panel of brokers, often 8-12 global investment banks (see later comments on alternative and independent execution). The arrangement will provide for an "execution only" commission rate to be subtracted from the client's "full service" commission rate. The money manager will account for the execution portion of the commission as a "payment for execution services". The balance of commission is held on account by the executing broker and is known, colloquially, in the UK as the commission "pot". This pot is paid out on instruction from the client to those independent research providers (IRPs), brokers or other allowable ancilliary service vendors, in the amounts instructed by the client, and at a frequency dictated by the agreement.

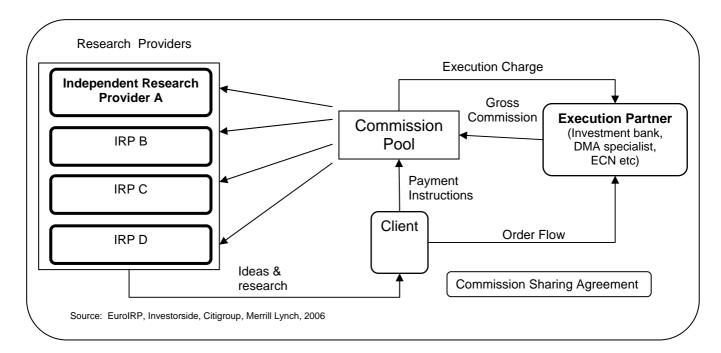
Note that the scope for paying for services under CSAs is limited to "research" and "execution". Clients should seek advice on the payment structures permitted for technology or data feeds, post trade analytics, or any publications which cannot be held out to be original research.

To set up a CSA arrangement, a client needs the relevant agreement from the executing broker. UK based clients should note the uncertain UK VAT environment surrounding these arrangements. There is a generally accepted financial markets view that commission paid out under a CSA structure is VAT-exempt as it is classified as an ancilliary transaction within a financial transaction, and financial transactions are VAT exempt. However the view of some VAT experts is that unless the transaction can be shown to have resulted from the advice being paid for it does not count as such. Many global broker CSAs are therefore structured from offshore. In most CSAs the VAT risk is laid off against the outside research provider. See appendix on VAT.

The outside research vendor (IRP or otherwise) will usually have to sign a participation letter with the executing broker. The outside vendor may or may not send Terms of Business to the institutional client, outlining the services that it can offer. However to be clear, the CSA agreement is between the client and the executing broker and counterparty / settlement risk lies with the executing broker. The participation letter governs the payments to the outside vendor from the client pot.

For the purposes of this paper we looked at 10 of these participation letters and the wording is very standard. They all specifically state that they shall not be liable to the outside vendor for any monies, unless directed by the "manager" (client). They seek to protect their existing commission structures outside the CSA environment, and they explicitly state that the VAT (if applicable)/ and or any other tax liability is "inclusive". Both the research vendor and the executing broker are signatories to the agreement and bank details are appended for payment purposes. Please contact EuroIRP for more specific guidance on participation letters.

#### "Pooled" CSA structure



Please note that these pooled CSA structures can and are not only being used to pay for independent research, but also other third party research, and the research of other investment banks – i.e. a money manager could conclude that if an investment bank does not meet its requirements in terms of execution capabilities, yet provides valuable research, it could terminate any execution relationship and pay for the research through another investment bank.

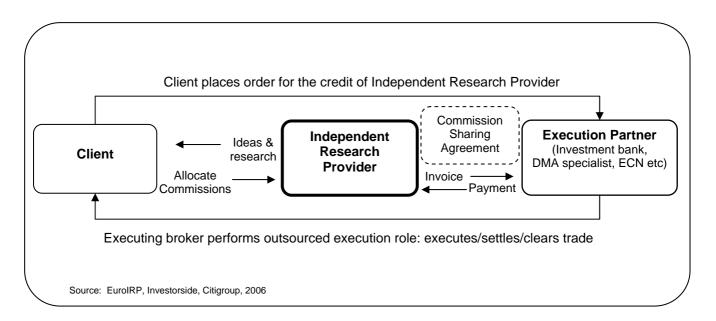
# • CSA - Individual

As discussed in the background section, CSA type structures have been in existence for some time, with many members using "directed commission" or "individual CSA" structures well in advance of unbundling.

Until 2006, these individual CSAs were the more common of the two structures. These start with an agreement between an executing broker and research provider. The executing broker will handle flow and will retain the execution element of gross commission and then pay out a pre-agreed "research element" to the research provider, based on a negotiated split between executing broker and research provider.

