

*United States Senate*

***PERMANENT SUBCOMMITTEE ON INVESTIGATIONS***

*Committee on Homeland Security and Governmental Affairs*

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*Carl Levin, Chairman*

*John McCain, Ranking Minority Member*

# **E X H I B I T S**

**Part 2 of 4 (Exhibits 21-37)**

Hearing On

***ABUSE OF STRUCTURED  
FINANCIAL PRODUCTS:  
Misusing Basket Options to  
Avoid Taxes and Leverage Limits***

**July 22, 2014**

**EXHIBIT LIST**

Hearing On

***ABUSE OF STRUCTURED FINANCIAL PRODUCTS:  
Misusing Basket Options to  
Avoid Taxes and Leverage Limits***

July 22, 2014

1. a. *The Fiction of Independence*, charts prepared by the Permanent Subcommittee on Investigations.
  - b. *Rentec Control of Palomino*, quotes taken from 6/24/2009 Barclays Memorandum to PwC. [BARCLAYS-PSI-139757-766, at 763-764, Exhibit #53, below.]
  - c. *Medallion Master Funds* [RT-PSI-00363694]
  - d. *Signatories to Franconia-Rentec Investment Advisory Agreement*  
[RT-PSI-0396355, Exhibit #6, below.]  
*Signatories to Mosel Limited Partnership Agreement*  
[RT-PSI-00396411-412, Exhibit #8, below.]  
*Signatories to Bass-Rentec Investment Advisory Agreement*  
[RT-PSI-00396321, Exhibit #35, below.]  
*Signatories to Badger Holdings Ltd. Partnership Agreement*  
[RT-PSI-00396313-314, Exhibit #4, below.]
2. Internal Revenue Service Generic Legal Advice Memorandum (GLAM), released November 12, 2010, re: *Hedge Fund Basket Option Contracts (The contract does not function like an option, and should not be treated as such.)*. [BARCLAYS-PSI-748148-158]

**Documents Related to Renaissance Technologies (RenTec):**

3. RenTec email, dated September 2008, re: *Re-shuffle- Follow-up (I confirmed that there is no prohibition against end-of-day transfers in our new MAPS documentation. We may reshuffle the constituents of the underlying options at the end of the day, at the current closing price. \* \* \* Mark Silver was going [to] discuss with you the ability to optimize the end of day re-shuffle process in order to keep the number of position re-shuffles to a manageable amount and below the radar of DB.)*. [RT-PSI-00068362]
4. RenTec/Deutsche Bank email, dated November 2008, re: *DB counteroffer (Daniel Koranyi wrote: ... Colin points out that the Optimal Execution paper supports our contention that any portfolio they would find themselves having to liquidate would be low-risk, and could be liquidated slowly if required. The portfolio would be well diversified, market-neutral, and with low liquidity imbalance....)*. [RT-PSI-00368695-697]

5. RenTec email, dated August 2011, re: *US portfolio shift - overrides? (Management has decided to shift some portfolio from the Palomino loss-protected managed account to the Deutsche (DBAG) loss-protected managed accounts. The total amount of portfolio to shift, for now, is USD 4e9).* [RT-PSI-00364418]

**Documents Related to MAPS Transactions:**

6. *Investment Advisory Agreement* between Renaissance Technologies Corp. and Franconia Equities Ltd., dated March 30, 2000. (*Advisor is authorized, without further approval by or notice to the Client, to make all investment decisions concerning the Account....*) [RT-PSI-00396351-355]
7. *Barrier Option Transaction* confirmation, dated March 14, 2012, between Deutsche Bank AG, London Branch and Franconia Equities Ltd. (*Buyer has made an independent judgment of the experience and expertise of the Investment Advisor. \*\*\* Other than as provided above, Buyer agrees that it shall not contact directly the Investment Advisor regarding the terms or subject matter of this Transaction.*). [DB-PSI 00123196-208]
8. *Mosel Equities L.P., Limited Partnership Agreement*, dated October 26, 2007. (*[T]he General Partner shall have complete and exclusive responsibility for managing and administering the affairs of the Partnership, and shall have the power and authority to do all things necessary or proper to carry out its duties hereunder.*) [RT-PSI-00396394-413]
9. *Amended & Restated Investment Advisory Agreement*, dated November 16, 2007, between Deutsche Bank AG London and Renaissance Technologies LLC. [RT-PSI-00000914-931]
10. RenTec/Deutsche Bank email, dated December 2007, re: *Buy Back Request (We've been unable to maintain a borrow to fully cover your following short position. Please confirm your willingness to buy this position back as we're exposed to being bought in (any cost/short sale fines will be passed on)[.] Due to the illiquidity of this stock at present I must also ask you not to short any more.*) [RT-PSI-00004630-632]
11. RenTec/Deutsche Bank email, dated February 2008, re: *UK MAPS (However, what you described faced some general objection where DB could be argued to have been effectively fronting for an unregulated fund.... Not thought to be a good idea then and following the Soc. Gen. fiasco I imagine there would be even more twitching now.)*. [RT-PSI-00062957-959]
12. *Deutsche Bank Maps: New Process/Procedures As of May 15, 2008 (Portfolio rebalancing due to Option Exercise \*\*\* Rentec Fund Operations group will reallocate the positions in the sub-account underlying the exercised option to the remaining options based on their relative cash settlement amounts....)*. [RT-PSI-00002319-322]

13. RenTec/Deutsche Bank email, dated June 2008, re: *Language (Staggering options: You wish to staffer options once every 3 months. My suggestion is that you stagger options by NAV also, so there is at least 6 points in NAV difference between different options.)*. [RT-PSI-00054256-257]
14. Deutsche Bank email, dated June 2008, re: *What we need coded on PEAS apart from guidelines (The anticipated leverage amt is not randomly chosen. It is chosen so that the funding cost (which we will call the "optionality value") on the long side.... ...is between 20-25% of the initial premium (100 in the above)*. [DB-PSI 00010767-769]
15. *Managed Account Products, Option Account Profile, DBAG MAPS Rentech Mosel Equities LP Option Account 1*, dated June 24, 2008. [DB-PSI 00001599]
16. Deutsche Bank email, dated June 2008, re: *Tentative: MAPS Working Group... (...if one option is near breaching the barrier and they [RenTec] want to reallocate trades from that options to others that are at capacity while still being under the 33bn GMV [Gross Market Value] threshold. Based on prior conversations they want to keep their flexibility around allocations.)*. [DB-PSI 00025033-034]
17. GWA/Deutsche Bank email, dated July 2008, re: *George Weiss MAPS Investment Guidelines - PLEASE READ (Please transfer all the positions mentioned in Rule 11 and Rule 12 to OGI account from the MAPS account \*\*\* He will be able to do the crosses requested under Rule 11 & Rule 12 in the AM)*. [GWALLC-PSI-0002504-505]
18. RenTec/Deutsche Bank email, dated July 2008, re: *Optionality Value (While this formula will give a desired result at the current interest levels, as interest rates increase (and we could potentially require a longer dated option) the Optionality Value could get prohibitively high even to the point of exceeding the total amount of premium. I played around with other formulas but still came up against the same conundrum)*. [RT-PSI-00046119-121]
19. Excerpt of *Deutsche Bank, GPF Business Development, CTB Program Portfolio, September 2008*. *(The object of this initiative is to provide a New Multiple MAPS structure that will more closely resemble a traditional options structure – premium risk.)*. [DB-PSI 00116157-160, 177]
20. GWA email, dated October 2008, re: *db maps account inbalance (just got a call from db claiming we have too much net long exposure in maps and want just to bring the portfolio back within 5% exposure within a week ... maybe we can cross some position over to ybs next week)*. [GWALLC-PSI-0002328]

21. Deutsche Bank/RenTec email, dated October 2008, re: *DB-Rentec - Response to Issues Discussed on 10/16 (In any event, expanding this to 20 Exchange Business Days does not work from a tax standpoint. 20 Exchange Business Days to make a termination decision under a 13-month options tilts the balance strongly in favor of viewing the accrual of this termination right into the effective conversion of the option into an American style option.)*. [DB-PSI 00079017-021]
22.
  - a. Excerpt of transcript of telephone conversation on November 7, 2008, between Satish Ramakrishna and William Broeksmit (Mr. Ramakrishna: *[S]o that's the way option is supposed to work ... this is structured as an option because* Mr. Broeksmit: *Yeah for tax reasons* Mr. Ramakrishna: *For tax reason but the ... option make it clear that the premium is only ... commitment that the option holder has*). [DB-PSI 00122458]
  - b. Excerpt of transcript of telephone conversation on November 6, 2008, between Peter Brown and Satish Ramakrishna (*[T]he models don't see the government intervention but we do and we are nervous that something could happen. ... So we have actually intervened and we do that from time to time when things like this happen.*). [DB-PSI 00122457]
23. RenTec/Deutsche Bank email, dated December 2008, re: *Test of representations (It will be operationally feasible for DB to create Designed Positions, both by not executing transactions directed by the Advisor and by unwinding or liquidating Effected Positions without the direction of the Advisor.)*. [RT-PSI-00236253-258]
24. *Master Investment Advisory Agreement*, dated December 15, 2008, between Deutsche Bank AG London and Renaissance Technologies LLC (*...supervise and direct the investment and reinvestment of all assets in the Account, and engage in such transactions on behalf of the Client's Account, in the Advisor's discretion and without prior consultation with the Client, subject only to the terms of this Agreement, in any and all forms of securities or other property....*) [DB-PSI-00000001-047]
25. Deutsche Bank/GWA email, dated February 2009, re: *MAPs comments (Loss of the cross collateralization (ability to borrow against the excess equity) of the option. Historically, we have been able to fund the operating expenses of our business by borrowing against the excess equity value of the option.)*. [DB-PSI 00033762-765]
26. Deutsche Bank email, dated August 2009, re: *RenTech MAPS (If client started the day with maximum leverage (it has never done so), longs would have to underperform shorts by 11% to burn through capital and put us into non-recourse loss territory. We have triggers in place that allow us to seize control of the portfolio at any point during the day if half of the capital is depleted (ie, 5.5% long underperformance of shorts.)*). [DB-PSI 00006983-984]
27. *Barrier Option Transaction confirmation*, October 8, 2009, between Deutsche Bank AG, London Branch and Mosel Equities L.P. (*Buyer has made an independent judgment of the experience and expertise of the Investment Advisor. Buyer agrees that it shall not attempt to direct or influence the choice of investments in the Basket.*). [DB-PSI 00000181-209]

28. Deutsche Bank/GWA email, dated October 2009, re: *DB Options - possible new developments (...codification of the economic substance doctrine which, if enacted, could have serious implications with respect to the DB option transaction.)*. [DB-PSI 00036241-244]
29. Deutsche Bank/GWA email, dated October 2009, re: *DB/Weiss MAPS option (Cross selling: DB will not allow Weiss to cross sell positions held in the DB account to other prime brokers in connection with its routine rebalancing activities.)*. [DB-PSI 00036700-701]
30. Deutsche Bank email, dated November 2009, re: *Rentec Mosel EurOption #4 (Problem is they were targeting the 7X Init Leverage again but that only gets us to a 16.6% Optionality Val. We either need 8.45X Init Leverage or Libor + 133bps Term Rate?????)*. [DB-PSI 00008625-627]
31. Deutsche Bank email, dated February 2012, re: *Two Sigma Follow-up (Non-recourse financing is one option (MAPS is just a name for that)....)*. [DB-PSI 00045265-266]
32. Deutsche Bank email, dated September 2011, re: *quick summary on Rentec (Im hoping you have a rough idea of the situation re the MAPS trades. In order to resolve the question of[:] - Owner of option controlling the entire underlying - Option (really the earliest version) looks like a margin account[.] I was thinking of using a CPPI like structure[.]).* [DP-PSI 00112132-133]
33. Deutsche Bank email, dated November 2011, re: *Rentec (That's the result of having a real option.)*. [DB-PSI 00112522-523]
34. Deutsche bank email, dated December 2011, re: *Rentec confirm and IMAs (Please see below the changes to the Rentec confirm suggested by U.S. tax. I note that some of these changes are in response to changes suggested by Rentecs counsel, Winston & Strawn. I have not been privy to such communications. I trust you have been involved.)*. [DB-PSI 00020740-748]

**Documents Related to COLT Transactions:**

35. *Investment Advisory Agreement* between Renaissance Technologies Corp. and Bass Equities Ltd., dated September 1, 2002. (*Advisor is authorized, without further approval by or notice to the Client, to make all investment decisions concerning the Account....*) [RT-PSI-00396318-321]
36. Barclays *Project Colt, New Product Proposal*, dated May 28, 2002, (*COLT provides an after tax benefit to these investors through the conversion of their return from the fund from short term capital gains (taxed at 39.6%) to long term capital gains (taxed at 20%).*). [BARCLAYS-PSI-212544-557]

37. Correspondence between Barclays and Financial Services Authority re: *PROJECT COLT*, dated July 4, August 16, September 5, and September 13, 2002. [BARCLAYS-PSI-005241-243, 255-257, 260-261, and 258-259]
38. Barclays Memo, dated August 22, 2002, re: *SCM [Structured Capital Markets] Approvals paper - Project COLT (COLT provides an after tax benefit to these investors [RenTec] through the conversion of their return from the fund from short term capital gains (taxed at 39.6%) to long term capital gains (taxed at 20%). This would be achieved by substituting the Fund's direct execution of its trading strategy with the cash settled call option over a Barclays proprietary account whose performance substantially replicates the Fund's trading strategy.)*. [BARCLAYS-PSI-212590-598]
39. Letter Agreement, dated September 30, 2002, between Barclays Bank PLC and Bass Equities Ltd. (COLT Transaction). [BARCLAYS-PSI-212918-932]
40. Barclays Memo, dated April 4, 2003, re: *SCM Approvals paper - Project COLT (Renaissance II) (Palomino will not have any credit risk or market risk in the transaction, due to the fact that ... its PB account is hedged by the Synthetic Call Option and Prime Brokerage effectively has taken the downside risk. The risk borne by Prime Brokerage is akin to the risks taken in a normal collateralised [sic] Prime Brokerage relationship.)*. [BARCLAYS-PSI-213947-953]
41. *Badger Holdings L.P., Limited Partnership Agreement*, dated August 17, 2004. ([T]he General Partner shall have complete and exclusive responsibility for managing and administering the affairs of the Partnership, and shall have the power and authority to do all things necessary or proper to carry out its duties hereunder.) [RT-PSI-00396296-315]
42. Barclays Capital Memo to SCM Approvals Committee, dated September 3, 2004, re: *Approvals paper – COLT V: Renaissance Restructuring (The risk borne by Prime Brokerage is akin to the risks taken in a normal collateralised [sic] Prime Brokerage relationship, where the risks generally are confined to catastrophic losses occurring over a short period of time.)*. [BARCLAYS-PSI-004161-165]
43. *Indemnity Agreement*, dated October 1, 2004, among Barclays Bank PLC, Palomino Limited, Badger Holdings L.P., Medallion International Limited, Medallion Capital Investments Ltd., Medallion Associates L.P., Medallion Fund L.P., and Medallion RMP Fund L.P. [BARCLAYS-PSI-632877-904]
44. Letter Agreement, dated December 21, 2005, between Barclays Bank PLC and Palomino Limited (COLT Transaction). [BARCLAYS-PSI-002879-896]
45. *Investment Management Agreement*, effective October 1, 2004, between Palomino Limited and Renaissance Technologies Corporation ([T]he Manager shall have full discretion and authority, without obtaining the Client's prior approval, to manage the investment and trading of the Accounts....]. [BARCLAYS-PSI-574664-686]