Separately the research provider agrees to provide a money manager with research and advice. It is agreed that the payment mechanism will be a commission-share with an executing broker. The money manager will direct certain deals to the executing broker (which can be any number of brokers on a "panel"), signaling they are for the account of the specific research provider. At regular intervals (typically monthly) the executing broker pays the research provider its split.

These structures are less prevalent than they were, though several executing brokers such as Instinet, Citigroup, Cheuvreux etc. do still operate versions of this in the UK, and most independent research providers still derive a substantial portion of their commissions via this route.



#### **EUROIRP & INVESTORSIDE OPINION**

#### **CSA Positives**

As EuroIRP has stated in its submissions to the SEC, CSAs are <u>theoretically</u> a very positive development, both for money managers and independent research firms;

- A more level playing field in the provision of research. As a result of the "discrete pricing of research" and the identical disclosure and record keeping requirements for research from brokers and independent providers, clients should be better able to judge whether value-for-money is being achieved when purchasing research using client commissions than is possible in a bundled environment.
- Money managers are better able to seek best execution. CSAs enable clients to deal with the broker of choice at the point of execution, empowering trading desks to focus on best execution, whilst still enabling the fund managers to pay for research services from diverse providers.
- Increased competition in the provision of execution services. As a result of the discrete pricing of execution (without the bundling in of non-execution services such as research), and removal of guaranteed business levels associated with soft-dollar arrangements, there should be heightened price and service competition in execution than in a bundled environment.

#### **CSA** Issues

However, looking back at the reality of the first year of CSAs in an "unbundled" context in 2006, there are material issues which need to be addressed;

# CSA administration causing cashflow and accounting issues:

On client administration of CSA payments, we would like to highlight several areas of difficulty. Firstly most independents have experienced instances of non-payment or under-payment of sums previously promised under CSAs.

There is an even more widespread problem of severe delays in payments, or CSA agreements which pay only once or twice a year. This creates cashflow issues for independent research firms, where they are effectively extending credit for research and advice provided to money managers for extended periods (sometimes as much as 12 months) and then providing working capital to the executing broker. Delays are taking place in the initial reconciliation process between the money manager and executing broker, as well as in the voting and evaluation process within the money manager. There is then the added problem that the executing broker is under no obligation to make "prompt payment" as in the US

(this is explicitly cited in the July 24 2006 release), which means they can delay payment to research providers.

CSA administration has also created accounting difficulties in some cases, with accruals having to be adjusted or written down.

At many clients, voting structures have now evolved to take account of CSA arrangements, with the vote split into the two main segments of research/sales and execution. However many of these new structures are very beneficial to the global broker, as they do not account for the execution portion which may be subtracted from the commission earned by the independent research firm under the research vote. Nor is this execution portion then accounted for under the execution portion of the vote, which the global house has already earned. By way of illustration, if global house A receives 100 points for execution but none for research, and independent B receives 100 points for research, under a 50:50 arrangement the global house will get 150 points of commission and the independent just 50.

The SEC is already aware of and has expressed concern about some of these CSA administration problems. It has mandated payments be made "promptly" by executing brokers. EuroIRP and Investorside will be requesting that the FSA consider this and other issues in encouraging a best practise code on CSAs.

#### Contractual terms & pricing:

There are three parties to a pooled CSA – the transacting client, the executing broker and the research provider. While there is a contractual relationship between the client and the executing broker, there is none between the execution partner and the research firm (only a "participation letter"), since the latter provides no direct service to the former. This places the independent research firm in a weak position to ensure timely and complete payment for the services that have been provided. It is therefore necessary that the agreement between the client and the executing broker should contain provisions that are sufficiently firm and clear to enable the independent research firm to secure prompt payment.

In the pooled CSA structure, the executing broker dictates terms in its "participation letter", which the independent research provider has to sign up to as a condition of payment. The IRP has no influence on the terms, and is not normally made aware of the underlying commercial terms in the execution/ research pricing or split, despite the fact that because of the way CSAs have been implemented this split impacts the price of the research they provide. As discussed, these participation letters appear to be nearly identical from all the major global investment banks.

Execution rates are, in the view of EuroIRP and Investorside, in many instances unrealistically high under some CSAs compared with other methods of execution. Whilst competition should reduce these rates over time, execution rates under CSAs are currently often well above the rates which those independents have secured under their own execution agreements made with executing brokers under "individual CSA" or "introducing broker" arrangements. This is putting a significant squeeze on outside vendor margins in many cases. By way of broad illustration, many CSA agreements are 50:50 research/execution, replacing existing arrangements in the 70:30 range. This amounts to a huge swing in favour of the global executing broker.