46. Barclays email, dated April 2009, re: *June Balance sheet targets (Rentec wasn't comfortable with directly signing off on the deconsolidation, as they didn't view this to be their problem. They are now considering a proposal to include some new language in their investment management document which would require them to sign off should we seek to reconsolidate at a later date.)*. [BARCLAYS-PSI-025382-383]
47. Barclays email, dated April 2009, re: *Colt (Marty Malloy spoke with RenTec today and they have indicated that they are fine with the proposal in principle, although they apparently mentioned that their tax counsel would also be putting together a letter agreement of some kind for us to review in the next couple days.)*. [BARCLAYS-PSI-588643]
48. Barclays email, dated April 2009, re: *Palomino letter*, attaching April 29, 2009 letter from Renaissance Technologies to Barclays Bank re: Palomino Limited Investment Management Agreement. *(Please find the attached letter highlighting our concerns and representations that Renaissance would like Barclays to make in connection with the changes you are contemplating for Palomino.)*. [BARCLAYS-PSI-326572-575]
49. Barclays/RenTec email, dated May 2009 *(My guys have some comment on the letter and would like to discuss with our lawyers and Ed.)*. [BARCLAYS-PSI-285585-586]
50. Barclays/PwC email, dated May 2009, re: *Palomino to PwC 20/5/09 (...set up for the benefit of Renaissance, who are exposed to the majority of risks and reward.)*. [BARCLAYS-PSI-328074-077]
51. Barclays email, dated June 2009, re: *Project COLT - articles amendment (...restrict the activities of Palomino to those it is currently engaged in under the COLT transaction.)*. [BARCLAYS-PSI-577747]
52. Rentec/Barclays/Winston Strawn/OrrickHerrington/WalkersGlobal/ email, dated June 2009, re: *Palomino Limited - side letter (with attachments)*. [RT-PSI-00361844-847, RT-PSI-00361879-881, RT-PSI-00235499-500]
53. Barclays Capital Memo, dated June 24, 2009, re: Palomino Limited *(RenTec controls the major activities of Palomino and is exposed to substantially all significant risks and rewards arising from the activities carried out through the PB Accounts, being the only permitted activities of Palomino. Consequently, under IAS 27.13 and SIC 12, BBPLC should de-consolidate Palomino from the date these proposed amendments are effective because they give rise to a loss of control (IAS 27.32.)*. [BARCLAYS-PSI-139757-766]
54. Barclays email and Memo, dated June 2009, re: *Project COLT - Orphan Note (It has been agreed with BarCap Finance and PricewaterhouseCoopers ("PwC") that, following proposed amendments to Palomino's memorandum and articles of association (the "Articles") and the giving of a covenant by Barclays, as sole shareholder of Palomino, that it will not seek to amend the Articles in the future without the consent of Renaissance Technologies LLC ("RenTec"), Barclays will cease to consolidate Palomino under IFRS.)*. [BARCLAYS-PSI-026163-165]



55. Renaissance Technologies LLC letters, both dated June 26, 2009, re: *Palomino Limited (Barclays hereby further covenants to Renaissance that it shall not make any amendments or modifications to the Memorandum and Articles of Association of Palomino after the date hereof without first obtaining the prior written consent thereto of Renaissance.)*. [RT-PSI-00236651-655 and 00236914-918]
56. Letter Agreement, dated June 26, 2009, between Barclays Banks PLC, Badger Holdings L.P, Renaissance Technologies LLC and Palomino Limited. [BARCLAYS-PSI-730031-032]
57. *The Companies Laws ... Memorandum and Articles of Association of Palomino Limited*, dated June 26, 2009. [RT-PSI-00234974-998]
58. Barclays emailed, dated June 2010, re: *Renaissance*, attaching *Barclays Capital, Portfolio Analysis of Renaissance Portfolios, CRA*, dated June 2010. [BARCLAYS-PSI-330659-682]
59. Barclays email, dated May 2010, re: *COLT XIX - Draft SCM Approvals Notification (The options reference the value of these PB [Prime Brokerage] accounts, which is equivalent to them referencing the assets directly, and therefore there is no leakage between the value of the assets ... and the value of the options. Thus, the net effect is that Barclays is extending senior financing to RenTec.)*. [BARCLAYS-PSI-010082-083]
60. Barclays email, dated November 2010, re: *Privileged - Colt (This [the GLAM] is a detailed write up of Colt concluding it doesn't work. We can discuss on MDs [managing directors] call but I intend to reach out to RenTec and Ed Cohen this morning to make sure they are aware. We will also confirm it does not impact Barclays. The only issue for Barclays I could see is some deemed wht [withholding] agent issue as the memo concludes that RenTec are the legal owner of the stocks. To me this would signal that IRS is inevitably going to litigate Colt.)*. [BARCLAYS-PSI-748506-507]
61. Barclays Memo to SCM US Approvals Committee, dated October 3, 2012, re: *COLT XXVII (The tax risk is assumed by the Client. The New Option Transaction does not meaningfully increase Barclays' reputation risk in relation to the Option Transactions, because writing a new option (or exercising an existing one) should be viewed as the maintenance of a longstanding structure.)*. [BARCLAYS-PSI-016946-947]
62. Barclays Memo to Tax Risk Committee, dated October 3, 2012: re: *COLT (There is a reputation risk for Barclays, especially if the matter proceeds to court and the IRS's challenge and Barclays' role become publicly disclosed.)*. [BARCLAYS-PSI-016951-952]
63. Barclays email, dated October 2012, re: *COLT SCM Transaction/Important (The SCM US Approvals Committee recently approved an option transaction in which US tax reputation risk is an issue, and the Committee has engaged in the Tax Risk Committee on the transaction.)*. [BARCLAYS-PSI-748590]

64. Barclays Memo to Tax Risk Committee, dated October 12, 2012, re: *COLT (This memo explains the background to an investment structure which has been in place for 10 years and explains why, notwithstanding the publicity risk that Barclays is subject to as a witness to the case if the Client proceeds to litigate in court, we believe it remains an appropriate transaction for Barclays to be a party to.)*. [BARCLAYS-PSI-018114-116]
65. Barclays Memo to SMC US Approvals Committee, dated November 2012, re: *Project COLT XXVII (Renaissance Technologies) - Approvals Notification (SCM has notified and received approval from the following in relation to proceeding with the proposed transaction: Tax, Finance, Credit Risk, Market Risk, Regulatory, Legal, Compliance, and Operations.)*. [BARCLAYS-PSI-017091-093]
66. Barclays email, dated November 2012, re: *Palomino options (...it was agreed that any exit from this structure would not result in the 60 days notice would be given, rather there would be more notice meaning that Reny would not have to close out the option and suffer short term capital gains tax.)*. [BARCLAYS-PSI-322103]
67. *BARCLAYS, New COLT Transaction, Transaction Review Committee, December 2013, (A reputational risk may arise to Barclays if the Original COLT Transaction proceeds to court or is included in a public hearing. However, it is considered that the New COLT Transaction does not meaningfully increase Barclays' reputation risk in relation to the COLT Transactions, especially as it eliminate the Rate Differential Benefit.)*. [BARCLAYS-PSI-748587-589]
68. Excerpts of *Securities and Exchange Commission Form 20-F*, Annual Reports for Barclays PLC, Barclays Bank PLC, reflecting that Palomino was not controlled by Barclays.
  - a. Fiscal year ended December 31, 2009;
  - b. Fiscal year ended December 31, 2010;
  - c. Fiscal year ended December 31, 2011;
  - d. Fiscal year ended December 31, 2012; and
  - e. Fiscal year ended December 31, 2013.*(...they are excluded from consolidation because the Group either cannot direct the financial and operating policies of these entities, or on the grounds that another entity has a superior economic interest in them.)*

From: Jonathan Mayers <jmayers@rentec.com>  
Date: 10/21/2008 09:13:19 AM  
To: Frank X Nelson/db/dbcom@DBAMERICAS; Eamon McCooey/db/dbcom@DBAmericas;  
Peter Brophy/db/dbcom@DBAmericas; cn=frank x nelson/ou=db/o=dbcom@dbamericas  
Subject: [Fwd: FW: DB/Rentec - Response to Issues Discussed on 10/16]

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----- Original Message -----  
Subject: FW: DB/Rentec - Response to Issues Discussed on 10/16  
Date: Mon, 20 Oct 2008 18:08:03 -0500  
From: O'Brien, Michael P. <MPObrien@winston.com>  
To: 'Jonathan Mayers' <jmayers@rentec.com>

word from Josh

Michael P. O'Brien  
Partner

T: +1 (312) 558-8097

-----Original Message-----  
From: Goldstein, Joshua [mailto:JGoldstein@McKeeNelson.com]  
Sent: Monday, October 20, 2008 6:04 PM  
To: O'Brien, Michael P.  
Cc: Kopp, Steven  
Subject: RE: DB/Rentec - Response to Issues Discussed on 10/16

Dear Michael,

A couple of comments regarding your email of Friday, October 17.

1) You have proposed 20 Exchange Business Days as the use-it-or-lose-it timing on the Advisor For Cause Termination Event. I'm sure you must realize that this is a huge departure from the 4 Exchange Business Days that you had reviewed in multiple earlier drafts (and please note that the clock started ticking, under the earlier drafts, from the time that the Advisor became aware of the facts giving rise to the breach - without regard to any 2- day cure the Client might have). In any event, expanding this to 20 Exchange Business Days does not work from a tax standpoint. 20 Exchange Business Days to make a termination decision under a 13-month option tilts the balance strongly in favor of viewing the accrual of this termination right into the effective conversion of the option into an American style option. Although we conveyed to you that we could give you another day - to 5 Exchange Business Days, unfortunately we cannot give you 20 days. In addition, for terminations such as breaches of confidentiality and representations, there seems to be no rational business reason that would require you to have more days to make a termination decision (particularly no business reason that would withstand our tax analysis).

Permanent Subcommittee on Investigations

EXHIBIT #21

2) I have spoken with DB about the Pricing Period adjustment which RenTech and you are rejecting. DB has expressed to me that you're position is the same one that you, me and my colleague Steve Kopp discussed on the phone last week: namely that you believe that because the Calculation Agent determines the Pricing Period, the basis risk that we identified does not exist. Perhaps there is a misunderstanding, but permit me to reiterate our position. The definition of Pricing Period states:

"In the event that the Buyer disputes the Calculation Agent's determination of the Pricing Period and can reasonably demonstrate that an investment manager could have liquidated and reduced to cash a portfolio substantially similar to the Basket in a shorter period subject to the same conditions considered by the Calculation Agent in determining the Pricing Period, then Buyer and Seller shall mutually determine in good faith any adjustment to the Pricing Period and the Pricing Period shall end on the last day of such adjusted period."

Suppose, for example, that the Confirmation is terminated on a Monday morning by Mosel because of a Credit Event Upon Merger in respect of DB. The Pricing Period would then be treated as having started at the time of such termination on Monday. However, the IAA would not automatically terminate and so DB, if it chose to terminate the IAA, would need to give three days notice to the Advisor that it was terminating the IAA without cause. The Advisor then has three days to decide whether it is going to control the Liquidation. After those three days pass, if the Advisor has not stated that it will control the Liquidation, then the Client may take control of the Account and commence the Liquidation. (Alternatively, the Advisor can notify DB on, say, Wednesday, that it is commencing a Liquidation.)

Thus, under this scenario, DB wouldn't be able to commence a Liquidation of the Account until three days after the Option terminated, on Thursday (assuming DB gave a termination without cause notice to the Advisor as soon as Mosel delivered a Buyer Termination Notice of the Option). However, the Pricing Period began on Monday. But suppose further that DB was able to completely liquidate the account on Thursday (in one Exchange Business Day). The Calculation Agent may state (although I don't know that they reasonably could) that the Pricing Period ran from Monday through Thursday. But the text of the Confirmation allows Mosel to dispute this determination - they can point out that the Liquidation could have been completed in one Exchange Business Day (because it actually was), and so they say that the Pricing Period should have started and ended on one Exchange Business Day, i.e. on Monday. Mosel could then argue that they believe that the Option should have been liquidated at market values reflecting where the market was on Monday rather than Thursday - leaving DB exposed to market movements (basis risk) from Tuesday through Thursday. This is the problem we are trying to eliminate. And of course it doesn't matter whether the actual Liquidation is one day, or several days, or a month, or whether, under the alternative scenario, the Advisor notifies DB on Wednesday that it is commencing a Liquidation (and actually conducts the Liquidation in one day or any other number of days). The same basis issue lurks in either of these scenarios.

Thus, even though the text says the Calculation Agent determines the Pricing Period, it also allows the option Buyer to challenge such determination. We are simply addressing that this dispute mechanism creates the basis risk that we want to mitigate.

Please let me know your thoughts.

Thank you,

Josh

Joshua J. Goldstein  
Associate

McKee Nelson LLP  
One Battery Park Plaza  
New York, NY 10004  
Phone: (917) 777-4378  
Fax: (917) 777-4299  
jgoldstein@mckeenelson.com

-----Original Message-----

From: O'Brien, Michael P. [mailto:MPObrien@winston.com]  
Sent: Friday, October 17, 2008 3:06 PM  
To: Goldstein, Joshua  
Cc: 'Jonathan Mayers'  
Subject: DB/Rentec - Response to Issues Discussed on 10/16

Josh:

This morning, I discussed with Jonathan the issues that we discussed yesterday afternoon concerning our latest comments on the outstanding points. Rentec's response on two of those issues is as follows:

1. Short Sale Liquidity Failure - Rentec is willing to accept DB's proposed approach with respect to creating Designated Positions on a transaction by transaction basis (in contrast to the "all or nothing" approach we proposed) to avoid a Short Sale Liquidity Failure. Thus our proposed change of 10/16 to the "Short Sale Liquidity Failure" rider can be ignored. Instead we propose to redraft slightly the parenthetical provision of the first sentence of the rider to read as follows:

"provided that, for purposes of this provision and in respect of any proposed short sale, the Client shall be deemed to have made sufficient shares available to support such short sale if the Client notifies Advisor that such short sale creates a Designated Position."

As discussed, our proposed addition of a new Section 2(b)(v) remains appropriate.

2. Section 8(d) - With respect to the lead in to Section 8(d), third paragraph of the DB proposed rider, Rentec is ok to withdraw the concept of the Advisor For Cause Termination Event but would propose to revise the relevant language to read:

"within twenty (20) Exchange Business Days of (x) in the case of (W) or (Y), attaining knowledge of the facts giving rise to the relevant breach or (y) in the case of (X), the occurrence of the Material Client Support Breach"

3. Pricing Period - I understand that Rentec is discussing directly with DB its concerns with the changes to this provision.

Please do not hesitate to contact me with any questions concerning the above.

Best regards

Michael P. O'Brien  
Partner

Winston & Strawn LLP  
35 West Wacker Drive  
Chicago, IL 60601-9703  
T: +1 (312) 558-8097  
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bio<<http://www.winston.com/index.cfm?contentID=24&itemID=12352>> |  
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--  
Jonathan Mayers  
Renaissance Technologies LLC  
800 Third Avenue, 35th floor  
New York, New York 10022  
tel (212)872-1614

**EXCERPT**

Bates No.	DB-PSI 00122458
Call Duration	32:19
Date of Call	November 7, 2008
<b>Time Stamp</b>	<b>Transcription</b>

**08:47**

	<b>Mr. Ramakrishna:</b> In that situation.. so that's the way option is supposed to work.. now what I've uh.. now this is meant... this is structured as an option because
	<b>Mr. Broeksmit:</b> Yeah for tax reasons <b>Mr. Ramakrishna:</b> For tax reasons but the.. the.. the option makes it clear that the premium is the only.... only commitment that the option holder has <b>Mr. Broeksmit:</b> Yeah umm hmm <b>Mr. Ramakrishna:</b> And so it's like a non-recourse strike <b>Mr. Broeksmit:</b> Yes



**TRANSCRIPT OF AUDIO RECORDING PRODUCED  
TO THE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS**

Date: November 6, 2008  
Parties: Jim Rowen, Peter Brown, Satish Ramakrishna and Deepak Agrawal  
Bates: DB-PSI 00122457

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**Peter Brown:** ... So I think your question is how would we react when some extraordinary thing happened that can't be so easily measured in market statistics? Is that accurate?

**Satish Ramakrishna:** Absolutely, yes.

**Peter Brown:** Well, the answer there is that we have a risk control department and we also have senior management, all of whom are quite tuned into what is going on in a qualitative sense in the market. Jim Rowen, here, is a perfect example. He spends a good fraction of his day calling around to various counterparties, some of whom we have relationships with and some of whom we don't, getting a sense of what is going on in the market. We then take that into account and it adjust the levels at which we run. So, for example – and now is a perfect example. October – and I think I can say this because it's going to be in the letter which I'm just writing. October was a record month for us. And, ah, we've done very well so far this month. It seems like an extremely – our models are functioning very well in this environment. Nonetheless, we are, they are, we are running at reduced levels and the reason we are running at reduced levels is precisely the reasons that you bring up. It's – there's still – it's not clear – we're still in uncharted territory here. We don't know exactly – is government intervention going on. This is new – the models don't see the government intervention but we do, and we are nervous that something could happen. As a result, right now the model would like to have very large portfolios, but we are running at reduced levels simply because of those qualitative extraordinary items you were talking about. So we have actually intervened and we do that from time to time when things like this happen.

---

**To:** eamon.mcchoey@db.com[eamon.mcchoey@db.com]; Peter Brophy[peter.brophy@db.com]  
**Cc:** Moetell, Mitch[MMoetell@winston.com]; Cohen, Edmund S.[ECohen@winston.com]; Jim Rowen[jrowen@rentec.com]; Jonathan Mayers[jmayers@rentec.com]; tkerns@rentec.com[tkerns@rentec.com]; 'DanielKoranyi'[dkoranyi@rentec.com]  
**From:** O'Brien, Michael P.  
**Sent:** Wed 12/10/2008 10:52:33 AM  
**Importance:** Normal  
**Subject:** FW: Test of representations

Eamon and Peter:

Please see Mitch's comment below.

Thanks

Michael P. O'Brien

Partner

T: +1 (312) 558-8097

WINSTON  
& STRAWN  
LLP

---

**From:** Moetell, Mitch

Permanent Subcommittee on Investigations

**EXHIBIT #23**

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**Sent:** Wednesday, December 10, 2008 8:48 AM  
**To:** O'Brien, Michael P.; Cohen, Edmund S.  
**Subject:** RE: Test of representations

In the lead-in, instead of "...in support of your legal opinion," say "...in support of your legal opinion to Mosel and certain of its affiliates."

Thanks,

Mitch

---

**From:** O'Brien, Michael P.  
**Sent:** Tuesday, December 09, 2008 11:24 PM  
**To:** Moetell, Mitch; Cohen, Edmund S.  
**Subject:** FW: Test of representations

Please see DB proposed reps below. Please let me know how you wish to respond to DB.  
Best

---

**From:** Eamon McCooey [mailto:[eamon.mccooey@db.com](mailto:eamon.mccooey@db.com)]  
**Sent:** Tuesday, December 09, 2008 10:00 PM  
**To:** O'Brien, Michael P.  
**Cc:** [peter.brophy@db.com](mailto:peter.brophy@db.com); [frank.x.nelson@db.com](mailto:frank.x.nelson@db.com)  
**Subject:** Fw: Test of representations

Michael,

Please find listed below the proposed draft of the DB reps that we will make to Winston, please let me know if this format is acceptable.

Regards,  
Eamon McCooley  
Deutsche Bank Securities Inc.  
Global Markets  
Global Prime Finance  
(212) 250-6856 - Office  
[REDACTED]  
(212) 250-6852 - Group Line

[REDACTED] = Redacted by the Permanent  
Subcommittee on Investigations

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**Marcelo Riffaud/db/dbcom**

12/09/2008 09:45 PM

To

frank.x.nelson@db.com, Eamon McCooley/db/dbcom@DBAmericas, Peter Brophy/db/dbcom@DBAmericas

cc

marcelo.riffaud@db.com

Subject

Fw: Test of representations

Frank,

Here is the text of the rep letter for Winston. Please note that since we do not yet know the date of the option, the MIAA and the SIAA, we cannot date this or finalize this document. But that shouldn't be a problem, because it won't be required in final form until then -- which is the same day that we'll get their opinions.

Please show this to Winston. No doubt they will want to comment.

As to McKee's rep letter, they will likely want to draft their own as well, but we can do the same with their reps as I have done here.

\_\_\_\_\_ START OF WINSTON REP  
LETTER \_\_\_\_\_

[ENTER DATE]

Winston and Strawn [Correct spelling]  
[Address]

In connection with (a) the Outperformance Barrier Option Transaction between Deutsche Bank AG London ("DB") and Mosel Equities LP ("Mosel") dated [ ] (the "Option"), (b) the Master Investment Advisory Agreement between DB and Renaissance Technologies LLC ("Rentec") dated [ ] (the "MIAA"), and (c) the Supplemental Investment Advisory Agreement (the "SIAA") between DB and Rentec dated [ ] (the "SIAA" and together with the Option and the MIAA, the "Transaction Documents"), you have asked that we provide the following representations as part of the basis of support of your legal opinion.

Unless the context indicates otherwise, all capitalized terms used herein and not otherwise defined herein shall have the meanings provided in the

Transaction Documents.

DB represents and warrants as follows:

1. DB would not be willing to extend a loan commitment to Mosel in the amount that would be necessary to enable Mosel (as borrower) to trade positions in securities up to the limits set forth in the SIAA in an account owned by Mosel (as borrower) that was capitalized with an amount equal to the Sub-Account Initial Capital Available, if DB's recourse, as lender, were limited to the assets in that account; and
2. It will be operationally feasible for DB to create Designated Positions, both by not executing transactions directed by the Advisor and by unwinding or liquidating Effected Positions without the direction of the Advisor.

DEUTSCHE BANK AG LONDON

By: \_\_\_\_\_  
 Name:  
 Title:

By: \_\_\_\_\_  
 Name:  
 Title:

\_\_\_\_\_ END OF WINSTON REP  
 LETTER \_\_\_\_\_

— = Redacted by the Permanent  
 Subcommittee on Investigations

Marcelo Riffaud  
 Managing Director | Legal Department  
 Deutsche Bank AG | 60 Wall St. | New York, NY 10005  
 212.250.7628 (office) | \_\_\_\_\_ | 732.460.7183 (fax)

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**MASTER INVESTMENT ADVISORY AGREEMENT**

AGREEMENT dated as of December 15, 2008 (the "Agreement") between **Deutsche Bank AG London** (the "Client"), and **Renaissance Technologies LLC** (the "Advisor," and with the Client, each a "Party" and together, the "Parties").

In consideration of the premises and mutual promises hereinafter set forth, the parties hereto agree as follows:

1 Appointment of the Advisor.

(a) The Client hereby appoints the Advisor as the exclusive manager of a separately managed account containing a designated portion of the Client's proprietary portfolio (the "Account") upon the terms hereinafter contained and in accordance with the Client's Investment Guidelines and Compliance Restrictions as set forth on Appendix I hereto, (the "Master Investment Guidelines and Compliance Restrictions") and the Advisor hereby accepts such appointment and agrees to assume the obligations and duties set forth herein until its appointment shall be terminated as hereinafter provided. Any amendment to the Master Investment Guidelines and Compliance Restrictions must be in writing and signed by the Parties. At the request of the Client, the Account may be divided into one or more sub-accounts (each, a "Sub-Account"). With respect to any Sub-Account, further investment guidelines and compliance restrictions will be established under Supplemental Investment Guidelines and Compliance Restrictions ("Supplemental Investment Guidelines and Compliance Restrictions") pursuant to a Supplemental Agreement (as defined below). The Client may further sub-divide each Sub-Account into (i) one or more "Trading Accounts" and (ii) one or more "Term Accounts," as those terms are defined in the applicable Supplemental Agreement. Upon the establishment of any Sub-Account, the Parties shall execute a Sub-Account Supplemental Investment Advisory Agreement, (a "Supplemental Agreement," ) in the form attached hereto as Appendix II, so as to include, if appropriate, Supplemental Investment Guidelines and Compliance Restrictions with respect to such Sub-Account, and any other terms individually applicable to such Sub-Account.

(b) The fees and compensation of the Advisor for the performance of its duties under this Agreement are as set forth in the applicable Fee Letter (each, a "Fee Letter" and all such fees, collectively "Advisor Fees") entered into between the Advisor and the Client attached as an appendix to each Supplemental Agreement.

(c) Until the termination of this Agreement, and subject to the provisions of this Agreement permitting it to act otherwise, the Client shall provide, or cause to be provided, such services, maintain such reports and perform its obligations under this Agreement as is necessary to permit the Advisor to perform its obligations under this Agreement, subject to the limits contemplated by the Master Investment Guidelines and any applicable Supplemental Investment Guidelines.

(d) The Client owns all assets in the Account, is entitled to all income in respect thereof (other than income credited in respect of Designated Positions (as defined below)) and is responsible for all expenses in respect thereof (other than expenses debited in respect of Designated Positions) subject only to the obligations of the Client to the Advisor hereunder or under any Fee Letter. Nothing in this Agreement shall be deemed or construed to convey to the Advisor an ownership interest in the Account.

2 Functions, Powers, Duties and Obligations of the Advisor; Designated Positions.

(a) During the continuance of its appointment the Advisor shall, subject to compliance with the Master Investment Guidelines and Compliance Restrictions and any applicable Supplemental Investment Guidelines and Compliance Restrictions, have full power, authority and right to:

(i) supervise and direct the investment and reinvestment of all assets in the Account, and engage in such transactions on behalf of the Client's Account, in the Advisor's discretion and without prior



consultation with the Client, subject only to the terms of this Agreement, in any and all forms of securities or other property, including, without limitation, derivatives, options, futures and commodities, as permitted by the Master Investment Guidelines and Compliance Restrictions and any applicable Supplemental Investment Guidelines and Compliance Restrictions (any transaction directed by the Advisor and actually executed on behalf of the Account pursuant to such directions being an "Effected Position"); provided, that any Effected Position that, at the time of its execution, results in an Investment Guidelines Violation or a Compliance Violation (as each term is defined below in Section 8(c)), shall remain an Effected Position unless and until liquidated;

(ii) hold temporary cash balances in the Account or invest such temporary cash balances in money market funds or comparable short-term investments with interest thereon credited to the Account and the applicable Sub-Account;

(iii) prepare or procure the preparation of reports on the Account's investment performance and such other matters, as further provided herein;

(iv) select and place orders with brokers and dealers to execute Account transactions, as further provided herein; and provide such other services in connection with the management of the Account by mutual consent of the Client and the Advisor.

The Advisor shall keep or cause to be kept on behalf of the Client's Account such books, records, statements and accounts as may be necessary to evidence a complete record of all transactions carried out by the Advisor for the Account; and shall permit the Client and its employees and agents to inspect such books, records and statements at all reasonable times.

In exercising rights and carrying out its duties hereunder the Advisor is authorized to act for the Account and on the Client's behalf either by itself or in part through its authorized agents as it shall determine; provided, however, that the appointment of any agent shall not relieve the Advisor of its responsibilities or liabilities hereunder. In managing the Account and exercising rights and carrying out its duties hereunder, the Advisor shall exercise the same care that it would exercise in handling similar matters for its own account, except as such standard of care may be otherwise modified by the express terms of this Agreement.

The Advisor is authorized but shall not be required (x) to tender or convert any securities in the Account, (y) to execute instruments with regard to such securities and (z) to endorse, transfer or deliver such securities. Unless directed by the Client, the Advisor shall not execute waivers or consents with regard to any securities in the Account, not exercise rights (including voting rights) with respect to such securities and not consent to any class action, plan of reorganization, merger, combination, consolidation, liquidation or similar plan with reference to such securities.

The authorities herein contained are continuing ones and shall remain in full force and effect until revoked by termination of this Agreement as hereinafter provided, but such revocation shall not affect any liability in any way resulting from transactions initiated prior to such revocation.