# • Competition:

One of the unanticipated consequences of unbundling has been a growing concentration in the execution market, as the majority of CSA type arrangements are being put in place with global brokers. Our members have dealt with well over a dozen different executing brokers on CSAs, both global investment banks and alternative and specialist providers, so it is worth giving our perspective on the execution side of CSAs.

Several of the global investment banks have been proactive and effective in their administering of CSAs and dealings with IRPs. However, a number have material failings in their CSA administration and have been less than cooperative in their dealings with the smaller independent sector. Member firms may be able to advise clients with concerns regarding this.

Most institutional clients will naturally want CSAs with core global brokers. In addition to this we would recommend:

- Maintain at least one CSA relationship with a pure execution provider, which serves as a check on global broker execution pricing. In our experience ECNs, DMA specialists and other pure execution specialists offer very competitive pricing and have the capabilities to administer CSAs, yet have often been overlooked in the context of CSAs.
- Maintain sufficient diversity in CSA lists. One of the problems some institutional clients are
  encountering is that due to the limited list of 8-12 global CSA brokers, they are struggling to
  generate commissions across all the markets and sectors in which they need to buy research. This
  means they either have to cross-subsidize, or the "pots" in certain areas are insufficient to meet
  fund manager needs. More recently we have seen some institutional clients widening their CSA
  agreements to include leading local market or small-mid cap specialists, and we urge more clients
  to consider this approach.

Execution in a CSA environment will be best served by healthy competition and diversity of provision. The FSA has not endorsed any particular CSA structure. CSAs can take the pooled form with global brokers, but just as legitimately the "individual CSA" form on different, less one-sided, contractual terms, with alternative, electronic and other specialist execution venues.

# • Pre-funding of "proprietary" (investment bank) research:

Under some CSAs the executing broker is able to pre-fund its own research, taking say the first 20% of the bundled payment. This means the independent research provider or broker is last in line to receive commission after the execution and then "proprietary" research portions, and distorts the spirit of the regulatory changes to level the research playing field.

#### CSA executing brokers enjoy asymmetric pricing knowledge on research

There is an information asymmetry on research pricing. A money manager in effect knows only what it paid last year, whereas a CSA executing broker knows what different clients pay for different research services. A widespread complaint by money managers is that the major investment banks, who also dominate CSAs, are unwilling to communicate their research pricing, undermining the ability to establish a market price for research.

A CSA executing broker that also provides research knows how much a client is paying to independent, third party providers and other brokers for particular research services, putting it at a competitive advantage.

# Conclusion

As discussed, CSAs are theoretically a positive development for the industry, helping meet the objective of separating the purchasing decisions for execution and research. However, there are issues that need to be addressed. Part of the solution is simply improvements in the CSA administration and reconciliation process within money managers and executing brokers. But there are some signs of anti-competitive behaviors or practices of which the FSA and SEC must take note. Independent research firms are in a position where their competitors, the executing broker (investment bank), controls the payment mechanism. Such a situation is open to abuse and requires monitoring.

Our findings have been communicated to both the FSA, which has said it will ensure the issues and concerns we have raised are factored into its work, and the SEC. In addition this document has been sent to over 150 institutional investment organisations that are clients of our member firms.

#### **EURO-IRP & INVESTORSIDE CONTACT DETAILS**

For more information on any of these discussion topics, please call:

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Pat Shea (CFRA +1 301 255 6659, Pat@cfraonline.com)

Richard Kramer (MD Arete Research +44 207 959 1300, richard.kramer@arete.net)

# **Appendix 1: VAT**

The VAT issue represents a distinct risk under CSA type arrangements, as the sums of money can be substantial, and the conclusions drawn by the financial services industry appear to conflict with the advice provided by certain specialist VAT advisers. We can only encourage end investors to seek clear specialist advice. We can suggest one or two structures which might or might not reduce that risk, but again these need to be independently checked. We suggest that any client wishing to pay for research and advice under a CSA type agreement check with their VAT advisers to see if the CSA agreement is structured for facilitating / arranging trades in securities if possible, or for the provision of services. We suggest that they check to make sure that it does not just say "for the provision of research services". We suggest that any Terms of Business issued by the outside vendor (detailing their services) be checked to ensure that it is for services related to the facilitation of trading in securities, rather than just for the provision of research services.