(b) Notwithstanding the power, authority and rights of the Advisor under Section 2(a), the Client shall retain the power to reject any transaction directed by the Advisor on behalf of the Account prior to the actual execution thereof and to unwind or liquidate any Effected Position without the direction of the Advisor. Upon the exercise of such power by the Client or otherwise as set out below, a transaction on behalf of the Account shall create (with the consequences set out below) a "Designated Position" if:

(i) such transaction is directed by the Advisor and is not executed in accordance with such directions as the result of instructions by the Client (other than inclusion on the Restricted List);

(ii) an Effected Position is unwound or liquidated by the Client without the direction of the Advisor;

(iii) such transaction is directed by the Advisor and is not executed in accordance with such directions as the result of the direct market access (or equivalent) execution system of the Client being inoperative;

(iv) such transaction is directed by the Advisor and is not executed in accordance with such instructions but Advisor receives notification from the Client that the transaction was executed; or

(v) such transaction is a Potential Short Sale (as defined in Section 8(d)) in respect of which the Client has provided to the Advisor an SSLF Designated Position Treatment Notice (as defined in Section 8(d)) and the Advisor confirms, during such Exchange Business Day, that the Advisor would have directed such Potential Short Sale on such Exchange Business Day as a transaction for the Account if the Client had actually made, or had caused to be made, available sufficient shares to support such Potential Short Sale.

Notwithstanding the foregoing a transaction directed by the Advisor shall not create a "Designated Position" and shall be given no effect under this Agreement if (x) the transaction is a short sale that is described in sub-clause 2(b)(i) above and, prior to direction by the Advisor, the Client had notified the Advisor that it did not have reasonable grounds to believe that the relevant security could be borrowed so that it could be delivered on the date delivery of such security would have been due in respect of such short sale, (y) the transaction is described in sub-clause 2(b)(iii) above and the Client has provided the Advisor notice that such execution system is or was inoperative, provided that if the Client provides such notice after the execution system becomes operative again, it must be provided no later than commencement of trading on the next Exchange Business Day (for the affected Exchange or Exchanges) after the Client has become aware of the existence of such transaction, or (z) the transaction, if executed in accordance with such directions, would have resulted in an Investment Guideline Violation or a Compliance Violation. In the event that the Advisor receives notice that the direct market access (or equivalent) execution system is inoperative (x) the Client may direct the Advisor to cancel, and upon such direction the Advisor will cancel, any open orders directed for execution through such system and such cancelled orders shall be given no effect under this Agreement and (y) until it receives notice that the system is operative, the Advisor will not direct new transactions on behalf of the Account for execution in such system.

A "Designated Position" represents the hypothetical position, and the results thereof, that would have existed in the Account if the transaction that created such Designated Position had been executed in accordance with the directions of the Advisor or if the Effected Position unwound or liquidated by the Client without the direction of the Advisor had not been so unwound or liquidated, as the case may be (Designated Positions and Effected Positions being "Advisor Positions"). A Designated Position shall be deemed liquidated only (x) if the Advisor notifies the Client that the Designated Position is to be deemed liquidated; (y) in connection with a Liquidation (as defined below) or (z) if the Designated Position would have caused, at any time, an Investment Guideline Violation or a Compliance Violation if the position had actually been an Effected Position at such time, in which case the Designated Position shall be deemed liquidated at the time such violation would have occurred.

The Client will maintain a record of Designated Positions and the performance thereof and any correspondence from the Client in respect of Designated Positions shall be sent to the Advisor in accordance with Section 11(g). For purposes of determining the performance of any Designated Positions in the Account or any Sub-Account, the prices associated with Designated Positions will be (X) in the case of a Designated Position created under any of sub-clauses (i), (iii), (iv) or (v) above, the initial price shall be within market parameters based on the time the transaction that created the Designated Position would have been executed, or (Y) in the case of a Designated Position created under sub-clause (ii) above, the initial price shall be at the price the initial Effected Position was unwound or liquidated if such Designated Position was established as a result of the unwinding or liquidation of an Effected Position; and the price associated with the deemed liquidation of a Designated Position shall be

within market parameters, based on the time such liquidation is deemed to have occurred (in accordance with the preceding paragraph). Dividends and interest income and expenses shall be credited or debited, as applicable, during the tenure of a Designated Position.

(c) At any time the Account shall consist of the Advisor Positions outstanding at such time and any cash (or investments of such cash) then held in the Account.

### 3 Trade Process Procedures.

(a) Daily Trade Blotter File. No later than at the close of business (i.e., 5:00 p.m. New York Time) on each "Exchange Business Day" (as used herein, as defined in the 2002 ISDA Equity Derivatives Definitions and with respect to the primary Exchange(s) on which such equity securities or Underlying Securities (as defined in the Master Investment Guidelines and Compliance Restrictions or any applicable Supplemental Investment Guidelines and Compliance Restrictions) in the Account trade, provided that if the context does not relate to an equity security or Underlying Security, then the applicable primary Exchange shall be the New York Stock Exchange), the Advisor shall deliver via electronic transmission to the relevant Client contact specified in Section 11(g) below (or such other person as the Client may specify in writing) a "Trade Blotter File" setting forth for each Advisor Position occurring on such Exchange Business Day, the following:

- (i) the Ticker (or other security identifier);
- (ii) the quantity and transaction price (gross basis);
- (iii) commission or any other transaction fee, if available;
- (iv) the name of the third party executing broker (if any);
- (v) the applicable Sub-Account or Sub-Accounts and if the trade is to be divided among multiple Sub-Accounts, the relevant allocation to each such Sub-Account; and,
- (vi) transaction type (buy, long sale, short sale, etc.);

provided, further, at any time during the term of this Agreement, the Advisor shall provide, once every hour prior to the close of business during such Exchange Business Day, intra-day reports setting forth the information described in this Section 3(a).

The Trade Blotter File shall be delivered to the Client in mutually agreed format/medium.

(b) Short Sales. Prior to effecting any short sales in any security for the Account, the Advisor shall obtain, from the authorized designee of the Client, short sale borrowing capability, it being understood and agreed that securities borrowing transactions to cover short sales shall be the responsibility of the Client. The Advisor shall effect all short sales and all other securities sales for the Client's Account in full compliance with all applicable short sale rules under federal securities law and regulations and the rules of the relevant securities exchange.

(c) Third Party Brokers. Other than in respect of the investment of cash, the Advisor shall execute trades in or for the Account only with those brokers identified on Appendix III hereto. Appendix III may, from time to time, be amended in writing by mutual agreement of the parties hereto, such agreement not to be unreasonably withheld. Notwithstanding any provision regarding the Advisor's authority hereunder to act on behalf of the Client, any documentation required in connection with establishing such brokerage account shall be reviewed and approved by the Client prior to execution, such approval not to be unreasonably withheld.

(d) Equity Position Limitations. The Advisor specifically agrees and acknowledges that (i) U.S. and foreign securities and banking laws applicable to the Client may limit from time to time the trading decisions of the Advisor in respect of the Account; (ii) specifically (by way of example, and without any limitation) pursuant to applicable U.S. banking laws and regulations the Client is subject to general limitations on holding a class of the outstanding voting equity securities or any class of equity securities (voting and non-voting) of any U.S. company; and (iii) under relevant U.S. and foreign banking and securities laws, generally any equity position of a particular issuer held in the Account will be aggregated with equity positions of such issuer held in other proprietary account(s) of the Client for purposes of determining compliance with such banking laws. For purposes of this paragraph, the Client will notify the Advisor, from time to time, of such U.S. and foreign laws and regulations as may be applicable to the Client.

(e) Regulatory Compliance. The Advisor specifically agrees and acknowledges that it may, from time to time, be necessary or advisable, to the extent necessary to maintain compliance with U.S. or non-U.S. applicable law or to maintain compliance with this Agreement, to liquidate certain Advisor Positions or to take other remedial actions. The Advisor agrees to comply promptly with any Client directions in this regard, including, but not limited to, those arising out of Section 8(c)(iii) below.

#### 4 Services of the Advisor Not Exclusive.

The services of the Advisor to the Client hereunder are not to be deemed exclusive and the Advisor shall be free to render similar services to others and to retain for its own use and benefit all fees or other moneys payable thereby and the Advisor shall not be deemed to be affected with notice of or to be under any duty to disclose to the Client any fact or thing which comes to the notice of the Advisor or any employee or agent of the Advisor in the course of the Advisor rendering similar services to others or in the course of its business in any other capacity or in any manner whatsoever otherwise than in the course of carrying out its duties hereunder. Nothing in this Agreement shall limit or restrict the right of any directors, officers or employees of the Advisor to engage in any other business or to devote his time and attention in part to the management or other aspects of any other business, whether of a similar or dissimilar nature. The Advisor may aggregate purchases or sales of securities for the Account with purchases or sales of the same securities by other clients of the Advisor, provided that the Advisor first discloses to, and obtains the approval of, the Client regarding the Advisor's allocation procedures. The Advisor agrees that in the event that purchases or sales of securities for the Account shall coincide with purchases or sales of the same securities by other clients of the Advisor, the Advisor will make such allocation in a manner believed by the Advisor to be equitable to each client.

Subject to Section 3(c), instructions to execute securities transactions may be placed by the Advisor with brokers, dealers and banks who supply services to the Advisor and such services may be used by the Advisor in advising other clients of the Advisor.

#### 5 Indemnification.

Each Party (as applicable, the "Indemnifying Party") agrees to indemnify, defend and hold harmless the other Party (the "Indemnified Party") and its officers, directors, shareholders, employees, affiliates and agents from and against all demands, claims, liabilities, damages, expenses (including legal fees and disbursements) and losses (collectively, "Claims") to the extent resulting directly from, and subsequent to, any action or failure to act by the Indemnifying Party that results in any material breach by the Indemnifying Party of any of the representations, warranties or agreements of the Indemnifying Party contained in this Agreement and the Appendices annexed hereto. Notwithstanding the foregoing, the Indemnifying Party shall not be liable for any Claim resulting from its failure to act if the Indemnifying Party made good faith and commercially reasonable efforts to take the relevant action but was unable to timely effectuate such action as a result of market conditions or other circumstances beyond its control.

6 Agency Cross Transactions.

Solely for the benefit and for the best interest of the Client (and, for the avoidance of doubt, not with a principal purpose of benefiting itself or one of its other clients), the Advisor shall be permitted to effect transactions between the Client's Account and any other account for which the Advisor acts as investment advisor. In connection with such transactions, the Advisor may act as broker for, receive commissions from, and have a potentially conflicting division of loyalties and responsibilities regarding, both parties to such transactions. The foregoing permission may be revoked at any time by written notice from the Client to the Advisor. For the avoidance of doubt, the Advisor may at any time effect bilateral transfers of cash or securities between Sub-Accounts (i.e., journals).

7 Assignment.

This Agreement may not be assigned without the prior written consent of the non-assigning Party and any purported assignment without such consent shall be void and of no effect. Neither Party shall unreasonably withhold consent to any proposed assignment of this Agreement by the other Party to any of its affiliates. In the event that a Party wishes to assign this Agreement that party must provide to the non-assigning Party such documents as the non-assigning Party may reasonably request in connection with the assignment and shall allow a reasonable time during which the non-assigning Party may review any such documents.

8 Termination.

(a) This Master Agreement and the management services provided for herein shall continue in full force and effect until terminated by one of the parties hereto as provided below. Each Supplemental Agreement shall continue in full force and effect until the termination date set out therein unless earlier terminated (directly, or by terminating this Master Agreement) by one of the parties as provided below.

(b) Any Supplemental Agreement may be terminated by the Client, without cause, upon not less than three (3) Exchange Business Days prior written notice to the Advisor specifying the effective date of such termination, provided that the Client may not terminate more than one Supplemental Agreement, without cause, in any period of 20 consecutive Exchange Business Days (without giving effect to the adjustment of the termination date, pursuant to Section 9(a), as the result of the Advisor controlling and managing the Liquidation of the applicable Sub-Account). In the event only one Supplemental Agreement is in effect, the Client may terminate this Agreement concurrently with a termination of such Supplemental Agreement, by so specifying in the termination notice. In the event no Supplemental Agreement is in effect, the Client may terminate this Agreement immediately upon notice to the Advisor.

(c) This Agreement or any Supplemental Agreement may be terminated by the Client, for cause, upon delivery of written notice to the Advisor in the circumstance described in this Section 8(c). In the event this Agreement is terminated for cause under this Section 8(c), all Supplemental Agreements will terminate upon the termination of this Agreement.

(i) In the event that (A) the purchase, sale or holding of any security or other investment in the Account or a Sub-Account, any of the Advisor's management activities relating to the Account or a Sub-Account, or any transaction pursuant to this Agreement does not comply with Part A of Appendix I hereto (a "Master Investment Guidelines Violation") or any applicable investment guidelines pursuant to a Supplemental Investment Guidelines and Compliance Restrictions (a "Supplemental Investment Guidelines Violation" and, together with a Master Investment Guidelines Violation, an "Investment Guidelines Violation") and (B) the Advisor, acting in good faith and on a best efforts basis, fails to remedy the Investment Guidelines Violation not later than the relevant cure period, if any, described below after the Advisor knows or should have known of such Investment Guidelines Violation, then (X) in the case of a Supplemental Investment Guidelines Violation, the Client shall be entitled to immediately (or at any commercially reasonable time thereafter) terminate the Supplemental Agreement for the affected Sub-

Account, upon delivery of written notice to the Advisor, and (Y) in the case of a Master Investment Guidelines Violation, the Client shall be entitled to immediately (or at any commercially reasonable time thereafter) terminate this Agreement (and all Supplemental Agreements), upon delivery of written notice to the Advisor. Notwithstanding the foregoing, to the extent it is practicable for the Advisor to remedy an Investment Guideline Violation sooner than the applicable cure period specified below, the Advisor shall so remedy as soon as is practicable. For the avoidance of doubt, if no cure period for a given Investment Guidelines Violation is specified herein (including, for the avoidance of doubt, in any applicable Supplemental Agreement), the Client shall immediately be permitted to exercise its rights under clauses (X) or (Y) of this Section 8(c)(i) following the occurrence of such Investment Guideline Violation.

For purposes of this Section 8(c)(i), if the Investment Guidelines Violation is due to a breach of Position Guidelines "a", "b", "c", "d" or "e" as defined in Part A.2 of the Master Investment Guidelines: the cure period shall be five Trading Days, provided, however, that if there are more than three breaches of such Position Guidelines (for the avoidance of doubt, if there are multiple breaches of the same Position Guideline, each individual breach counts as a separate breach) continuing simultaneously, the cure period shall be two Trading Days.