Clarity is required on the VAT situation for commissions on investment research. However, HM Revenue and the FSA must endeavour to treat proprietary and independent research in the same way, otherwise proprietary research will have a 17.5% pricing advantage over independent research. If VAT must be accounted for on that part of the shared commissions received by the independent research firm, then (as regards "proprietary" investment banking research providers), the independent research firm is at a competitive disadvantage, as it must absorb the VAT on its share of the commissions. Under EU case law and the Sixth directive, exemptions should not be construed so narrowly that they work to the detriment of outsourced services.

Appendix 2: Characteristics, pros & cons of pooled & individual CSAs

Pooled CSA Individual CSA	
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Characteristics	Commission split is negotiated/subject to agreement between the client and the executing broker. Only a "participation letter" exists between IRP & executing broker.	Commission split is negotiated/subject to agreement between executing broker and IRP
	Client and executing broker agree an execution rate	Client trades at normal commission rates. Agreed commission split is disclosed to the client
	Executing broker executes the trades and manages the commission pool; retaining the execution element of the gross commission, sometimes an element for its "proprietary" research, and then pays out remaining commission pool to research providers as directed by the client	Executing broker retains the execution component of gross commission, pays out research element to IRP
	Split typically in the range of 50/50 research/ execution	Split typically in the range of 70/30 research/execution
Pros	Meets FSA guidelines	Meets FSA guidelines
	Transparent and auditable to two parties; executing broker & client	Transparent to all three parties and auditable
	Same dealing desk contacts for clients	Same dealing desk contacts for clients
	Allows dealing desks to focus on best execution without worrying about directing business	Broad range of execution options for clients
	Easier for clients to administer if paying large numbers of research providers	Reconciliation & payment is monthly
	Increased capacity to pay for external research	Flexible, quick & easy to set up
Cons	Opaque to the IRP, which has standard terms dictated to it in the participation letter, and is not aware of the underlying split	Ongoing administrative burden is potentially greater, especially if used to pay large numbers of IRPs
	Reconciliation and payment is normally quarterly, biannually or annually	Client depends upon the IRP having sufficient individual CSAs in place
	Current lack of competition, mainly in place only with 8-12 global brokers	
	Greater burden in the initial set-up phase	

# Appendix 3: CSA execution provider contact details

Provider	Primary Contact	Address	Secondary Contact(s)
	: Global Investment Banks		
ABN Amro	Miranda Rayner	250 Bishopsgate	
1	T: +44 (0) 207 678 1821	LONDON	
	` ,	EC2M 4AA	

Provider	Primary Contact	Address	Secondary Contact(s)
Bear Stearns	Aziz Rehman	One Canada Square	
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Citigroup	Alec Tyler	Citigroup Centre	Damien Buggy T: +44 (0) 207 986 0221
	T: +44 (0) 207 986 0742 F: +44 (0) 207 986 6884	Canada Square Canary Wharf	F: +44 (0) 207 986 0221 F: +44 (0) 208 043 1629
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	joanne.lewis@db.com		
Goldman	Matthew J C Rattray	Peterborough Court	
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	matt.rattray@gs.com	LONDON	
		EC4A 2BB	
JP Morgan	Mike Shelley	66 Victoria Embankment	
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	F: +44 (0) 120 234 5805	EC4Y 0JP	
	micheal.j.shelley@jpmorgan.com	05.0.1.0.	1.4
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Brothers	Manager	LONDON	Administration Supervisor
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	<u>awells@lefililari.com</u>		James Cookson
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UBS	Sharon Persia	E14 4QH	Patrick Gill
UBO	T: +44 (0) 207 568 5075	1 Finsbury Avenue LONDON	T: +44 (0) 207 568 5522
	sharon.persia@ubs.com	EC2M 2PP	patrick.gill@ubs.com
	Sharon.persia@ups.com	LOZIVI ZF F	Ella Turnbull
			ella.turnbull@ubs.com
		L	S. G.
	Specialist Execution Providers	BNY Securities Ltd	
Bank of New York	Francis Land T: +44 (0) 207 964 7489	One Canada Square	
INEW IOIK	` '	LONDON	
	fland@bankofny.com	E14 5AL	
CF Global	Nathalie Chace	CF GLobal Trading (UK) Ltd.	
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		WOIV IDD	

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	jcarp@cheuvreux.com	Execution Services	
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		London EC3V 4QH	
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