(ii) The Advisor shall immediately notify the Client in the event that there is a violation of a Compliance Restriction described in Part B of Appendix I hereto (a "Master Compliance Violation") or any Compliance Restriction stated in any Supplemental Investment Guidelines and Compliance Restrictions (a "Supplemental Compliance Violation" and together with Master Compliance Violation, a "Compliance Violation"). Upon becoming, or being made, aware of a Compliance Violation, the Client shall provide to the Advisor a Violation Notice (as defined below) setting forth the terms of the remedy of such Compliance Violation (including any applicable time period to effectuate such remedy). The terms set forth by the Client shall be, to the extent practicable, commercially reasonable terms but shall take account of the fact that the violation is a Compliance Violation that may have legal, regulatory, reputational or similar consequences, in addition to economic consequences. In the event that the Advisor, acting in good faith and on a best efforts basis, fails to remedy the Compliance Violation according to the terms of the Violation Notice, then (A) in the case of a Supplemental Compliance Violation, the Client shall be entitled to immediately (or at any commercially reasonable time thereafter) terminate the Supplemental Agreement for the affected Sub-Account, upon delivery of written notice to the Advisor, and (B) in the case of a Master Compliance Violation, the Client shall be entitled to immediately (or at any commercially reasonable time thereafter) terminate this Agreement (and any Supplemental Agreements), upon delivery of written notice to the Advisor.

(iii) Upon becoming aware of an Investment Guidelines Violation or Compliance Violation, the Client shall deliver notice to the Advisor (to the relevant person specified in Section 11(g) below), specifying Advisor Positions and/or other circumstances with respect to which the Investment Guidelines Violation or Compliance Violation relates (a "Violation Notice"). The Advisor shall remedy the violation in accordance with the terms herein and therein.

(iv) In the event that (A) there occurs a material breach (as determined by the Client in its commercially reasonable judgment) by the Advisor of (1) any representation or agreement made by the Advisor in Section 12, (2) its obligation to deliver a "Trade Blotter File" or to provide intra-day reports, in each case, in accordance with Section 3(a) other than in circumstances beyond the control of the Advisor or (3) any covenant in Section 3 (other than Section 3(a)) the breach of which does not (or, with notice or the lapse of time or both, would not) otherwise constitute an Investment Guidelines Violation or a Compliance Violation and (B) unless such material breach constitutes the third (or greater) material breach of the same sub-clause within the twelve month period preceding the date of such material breach, the Advisor fails to cure such material breach within two (2) Exchange Business Days, in the case of sub-clause (1), one (1) Exchange Business Day, in the case of sub-clause (2), or seven (7) Exchange Business Days, in the case of sub-clause (3), after written notice of such material breach (an "Advisor Material Breach Notice") from the Client, then for so long as such material breach is continuing (but in no event longer than fifteen (15) Exchange Business Days after the lapse of such cure period) the Client may terminate this Agreement, for cause, upon delivery of written notice to the Advisor specifying the termination date, which date shall be no earlier than the date of such notice, provided, however, in the

case of a material breach described in sub-clause (3), the Client may terminate this Agreement only if the occurrence of a substantially similar breach by an internal manager of the Client would be sufficient to be the sole basis for the Client to terminate such internal manager. The Client must deliver the Advisor Material Breach Notice within four (4) Exchange Business Days of attaining knowledge of the facts giving rise to the relevant breach or the Client's right to terminate on the basis of such breach shall be deemed waived.

For the purposes of this Section 8(c), "Trading Day" means any day when the New York Stock Exchange, the London Stock Exchange or any other relevant or applicable exchange is open.

(d) This Agreement may be terminated by the Advisor, for cause, upon delivery by the Advisor to the Client of a written notice of termination (W) after the breach by the Client of its obligations under Section 10, (X) after the occurrence of a Material Client Support Breach (as defined below), (Y) after the material breach of any representation or agreement (subject to the cure period described below) made by the Client in Section 12 (as determined by the Advisor in its commercially reasonable judgment) or (Z) after the occurrence of an Adverse Trading Regulatory Change (as defined below). Each of (W), (X), (Y) and (Z) (after applicable cures) being an "Advisor for Cause Termination Event".

Upon becoming or being made aware of a material breach by the Client of any representation or agreement made by the Client in Section 12, the Advisor shall deliver notice to the Client (to the relevant person specified in Section 11(g) below) specifying the representation with respect to which the breach relates (a "Breach Notice"). If the Client fails to cure such breach of representation or agreement within two (2) Exchange Business Days of delivery of the Breach Notice, then the Advisor shall be entitled to immediately terminate this Agreement for cause.

The Advisor must deliver any notice of termination described in this Section 8(d) within 15 days of attaining knowledge of the facts giving rise to the Advisor for Cause Termination Event, or in each case the Advisor's right to terminate on the basis of such facts shall be deemed waived. In the event this Agreement is terminated by the Advisor for cause under this Section 8(d), all Supplemental Agreements will terminate upon such termination of this Agreement. For the avoidance of doubt, the Advisor may not terminate a Supplemental Agreement for cause without also terminating this entire Agreement (and all Supplemental Agreements) for cause. If the Advisor duly delivers a notice of termination of this Agreement pursuant to this Section 8(d), the termination of this Agreement (and all Supplemental Agreements) shall be effective upon the earliest of (i) the Advisor giving notice to the Client that it will not commence and manage a Liquidation, (ii) three (3) Exchange Business Days after delivery of the termination if the Advisor does not give notice to the Client specifying whether the Advisor will or will not control and manage the Liquidation and (iii) if the Advisor gives notice to the Client, in accordance with Section 9(a), that the Advisor will control and manage the Liquidation, the earlier of (x) twenty (20) Exchange Business Days after the delivery of such notice and (y) subject to Section 9(b) below, the completion of the Liquidation by the Advisor.

For purposes of this Section 8(d), a "Material Client Support Breach" is the occurrence of any of the following: (i) both (x) the failure by the Client to provide the Advisor by the close of trading on any Exchange Business Day reports and data files for the prior Exchange Business Day showing (A) executed transactions for the prior Exchange Business Day and (B) the status of compliance on the prior Exchange Business Day with the Master Investment Guidelines and Compliance Restrictions and with all Supplemental Investment Guidelines and Compliance Restrictions and (y) such failure is repeated on three consecutive Exchange Business Days; (ii) both (x) the failure by the Client to provide the Advisor by the close of trading on any Exchange Business Day reports and data files for the prior Exchange Business Day showing (A) cash balances, (B) portfolio positions and (C) summary financing information (debit interest and short rebates), in each case, for the prior Exchange Business Day and (y) such failure is repeated on five consecutive Exchange Business Days; (iii) both (x) the failure by the Client to provide the Advisor by the close of trading on any Exchange Business Day a report showing the net asset value of the Account for the prior Exchange Business Day and (y) such failure is repeated on the next Exchange Business Day; (iv) a DMA Failure in respect of a particular country that continues for three (3) consecutive Exchange Business Days or the occurrence of more than five (5) DMA Failures in respect of

a particular country within any period of twelve (12) consecutive calendar months; or (v) a Short Sale Liquidity Failure and the failure of the Client to cure the same within three (3) Exchange Business Days.

A "DMA Failure" means the unavailability during all of the normal trading hours on any Exchange Business Day of customary trade execution services through the Client's direct market access trading service in any country (an "Affected Country") in respect of which the Advisor is authorized to direct transactions under this Agreement unless (A) such execution services are unavailable for such Exchange Business Day in such country (x) as a result of circumstances that, notwithstanding commercially reasonable efforts by the Client to make such execution services available, are outside the control of the Client or (y) as a result of the failure of the Advisor to take any commercially reasonable action recommended by the Client to obtain relevant trade execution services unless the Advisor has previously notified the Client that the Advisor would not take such action, or (B) the Client gives notice to the Advisor that all transactions directed by the Advisor relating to the Affected Country, if any, will constitute Designated Positions.

A "Short Sale Liquidity Failure" means a material failure by the Client on any Exchange Business Day to make available, or cause to be made available, to the Advisor any shares requested by the Advisor to support any potential short sale transaction for the Account (a "Potential Short Sale") for such Exchange Business Day provided that, for purposes of this provision and in respect of any Potential Short Sale, the Client shall be deemed to have made sufficient shares available to support such Potential Short Sale if the Client notifies the Advisor (such notice, an "SSLF Designated Position Treatment Notice") that: such Potential Short Sale will create a Designated Position in the event that the Advisor confirms, during such Exchange Business Day, that the Advisor would have directed such Potential Short Sale on such Exchange Business Day as a transaction for the Account if the Client had actually made, or had caused to be made, available sufficient shares to support such Potential Short Sale. If the Advisor determines that such a material failure has occurred in respect of an Exchange Business Day, the Advisor shall notify the Client of such determination and upon such notice the Advisor shall determine the Benchmark Portfolio. A failure by the Client shall not be considered "material" if (A) the aggregate share quantity requested by Advisor to support Potential Short Sales for such Exchange Business Day exceeds, in aggregate, 110% of the aggregate of the share quantity requested by Advisor to support Potential Short Sales in the Benchmark Portfolio, (B) the shares made available by the Client to support Potential Short Sales for such Exchange Business Day exceed 90% of the shares made available by the Client to support Potential Short Sales in the Benchmark Portfolio or (C) the ratio of hard to borrow securities to generally available securities in the Potential Short Sales for such Exchange Business Day is more than 10% greater than the ratio in the Benchmark Portfolio. The "Benchmark Portfolio" for any Exchange Business Day means the arithmetic mean of the share quantity requested by Advisor to support Potential Short Sales under this Agreement and the arithmetic mean of the share quantity made available to support Potential Short Sales under this Agreement, in each case, on the day in each of the three most recent calendar months that corresponds with such Exchange Business Day (or if such corresponding day was not an Exchange Business Day, the first succeeding Exchange Business Day). In the absence of manifest error, the determination of the Benchmark Portfolio by the Advisor shall presumptively be deemed correct provided that if, within one Exchange Business Day of such determination, the Client objects to the classification by the Advisor of any security as "hard to borrow" or "generally available" then the classification of such security shall be determined by a third party mutually acceptable to each of the Client and the Advisor unless the Client and the Advisor are unable to reach agreement on such a third party within one Exchange Business Day of the Client's objection in which case the classification of such security shall be determined by Data Explorers Limited (or any successor).

For purposes of this Section 8(d), an "Adverse Trading Regulatory Change" means any change or series of changes after the date of this Agreement in any law (including, without limitation, any law, treaty, ordinance, rule, regulation, ruling, interpretation or authorization) or group of related laws or the issuance or revision or series of issuances or revisions after the date of this Agreement by any governmental or regulatory authority of any order or directive or group of related orders or directives that, in the case of any such law, order, directive or group: (1) applies to investments of, or transactions in or relating to, 50% or more of the Underlying Securities (as defined in Appendix I hereto) that have been traded in the Account in the previous 12 months in 25% or more of the MSCI Barra sectors (as defined by



the MSCI Barra US E3 model) associated with Positions (as defined in Appendix I hereto) in the Account; and (2) in the determination of the Advisor (which determination shall be made in good faith applying commercially reasonable standards), either individually or in cumulative effect with other such changes, issuances or revisions, has a material adverse effect on the ability of the Advisor to maximize the Advisor Fees; provided that "Adverse Trading Regulatory Change" shall not include the reinstatement of any price test restrictions substantially similar to the price test restriction set forth in Rule 10a-1 of the Securities Exchange Act of 1934 prior to July 6, 2007."

(e) Subject to the provisions of Section 9, upon termination of this Agreement or any Supplemental Agreement the Client will assume control of the Account (including all Sub-Accounts) or the relevant Sub-Account, as the case may be, without further liability or responsibility of the Advisor therefor.

## 9 Liquidation.

(a) In the event that (i) the Client has delivered a notice of termination in respect of any Sub-Account pursuant to Section 8(b) or (ii) the Advisor has delivered a notice of termination of this Agreement (and all Supplemental Agreements) pursuant to Section 8(d), there shall be a period of three (3) Exchange Business Days after such delivery for the Advisor to determine (in its sole discretion) whether a liquidation of the Advisor Positions in the affected Sub-Account or the Account (as the case may be) may adversely affect substantially similar positions that the Advisor manages on behalf of other clients. If, no later than the end of such period, the Advisor has made such determination and gives notice to the Client (substantially in the form attached hereto as Appendix IV) to such effect, the Advisor shall immediately commence and manage a liquidation and reduction to USD cash of all Effected Positions and a deemed liquidation and adjustment to USD cash of all Designated Positions (together, a "Liquidation") of the affected Sub-Accounts or the Account (as the case may be), subject to the provisions of Section 9(b), until such Liquidation has been completed. If the Advisor does not provide such notice to the Client by the end of such 3 Exchange Business Day period then the Client shall be entitled to assume control of the Account or the relevant Sub-Account, as applicable. Notwithstanding the specification of an earlier termination date in a notice of termination delivered by the Client pursuant to Section 8(b), if the Advisor has duly delivered to the Client a notice that it will control the Liquidation of the Account or a Sub-Account, as the case may be, this Agreement or the relevant Supplemental Agreement, as the case may be, shall terminate upon the earlier of (X) 20 Exchange Business Days from the commencement of such Liquidation by the Advisor and (Y) subject to Section 9(b) below, the completion of such Liquidation by the Advisor.

(b) Notwithstanding any provision of this Agreement to the contrary, any Liquidation by the Advisor shall be effected in such a manner, as determined by the Advisor exercising commercially reasonable judgment, to minimize market impact and preserve equity value of the affected Sub-Account(s) or the Account (as the case may be). In conducting any Liquidation, the Advisor shall give due regard to effecting proportionate reductions of any economic long positions and economic short positions. During a Liquidation, the Advisor shall not (i) direct that the affected Sub-Account(s) or the Account (as the case may be) enter into any new transaction unless such transaction would be a risk-reducing position and (ii) directly or indirectly effect the sale or transfer of any Advisor Position or any beneficial interest in any Advisor Position to any account (other than in an arms-length transaction to another Sub-Account or to another account held in the name of the Client) or entity that is, directly or indirectly, managed, advised or owned in whole or in part by the Advisor or any affiliate of the Advisor. Prior to commencement of a Liquidation by the Advisor, the Client shall (i) determine the market value of Designated Positions in the Account or Sub-Account as applicable based on the indicative bid for such Designated Positions from an unaffiliated market maker and credit or debit, as appropriate, the cash balance in the Account or Sub-Account, as appropriate, by such market value (such resulting cash balance, the "Adjusted Cash Balance") and (ii) prepare two "Equity Portfolio Analyses" of the Effected Positions in the Account or Sub-Account, as applicable, one actual and one theoretical. The actual Equity Portfolio Analysis shall utilize the actual relevant Account or Sub-Account data to generate such Equity Portfolio Analysis. The theoretical Equity Portfolio Analysis shall utilize the same Account or Sub-Account data as that used to generate the actual Equity Portfolio Analysis, but any data that reflects Effected Positions that are held long in the relevant Account or Sub-Account shall be reflected as being held short,

and any Effected Positions that are held short in the relevant Account or Sub-Account shall be reflected as being held long for the purposes of generating the Equity Portfolio Analysis. Accordingly, for the avoidance of doubt, the two Equity Portfolio Analyses shall be exact mirror images of one another. No indication shall be given to any potential bidder as to which of the Equity Portfolio Analyses is actual and which is theoretical and both shall be bid on as if they were the actual Equity Portfolio Analysis. All numerical notations on each Equity Portfolio Analysis shall use scientific notation that is accurate to the second significant decimal point and will take the following form:

$X.YZ0000 \times 10^m$ , where X is an integer between 1 and 9 (inclusive), Y and Z are each integers between 0 and 9 (inclusive) and m is an integer.

Each Equity Portfolio Analysis shall be substantially in the form attached hereto as Appendix V, and on the basis of these Equity Portfolio Analyses the Client shall obtain a firm principal bid for the Effected Positions, included in such Sub-Account or the Account (excluding, for the avoidance of doubt, any Adjusted Cash Balance in such Sub-Account or the Account at commencement of the Liquidation), as applicable, from no fewer than three market makers (one of which may be an affiliate of the Client but no one of which may be an affiliate of the Advisor) selected in the Client's sole discretion. The highest of these bids will be chosen as the "Market Bid Level."

The Client will notify the Advisor of how long the Market Bid Level bid is open for acceptance. If such initial Market Bid Level bid is open for less than one hour after such notice the Advisor shall have the right to request the Client to obtain a new firm principal bid for the Effected Positions included in the relevant Sub-Account or the Account, as applicable, and Client shall use best efforts to promptly obtain such a bid from the market maker whose bid established the Market Bid Level. The Client shall notify the Advisor of any such new bid and the amount of time such bid is open for acceptance, and upon such notice the new bid shall become the Market Bid Level, provided, that if the Client is unable to secure a new firm principal bid from such market maker, than such market maker's original bid, shall constitute the Market Bid Level. For so long as the bid that establishes the Market Bid Level remains open for acceptance, if the Advisor notifies the Client that the Advisor, in its sole discretion, has determined that the proceeds of the Liquidation of Effected Positions are not likely to exceed the Market Bid Level and therefore advises the Client to accept such bid, and the Client, using commercially reasonable efforts, would have sufficient time to accept such bid, then (x) the relevant Sub-Account or the Account, as applicable, shall be deemed to have a Market Value (as defined below) equal to the sum of the Market Bid Level and its Adjusted Cash Balance for the purpose of determining any applicable Advisor Fee, (y) the Advisor shall not commence a Liquidation of Effected Positions and (z) the Advisor shall take such actions as the Client may direct to transfer the Effected Posotions to the market maker that provided the bid that established the Market Bid Level, or as the Client may otherwise direct consistent with its ownership of the Sub-Account or Account, as applicable. If the Advisor does not timely provide the notice described in the prior sentence, then the Advisor shall immediately commence a Liquidation of the Sub-Account or Account, as the case may be. Notwithstanding the foregoing, if the Advisor advises Client in a timely fashion to accept the bid that established the Market Bid Level but the Client determines that it is not in the Client's best interest to so accept such bid, the Client shall immediately assume control of the relevant Sub-Account or the Account, as applicable, and for the avoidance of doubt, Section 9(c) shall apply.

If the Advisor does not advise the Client in a timely fashion to accept the bid constituting the Market Bid Level, then in connection with any resulting Liquidation, the quotient of (A) (I) the value of the Effected Positions in the Sub-Account or Account, as applicable, based on the sum of the market values of the Effected Positions in such Sub-Account or the Account (the "Market Value") at the commencement of the Liquidation **minus** (II) the Market Bid Level, **divided by** (B) two, shall be the "Control Trigger Decline Amount." The difference of the (D) the sum of (u) the Market Value, at the time the Control Trigger Decline Amount is determined, **plus** (v) the Adjusted Cash Balance in such Sub-Account or the Account, as applicable, **minus** (E) the Control Trigger Decline Amount shall be the Control Trigger Amount. If, in respect of a Liquidation by the Advisor of the Account or any Sub-Account, (x) at any time, the sum of (I) the applicable Market Value plus (II) the Adjusted Cash Balance in such Sub-Account or the Account, as applicable, falls below the Control Trigger Amount, (y) such Liquidation is not completed

within 20 Exchange Business Days of its commencement or (z) in the case of a Liquidation of a Sub-Account, at any time the AssetNAV of such Sub-Account is less than the Net Asset Floor (as defined in the relevant Supplemental Agreement) for such Sub-Account, then the Client may, at its sole discretion, immediately (or at any time thereafter) assume control of such Sub-Account or the Account (as the case may be) that is subject to the Liquidation upon delivery of written notice to the Advisor.

(c) Notwithstanding Section 9(a), if the Client assumes control of the Account or any Sub-Account pursuant to any provision herein or of any applicable Supplemental Agreement, the Client may, but is not obligated to, liquidate some or all of the Advisor Positions of the Sub-Account or Account, as the Client determines in its sole discretion. Upon such assumption of control, if the Client determines to liquidate any Advisor Positions or otherwise reduce exposure in the Account or any Sub-Account, the Advisor shall, upon request, actively cooperate with the Client and advise the Client (including, for the avoidance of doubt, actually conducting the Liquidation if so requested by the Client), in connection with such liquidation or exposure reduction, as to the manner in which to proceed that minimizes market impact and best preserves equity value. The Advisor shall perform its obligations under this Section 9(c) with the same level of diligence as if the Advisor were still directly managing the Account or such Sub-Account(s). Notwithstanding the foregoing, the Client has no obligation to proceed upon such advice given by the Advisor. If the Client assumes control of the Account or any Sub-Account, this Section 9(c) shall survive the termination of this Agreement and any applicable Supplemental Agreement, as the case may be, until any such Liquidation is complete.

(d) On or after such time as the Client assumes control of the Account or any Sub-Account in accordance with the provisions hereof, the Client in its sole discretion may take over management of the Account or Sub-Account, bring in a replacement manager for the Account or such Sub-Account or allow Advisor to continue to manage in accordance with the provisions hereof. In respect of a Liquidation by the Advisor of any Account or Sub-Account, until such time, if any, that the Client takes over management or brings in a replacement advisor of the Account or such Sub-Account in accordance with the provisions hereof, the Advisor shall continue to manage such Liquidation in accordance with the terms of Section 9(b). If, at any time the Client assumes control of any affected Sub-Account or the Account in accordance with the provisions hereof, the Advisor shall, at the Client's request, continue to advise the Client, in accordance with the terms of Section 9(c). This Section 9(d) shall survive the termination of this Agreement until the Liquidation of the Account is completed.

#### 10 Confidentiality.

(a) Subject to the provisions of Section 10(b) below, neither of the Parties shall, except under compulsion of any applicable law or regulation made thereunder or as required by applicable law, rule, regulation, order or as requested by any regulatory authority, agency, body, court or representative thereof, or pursuant to legal process (hereafter "Regulatory Mandated Disclosure"), either before or after the termination of this Agreement disclose to any person not authorized by the relevant Party to receive the same any confidential information relating to such Party or to the affairs of such Party of which the Party disclosing the same shall have become possessed during the period of this Agreement and such Party shall use all reasonable efforts to prevent any such disclosure as aforesaid. Without in any way limiting the generality of the foregoing, before acting upon a request for any Regulatory Mandated Disclosure, a Party shall (i) immediately notify the other Party of the existence, terms and circumstances surrounding such request to the extent permissible; (ii) consult with such other Party on the advisability of taking legally available steps to resist or narrow such request to the extent permissible; and (iii) if such Regulatory Mandated Disclosure is required, exercise such Party's best efforts to obtain reasonable assurance that confidential treatment will be afforded. Each Party further agrees not to disclose or use the name of the other Party (or any affiliate thereof) for marketing or other purposes not directly relating to implementation of this Agreement.

The term "confidential information" shall include (without limitation) the existence of, and contents of, the Trade Restrictions List (referenced on Appendix I hereto) delivered by the Client to the Advisor from time to time as well as any other proprietary, non-public information regarding a Party to the Agreement that such other Party received in connection with this Agreement, including, without limitation,

that such Party has entered into this Agreement with the other Party. The Advisor acknowledges its obligations under applicable law, including federal and state laws, not to disclose, or otherwise effect trades based on, material non-public information. Without limiting the responsibilities and agreements of the Advisor under this Section 10, the Advisor specifically agrees with the Client that the Advisor shall not utilize, directly or indirectly, any Trade Restrictions List as a basis for trading or otherwise investing in (either through the Account or by means of any other independent trading or advisory activities of the Advisor) any securities included in good faith on such Trade Restrictions List.

The Client further specifically agrees that, other than by reason of Regulatory Mandated Disclosure, (i) except with the prior written consent of the Advisor it shall not disclose to any third party the terms of the Advisor-directed trading strategies (including the nature and content of the Account) contemplated under this Agreement (as evidenced by the annexed Master Investment Guidelines and Compliance Restrictions, any Supplemental Investment Guidelines and Compliance Restrictions and related transaction reports); and (ii) it shall not establish or engage in any form of trading strategy, for its own account or for the account of any affiliate or third party, that materially replicates any aspect of Advisor's trading strategies provided for in this Agreement if the establishment or engagement of such strategy or strategies is a result of the Client's knowledge of the Advisor's trading strategies provided for in this Agreement. Notwithstanding the foregoing, the Client shall be permitted to reveal confidential information in connection with the bidding process described in Section 9(b), but only to the extent such information would be required to complete the form of Equity Portfolio Analysis attached hereto as Appendix V.

(b) Notwithstanding anything to the contrary in this Agreement, except as otherwise hereinafter set forth in this Section 10(b), the parties hereto agree and acknowledge that the structure and tax aspects of the Account, any Sub-Account, this Agreement, any transaction effected pursuant to this Agreement, and all materials provided by either Party with respect to such structure and tax aspects are, and have always been, non-confidential, and are not the proprietary information of either Party. Notwithstanding anything to the contrary in this Agreement, each Party and each affiliate thereof (and each employee, representative, or other agent of any of the foregoing) may disclose, and has always been entitled to disclose, to any and all persons, without limitation of any kind, the tax treatment and tax structure of the Account, any Sub-Account, this Agreement, any transaction effected pursuant to this Agreement and all materials of any kind (including opinions or other tax analyses) that are provided to such Party (or affiliate) relating to such tax treatment and tax structure (provided, however, that the names and all other identifying information of all entities and persons have been properly erased from such materials prior to the disclosure thereof unless and to the extent such information is necessary or helpful in understanding the tax treatment or tax structure of the transaction).

11 Miscellaneous.

(a) No failure on the part of either Party to exercise, and no delay on its part in exercising, any right or remedy under this Agreement will operate as a waiver thereof nor will any single or partial exercise of any right or remedy preclude any other or further exercise thereof or the exercise of any other right or remedy. The rights and remedies provided in this Agreement are cumulative and not exclusive of any rights or remedies provided by law.

(b) This Agreement may only be amended by the written agreement of the parties hereto.

(c) The illegality, invalidity or unenforceability of any provision of this Agreement under the law of any jurisdiction shall not affect its legality, validity or enforceability under the law of any other jurisdiction nor the legality, validity or enforceability of any other provision.

(d) The Advisor will forward to the Client a list of names and specimen signatures of persons authorized to act on behalf of the Account, subject to the Client's approval, such approval not to be unreasonably withheld. The Client will forward from time to time a list of names and specimen signatures of persons authorized to act on behalf of the Client. The Advisor and/or the Client, as applicable, will

provide to the other Party a revised list of names and specimen signatures of persons authorized to act on behalf of the Account or the Client whenever such authorized persons change.

(e) Notwithstanding anything to the contrary contained in this Agreement, the Client agrees that any amounts owed or liabilities incurred by the Advisor under this Agreement, will be satisfied solely from the Advisor's assets. Without limiting the generality of the foregoing, in no event shall this Agreement give the Client recourse, whether by setoff or otherwise, with respect to any such amounts owed or liabilities incurred, to or against any assets of any person or entity other than the Advisor.

(f) Notwithstanding anything to the contrary contained in this Agreement, except as provided in Section (5) hereof, the Advisor will not be liable to the Client for any losses, damages, costs, expenses, or other liabilities arising in connection with their activities and services hereunder.

(g) Notices. Except in the case of notices and other communications expressly permitted to be given by telephone or by electronic transmission alone (including e-mail), all notices and other communications provided for herein shall be in writing and shall be sent by e-mail to all the individuals listed below, in accordance with the information set forth below unless otherwise instructed by such Party. Any such notice shall be deemed duly served at the time sent to all individuals listed below. The sender of notice shall use its best efforts to follow each email notice with telephonic notice to any of the individuals listed below, which will be deemed made when such individual actually fields the phone call; provided however, that the effectiveness of the email notice shall not be affected by the failure to make such telephonic notice. The Advisor may rely and shall be protected in acting upon any written instruction or communication believed by it to be genuine and to have been signed by, or in the case of e-mail, sent by, the proper Party or parties.

Deutsche Bank AG, London Branch  
c/o Deutsche Bank Securities Inc.  
60 Wall Street  
New York, NY 10005

Renaissance Technologies LLC  
800 Third Avenue  
New York, NY 10022

All email notices to be sent to:  
RentecNotification@list.db.com

Attn: Mark Silber / Carla Volpe Porter  
Jim Rowen  
Tel: (212) 486-6780  
Fax: (212) 758-7136  
E-mail: Silber@rentec.com  
Carla@rentec.com  
JRowen@rentec.com

Additional specific contacts:  
Daily Trade Blotter:

Attn: Vincent Capone  
Tel: (212) 250-7221  
Fax: (212) 797-4932  
E-mail: vincent.j.capone@db.com

Attn: Peter Brown / Bob Mercer  
Tel: (631) 444-7000  
Fax: (631) 689-4495  
E-mail: Peter@rentec.com  
Mercer@rentec.com

Attn: Peter Brophy  
Tel: (212) 250-7626  
Fax: (212) 797-8733  
E-mail: peter.brophy@db.com

Attn: Thomas Kerns / Scott Chinsky  
Tel: (212) 486-6780  
Fax: (212) 486-7291  
E-mail: TKerns@rentec.com  
Scott@rentec.com

Payments/Fixings:

Attn: Vincent Capone  
Tel: (212) 250-7221  
Fax: (212) 797-4932  
E-mail: vincent.j.capone@db.com

Investment Advisory Agreement / Legal Notices:

Attn: Frank Nelson  
Tel: (212) 250-2983  
Fax: (212) 797-0851  
E-mail: frank.x.nelson@db.com

12     Representations and Warranties

Each of the Parties (or the specified Party, as the case may be) represents, warrants, and agrees with the other Party that:

It is duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation and has all requisite power and authority to own its property, to conduct its business as currently conducted and to execute and deliver, and to perform its obligations under, this Agreement.

This Agreement has been duly authorized, executed and delivered by it and constitutes a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.

No permits, licenses, franchises, approvals, authorizations, qualifications or consents of, or registrations or filings with, governmental authorities are required in connection with the execution or delivery by such Party of, or the performance by such Party of its obligations under, this Agreement, except for such as have been obtained and are in full force and effect.

The execution and delivery of, and the performance by such Party of its obligations under, this Agreement do not and will not result in a breach or constitute a violation of, conflict with, or constitute a default under, the certificate of incorporation or bylaws of such Party or any agreement or instrument to which it is a Party or by which it or any of its property is bound, which breach, violation, conflict or default could have a materially adverse effect on its ability to perform its obligations under this Agreement.

No actions, proceedings or claims are pending or, to the knowledge of such Party, threatened against such Party or any of its property that could affect the validity or enforceability of this Agreement or that could have a materially adverse effect on the ability of such Party to perform its obligations under this Agreement.

The Client represents and covenants that it is and will remain for the term of this Agreement a "qualified eligible person" as such term is defined in Rule 4.7 under the Commodity Exchange Act. The Client hereby consents to the Account being treated as an "exempt account" pursuant to the provisions of Rule 4.7.

13     No Amendment or Restatement of Existing Investment Advisory Agreement.

The parties agree that this Agreement does not amend or restate the Amended and Restated Investment Advisory Agreement dated as of November 16, 2007, between the Client and the Advisor (the "Existing Agreement"). The parties hereto acknowledge and agree that this Agreement does not constitute a novation or termination of the Existing Agreement or any transactions thereunder and the Existing Agreement and the transactions thereunder are in all respects continuing under the terms described thereunder.

14     Governing Law; Waiver of Jury Trial.

THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN THE STATE. EACH PARTY CONSENTS TO THE JURISDICTION OF THE FEDERAL AND STATE COURTS IN NEW YORK; EACH PARTY HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY SUIT, ACTION, CLAIM OR PROCEEDING ARISING OUT OF, OR RELATING TO, THIS AGREEMENT.

15     Client Receipt of Advisor's Brochure


The Client hereby acknowledges receipt of the Advisor's current Form ADV Part II or brochure statement in lieu thereof.

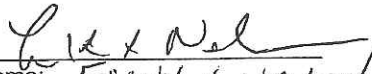
*[Rest of this page intentionally blank; signature page follows]*

PURSUANT TO AN EXEMPTION FROM THE COMMODITY FUTURES TRADING COMMISSION IN CONNECTION WITH ACCOUNTS OF QUALIFIED ELIGIBLE PERSONS, THIS ACCOUNT DOCUMENTATION IS NOT REQUIRED TO BE, AND HAS NOT BEEN, FILED WITH THE COMMISSION. THE COMMODITY FUTURES TRADING COMMISSION DOES NOT PASS UPON THE MERITS OF PARTICIPATING IN A TRADING PROGRAM OR UPON THE ADEQUACY OR ACCURACY OF COMMODITY TRADING ADVISOR DISCLOSURE. CONSEQUENTLY, THE COMMODITY FUTURES TRADING COMMISSION HAS NOT REVIEWED OR APPROVED THIS TRADING PROGRAM OR THIS ACCOUNT DOCUMENT.

IN WITNESS WHEREOF, this Agreement has been entered into the day and year first above written.

**DEUTSCHE BANK AG LONDON**

By:  Satish Ramakrishna  
Name: Satish Ramakrishna  
Title: Attorney-in-Fact  
Managing Director

By:   
Name: Frank X. Nelson  
Title: Attorney-in-Fact

**RENAISSANCE TECHNOLOGIES LLC**

By: \_\_\_\_\_  
Name: James S. Rowen  
Title: Chief Operating Officer

[Signature page to Master Investment Advisory Agreement]

263720



PURSUANT TO AN EXEMPTION FROM THE COMMODITY FUTURES TRADING COMMISSION IN CONNECTION WITH ACCOUNTS OF QUALIFIED ELIGIBLE PERSONS, THIS ACCOUNT DOCUMENTATION IS NOT REQUIRED TO BE, AND HAS NOT BEEN, FILED WITH THE COMMISSION. THE COMMODITY FUTURES TRADING COMMISSION DOES NOT PASS UPON THE MERITS OF PARTICIPATING IN A TRADING PROGRAM OR UPON THE ADEQUACY OR ACCURACY OF COMMODITY TRADING ADVISOR DISCLOSURE. CONSEQUENTLY, THE COMMODITY FUTURES TRADING COMMISSION HAS NOT REVIEWED OR APPROVED THIS TRADING PROGRAM OR THIS ACCOUNT DOCUMENT.

IN WITNESS WHEREOF, this Agreement has been entered into the day and year first above written.

**DEUTSCHE BANK AG LONDON**

By:

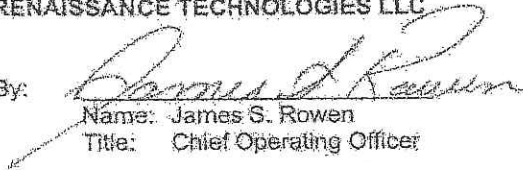
\_\_\_\_\_  
Name: Satish Ramakrishna  
Title: Attorney-in-Fact

By:

\_\_\_\_\_  
Name:  
Title: Attorney-in-Fact

**RENAISSANCE TECHNOLOGIES LLC**

By:

  
Name: James S. Rowen  
Title: Chief Operating Officer

[Signature page to Master Investment Advisory Agreement]

263720

## APPENDIX I

### Investment Guidelines and Compliance Restrictions

#### Part A

For purposes of calculations under the Investment Guidelines, all Positions (as defined below) shall be valued in USD (converted, if necessary, using the then-applicable relevant FX rate of conversion).

#### 1) Investment Guidelines

a) Definitions (except where specified below, each defined term here is in respect of the Account taken as a whole):

i) "*Underlying Security*" or "*U*" shall mean any one of the following:

- (1) an equity security (including a depositary receipt) in a company listed on a recognized exchange or quoted on an over-the-counter market (e.g., IBM common stock);
- (2) an equity index (e.g., the S&P500 index); or
- (3) an exchange-traded fund (e.g., the SPDR fund), the value of which is linked to the prices of the equity securities comprising a specified index or basket of equity securities).

ii) "*Position*" means either:

- (1) a long or short direct holding in an Underlying Security (an "Actual Position"); or
- (2) an interest whose value is derived from an Underlying Security, whether by conversion, exchange, exercise or otherwise (a "Derivative Position");

For the purposes herein, every Advisor Position shall be considered as either an Actual Position or a Derivative Position, depending on the substance of such Advisor Position.

iii) "*Notional Shares*" with respect to any Position means (1) in the case of an Actual Position, the number of shares (long or short) and (2) in the case of a Derivative Position, the number of shares of the Underlying Security into which the Derivative Position is convertible, exchangeable, exercisable or otherwise related. In all cases, Notional Shares shall be expressed as a positive number.

iv) The "*Delta*" of a Position means the ratio of A over B where:

- (1) "*A*" = the actual number of shares in an Underlying Security that would be expected to have the same change in value as the expected change in value of the Position given a small increase in the price of the Underlying Security assuming all other variables remain constant. A will be positive for an increase in value and A will be negative for a decrease in value; and
- (2) "*B*" = the Notional Shares of such Position.

For the avoidance of doubt, the Delta of a long Actual Position is +1, and of a short Actual Position is -1.

- v) "*Exposure*" (Delta-adjusted value) with respect to any Position means the product of (i) Delta, (ii) the Notional Shares and (iii) the share price of the Underlying Security, with the share price of U converted to USD using the prevailing exchange rate if such price is quoted in a currency other than USD.
- vi) "*Liquidity Measure*" means the daily trading volume, determined in the following order, depending on availability:
- (1) 100 working day average trading volume
  - (2) 0.75 \* 20 working day average trading volume, and
  - (3) 0.50 \* 10 working day average trading volume.
- vii) "*Term Basket*" means a record maintained by the Client relating to the Advisor Positions in the Account, in respect of which all of the following characteristics have been specified: (i) a country, (ii) a currency, (iii) the date on which such record is established (the "Start Date"), (iv) the relevant LIBOR Rate and (v) the date on which all of the Advisor Positions included in such record are scheduled to be liquidated (the "End Date"); and that identifies, at all times, all of the outstanding Advisor Positions in the Account designated by the Advisor to be included in such record.
- viii) "*Trading Basket*" means a record maintained by the Client relating to the Advisor Positions in the Account, in respect of which all of the following characteristics have been specified: (i) a country and (ii) a currency; and that identifies, at all times, all of the outstanding Advisor Positions designated by the Advisor to be included in such record.
- ix) For each U:
- (1) The "*Term Position Set*" of U shall consist of all Positions in the Term Basket with the same U.
  - (2) The "*Trading Position Set*" of U shall consist of all Positions in the Trading Basket with the same U.
  - (3) The "*Position Set*" of U shall consist of the union of the Trading Position Set and the Term Position Set of such U.
  - (4) "*Actual Trading Gross*" shall mean the sum of the absolute values of the Exposures of all Actual Positions in the Trading Position Set of U;
  - (5) "*Actual Term Gross*" shall mean the sum of the absolute values of the Exposures of all Actual Positions in the Term Position Set of U;
  - (6) "*Derivative Trading Gross*" shall mean the sum of the absolute values of the Exposures of all Derivative Positions in the Trading Position Set of U;
  - (7) "*Derivative Term Gross*" shall mean the sum of the absolute values of the Exposures of all Derivative Positions in the Term Position Set of U;
  - (8) "*Actual Trading Net*" shall mean the algebraic sum of the Exposures of all Actual Positions in the Trading Position Set of U;
  - (9) "*Actual Term Net*" shall mean the algebraic sum of the Exposures of all Actual Positions in the Term Position Set of U;
  - (10) "*Derivative Trading Net*" shall mean the algebraic sum of the Exposures of all Derivative

Positions in the Trading Position Set of U;

(11) "*Derivative Term Net*" shall mean the algebraic sum of the Exposures of all Derivative Positions in the Term Position Set of U; and

(12) "*Total Net*" shall mean the algebraic sum of Actual Trading Net, Derivative Trading Net, Actual Term Net and Derivative Term Net.

b) "Total Gross Trading Exposure" shall not exceed USD 32 billion,

where "*Total Gross Trading Exposure*" shall mean the sum of Actual Trading Gross plus Actual Term Gross plus Derivative Trading Gross plus Derivative Term Gross.

c) "Capital Needed" shall always be less than or equal to the Capital Available;

where: "*Capital Available*" shall mean the sum of the Sub Account Capital Available for all existing Sub-Accounts;

where the "*Sub-Account Capital Available*" for each Sub-Account shall be the sum of

- (i) The Sub-Account Initial Capital Available for such Sub-Account;
- (ii) the aggregate realized and unrealized gains on all Positions in such Sub-Account minus the aggregate realized and unrealized losses in respect of all Positions in such Sub-Account; and
- (iii) the sum in such Sub-Account, expressed in USD, of (A) dividend income (determined based on ex-dividend dates) net of any tax withheld, if necessary, plus (B) interest income and any short rebates (on an accrual basis), plus (C) any other income accrued or realized in such Sub-Account, minus (D) payments in lieu of dividends (determined based on ex-dividend dates) in such Sub-Account grossed up for any dividend withholding taxes, if necessary, minus (E) interest expense and finance charges in such Sub-Account, minus (F) other expenses agreed by the Client and the Advisor from time to time, including, without limitation, the Advisor Fees for such Sub-Account.

For the avoidance of doubt, the sum of (ii) and (iii) (defined as the "*Sub Account Additional Capital Available*") should equal the true economic increase or decrease in the value in each existing Sub-Account.

and "*Capital Needed*" shall mean the greater of (A) 5.555555% of the Total Gross Trading Exposure and (B) the lesser of (X) the sum over all Us of the absolute value of the Total Net and (Y) the sum of :

- (i) "Alpha" multiplied by the sum over all Us of the absolute value of the Total Net; plus,
- (ii) "Beta" multiplied by the absolute value of the sum over all Us of the Total Net; plus,
- (iii) "Gamma" multiplied by the maximum of 0 and the difference between (the sum over all Us with the absolute value of Total Net positions greater than 2.5 times the Liquidity Measure of the absolute value of the Total Net) **minus** (3% of the sum over all Us of the absolute value of the Total Net).

where:

1. "Alpha" shall mean 0.0453216,
2. "Beta" shall mean 0.2046784, and
3. "Gamma" shall mean 0.99206

## 2) Position Guidelines

- a) The "Issuer Position" for any U shall not be greater than 4% of an issuer's total outstanding shares where:  
  
"Issuer Position" for a U shall equal the algebraic sum of the number of shares in all Positions in such U in the Position Set, exclusive of Positions that are Derivative Instruments with negative Delta.
- b) The sum over all Us with Total Net positions greater than 2.5 times the Liquidity Measure of the absolute value of the Total Net should not be greater than 54% of Capital Available.
- c) The sum over all Us with Total Net positions greater than 5 times and less than 10 times the Liquidity Measure of the absolute value of the Total Net should not be greater than 13.5% of Capital Available.
- d) The sum over all Us with Total Net positions greater than 10 times the Liquidity Measure of the absolute value of the Total Net should not be greater than 13.5% of Capital Available.
- e) The sum over all Us of the absolute value of the Total Net for U divided by "Total Trading GMV" times the fraction of the total trading volume in U executed by the advisor for the account on any day should be less than 20% where:

"Total Trading GMV" is the sum over all Us of the absolute value of the Total Net.

## Part B

### Compliance Restrictions

- 1) The Advisor shall not cause the Account to purchase or invest in securities the offering of which constitutes "new issues," as defined in NASD Rule 2790, as amended from time to time, or any successor rule of the Financial Industry Regulatory Authority.
- 2) The Advisor shall not cause the Account to purchase or sell, invest in or dispose of securities issued by Deutsche Bank AG or any of its affiliates.
- 3) The Advisor (a) shall not cause the Account to acquire 5% or more of any class of voting security for which reports are required pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended, and (b) shall not cause the Client, through its ownership of the Account, to become an "affiliate" of any issuer. As used herein "affiliate" has the meaning ascribed to it in each applicable jurisdiction.
- 4) The Client, acting reasonably and in good faith, has determined that it is necessary or advisable to liquidate certain positions in the Account, or take other remedial actions in relation to the Account, in order to comply or maintain compliance with applicable laws, rules, regulations or recommendations of regulatory authorities (including self-regulatory organizations), internal

policies or risk management requirements of Deutsche Bank Group or this Agreement and has delivered written notice to the Advisor indicating such actions to take and the Advisor has failed to (in the Client's sole reasonable opinion) effect such instructions of the Client.

- 5) The Client shall provide the Advisor with a list (the "Restricted List") of issuers, securities, industries and/or countries in which the Account is prohibited from buying or selling investments. The Client shall provide an updated Restricted List to the Advisor (i) as promptly as practicable upon any change in such list since its most recent distribution to the Advisor and (ii) no less frequently than daily. Except to the extent set out in the table of permissible activities below, the Advisor shall not cause the Account to trade in any investment included on the Restricted List. For the avoidance of doubt, if the Account is holding securities or obligations when such securities or obligations are placed on the Restricted List, the Advisor shall only be deemed in violation of these restrictions if the Advisor engages in a transaction with respect to such securities or obligations after receiving the Restricted List that contains such restrictions. The following table sets forth the various categories of restrictions that the Restricted List shall comprise, and includes permissible activities that the Advisor may take in respect of such restrictions:

Restriction Category	Permissible Activities
Full Restriction	<p>For the first Exchange Business Day on the relevant Exchange ("Relevant Exchange Business Day") following a security being categorized as "Full Restriction," no trades will be permitted. Permitted Trades (as defined below) may be executed, upon notice to the Client, during the second and third Relevant Exchange Business Days following the security being categorized as "Full Restriction." After the close of business on the third Relevant Exchange Business Day following the security being categorized as "Full Restriction", the position will be frozen and the Advisor will be prohibited from trading the security unless it is removed from the Restricted List.</p> <p>As used herein, "Permitted Trades" means a trade or trades that eliminate exposure to the restricted security by selling all or any part of a pre-existing long position or buying-in all or any part of a pre-existing short position, at then-current market prices, (a) in ordinary market transactions or (b) in transactions with an Unaffiliated Account (as defined below), <i>provided</i> that securities transferred to such Unaffiliated Account are not transferred back to the Account in a single transaction or series of transactions.</p> <p>As used herein, "Unaffiliated Account" means an account managed by the Advisor in which no Deutsche Bank entity has any beneficial interest.</p>
Offering	No trades are permitted.
Affiliate Related	The Advisor may, upon notice to the Client, sell a pre-existing long position, sell short and/or buy-in a pre-existing short position. Such transactions should be executed at then-current market prices in accordance with the provisions of (a) and (b) in "Full Restriction".
DB Investment	No trades are permitted.

**APPENDIX II**

**Form of Supplemental Investment Advisory Agreement**

*[Continued on next page]*

**SUPPLEMENTAL INVESTMENT ADVISORY AGREEMENT**

**relating to [•]**

AGREEMENT dated as of [•] (the "Supplemental Agreement") between **Deutsche Bank AG London** (the "Client"), and **Renaissance Technologies LLC** (the "Advisor"). This Supplemental Agreement constitutes a "Supplemental Agreement" as referred to in, and supplements, forms a part of and is subject to, the Master Investment Advisory Agreement between the Client and the Advisor, dated as of December 15, 2008 (the "Master Agreement"). This Supplemental Agreement, combined with the Master Agreement, forms a complete agreement with respect to the sub-account referenced herein (as so combined, the "Sub-Account [•] Investment Advisory Agreement"). Capitalized terms used herein and not defined herein shall have the meaning given to them in the Master Agreement.

In consideration of the premises and mutual promises hereinafter set forth, the parties hereto agree as follows:

16 Creation of New Sub-Account

(a) The Advisor is hereby notified of the establishment of a new Sub-Account, labeled Sub-Account [•] (the "Sub-Account") of the Account.

(b) The Sub-Account shall be managed as though the Client has made available \$[•] (the "Sub-Account Initial Capital Available"), to the Advisor for use in the Sub-Account.

17 Supplemental Investment Guidelines and Restrictions

(a) In addition to those Master Investment Guidelines imposed on the Account, and by extension the Sub-Account, the Supplemental Investment Guidelines and Restrictions (the "Supplemental Investment Guidelines"), attached hereto as Appendix S-I, shall apply to the Sub-Account.

(b) A violation of any provision of the Supplemental Investment Guidelines shall constitute a Supplemental Investment Guidelines Violation under Section 8(c) of the Master Agreement, subject to the applicable cure period described below.

In the case of a breach of the following Supplemental Investment Guidelines set out in Part A.1 of the Supplemental Investment Guidelines, the following cure period shall apply:

1. [•]

In the case of a breach of the following Supplemental Position Guidelines set out in Part A.2 of the Supplemental Investment Guidelines, the following cure periods shall apply:

2. [•]

In the case of a breach of any provision of the Supplemental Investment Guidelines not set out in [(i) or (ii)] above, there shall be no cure period.

18 Sub-Account Termination

(a) Unless previously terminated, this Supplemental Agreement shall terminate on [•]. If the Supplemental Agreement terminates pursuant to this Section 3(a), the Client will be deemed (solely for the purposes of conducting a Liquidation of the Sub-Account) to have delivered a termination notice to the Advisor and Section 9 of the Master Agreement shall apply.



(b) [For purposes of Section 9(b) of the Master Agreement, the Net Asset Floor for this Sub-Account shall be an AssetNAV (of this Sub-Account) of [●].

(c) Nothing in this Section 3 shall be seen to impair any rights the Client has under Section 8 of the Master Agreement.

19 Miscellaneous.

(a) This Supplemental Agreement may only be amended by the written agreement of the parties hereto.

(b) The illegality, invalidity or unenforceability of any provision of this Agreement under the law of any jurisdiction shall not affect its legality, validity or enforceability under the law of any other jurisdiction nor the legality, validity or enforceability of any other provision.

(c) Each of the parties (or the specified party, as the case may be) represents, warrants, affirms and agrees to the Representations and Warranties in Section 12 of the Master Agreement, as if they had been made as of the date hereof.

20 Governing Law.

THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN THE STATE.

*[Rest of this page intentionally blank; signature page follows]*

IN WITNESS WHEREOF, this Agreement has been entered into the day and year first above written.

**DEUTSCHE BANK AG LONDON**

By: \_\_\_\_\_  
Name:  
Title: Attorney-in-Fact

By: \_\_\_\_\_  
Name:  
Title: Attorney-in-Fact

**RENAISSANCE TECHNOLOGIES LLC**

By: \_\_\_\_\_  
Name:  
Title:

**APPENDIX S-I**

**Supplemental Investment Guidelines and Compliance Restrictions**

(i) Sub-Account: Investment Guidelines

**Part A**

1) **Supplemental Investment Guidelines**

**[•]**

2) **Supplemental Position Guidelines**

**[•]**

**Part B**

**Compliance Restrictions**

For the avoidance of doubt, the Compliance Restrictions located in the Master Investment Guidelines and Compliance Restrictions are incorporated by reference into this Supplemental Agreement.

**[•]**

**APPENDIX S-II**

***Country Tier pursuant to Appendix S-I***

[•]

**APPENDIX S-III**

\_\_\_\_\_, 20\_\_

**Renaissance Technologies LLC**  
800 Third Avenue  
New York, NY 10022

Dear Sirs:

With respect to the Supplemental Investment Advisory Agreement relating to Sub-Account [•] between **Deutsche Bank AG, London Branch**, ("Client") and **Renaissance Technologies LLC** (the "Advisor"), dated [•], (the "Supplemental Agreement") which supplements the Master Investment Advisory Agreement between the Client and the Advisor, dated December 15, 2008 (the "Master Agreement"), the Advisor will receive a management fee calculated as:

[fee to be negotiated by the parties and their counsel]

Capitalized terms used herein and not defined herein shall have the meaning given to them in the Master Agreement.

*[Rest of this page intentionally blank]*

Very truly yours,

**DEUTSCHE BANK AG LONDON**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: Attorney-in-Fact

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: Attorney-in-Fact

Agreed and Accepted:

**RENAISSANCE TECHNOLOGIES LLC**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

[Signature page to Fee Letter]

Appendix II – Page 8

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**APPENDIX III**

***[List of Third Party Brokers pursuant to Section 3(c)]***

NYSEARCA  
Bloomberg  
DOT  
Jefferies Execution Services  
NASDAQ  
Instinet LLC  
BATS  
CIBC  
NeoNet  
G-Trade  
CHI-X  
Deutsche Bank Securities Inc.

**APPENDIX IV**  
**Form of Liquidation Control Notice**

\_\_\_\_\_, 20\_\_

Dear Sirs:

In connection with Section 9(a) of the Master Investment Advisory Agreement between **Deutsche Bank AG, London Branch**, (the "Client") and **Renaissance Technologies LLC** (the "Advisor"), dated \_\_\_\_\_, 2008 (the "Agreement"), the Advisor is delivering to the Client this notice. [The Advisor has received notice from the Client indicating that [the Supplemental Investment Advisory Agreement[s] relating to Sub-Account[s] \_\_\_\_ ] [the Agreement] will be terminating on [DATE TERMINATION WILL BE EFFECTIVE] pursuant to Section 8(b) of the Agreement.] The Advisor hereby informs the Client that the Advisor has determined that a Liquidation of [the following Sub-Account[s]: \_\_\_\_ of the Account] [the Account] may adversely affect substantially similar positions that the Advisor manages on behalf of other clients; and the Advisor shall commence and manage the Liquidation of [the following Sub-Accounts: \_\_\_\_ of the Account] [the Account], subject to the provisions of Section 9(b) of the Agreement.

Capitalized terms used herein and not defined herein shall have the meaning given to them in the Agreement.

Very truly yours,

**RENAISSANCE TECHNOLOGIES LLC**

By: \_\_\_\_\_  
Name:  
Title:



**APPENDIX V**  
**Form of Equity Portfolio Analysis**

**EQUITY PORTFOLIO ANALYSIS**

Report Currency	<i>USD</i>	Trade Date	Volume Constraint
Names		Names	Names
Shares		Shares	Shares
Close Value		Close Value	Close Value
Last Value		Last Value	Last Value
Avg. Days to Trade		Avg. Days to Trade	Avg. Days to Trade
% of Avg. Volume		% of Avg. Volume	% of Avg. Volume
Mid Spread (BPS)		Mid Spread (BPS)	Mid Spread (BPS)
Mkt. Impact (BPS)		Mkt. Impact (BPS)	Mkt. Impact (BPS)
Value at Risk (VAR)		Value at Risk (VAR)	Value at Risk (VAR)
Beta Exposure		Beta Exposure	Beta Exposure
Beta		Beta	Beta
Residual Risk		Residual Risk	Residual Risk
Avg. Daily Return		Avg. Daily Return	Avg. Daily Return
Volatility		Volatility	Volatility
Alpha		Alpha	Alpha
Index Trk.		Index Trk.	Index Trk.

**EQUITY PORTFOLIO ANALYSIS**

**[Capitalization Breakdown]**

<b>BUY</b>							
Mkt. Cap	Last Value	Weight	% of Mkt Cap	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)	
0 to 1B							
1 to 10B							
10 to 50B							
50 to 100B							
Above 100B							
Totals:							
<b>SELL</b>							
Mkt. Cap	Last Value	Weight	% of Mkt Cap	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)	
0 to 1B							
1 to 10B							
10 to 50B							
50 to 100B							
Above 100B							
Totals:							

**EQUITY PORTFOLIO ANALYSIS**  
**[Liquidity Breakdown]**

<b>BUY</b>							
<b>Liquidity</b>	<b>Last Value</b>	<b>Weight</b>	<b>% of Mkt Cap</b>	<b>% of Avg. Volume</b>	<b>Mid Spread (BPS)</b>	<b>Mkt. Impact (BPS)</b>	
00 to 05%							
05% to 10%							
10% to 15%							
100% to 200%							
15% to 20%							
20% to 25%							
25% to 30%							
30% to 50%							
50% to 100%							
Above 200%							
UNKNOWN							
Totals:							
<b>SELL</b>							
<b>Liquidity</b>		<b>Weight</b>	<b>% of Mkt Cap</b>	<b>% of Avg. Volume</b>	<b>Mid Spread (BPS)</b>	<b>Mkt. Impact (BPS)</b>	
00 to 05%							
05% to 10%							
10% to 15%							
100% to 200%							
15% to 20%							
20% to 25%							
25% to 30%							
30% to 50%							
50% to 100%							
Above 200%							
UNKNOWN							
Totals:							

**EQUITY PORTFOLIO ANALYSIS**  
**[Country Breakdown]**

<b>BUY</b>											
Country	Trk. Index	Last Value	Weight	Index Trk.	Beta	Residual Risk	Volatility	C-Volatility	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)
Australia											
Canada											
Finland											
France											
Germany											
Italy											
Japan											
Netherlands											
Norway											
Spain											
Sweden											
Switzerland											
US											
Totals:											
<b>SELL</b>											
Country			Weight	Index Trk.	Beta	Residual Risk	Volatility	C-Volatility	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)
Australia											
Belgium											
Canada											
Finland											
France											
Germany											
Italy											
Japan											
Netherlands											
Norway											
Spain											
Sweden											
Switzerland											
US											
Totals:											

**EQUITY PORTFOLIO ANALYSIS**  
**[Exchange Breakdown]**

BUY								
Code		Name		Last Value	Weight	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)
ADF		Not Setup						
AMS		Amsterdam Stock Exchange						
ASE		American Stock Exchange						
ASX		Australian Stock Exchange						
GER		XETRA						
GSD		Not Setup						
HEX		Helsinki Stock Exchange						
JSD		JSDA OTC market						
MCE		Madrid Stock Exchange						
MIL		Milan Stock Exchange						
NAS		NASDAQ						
NMS		NASDAQ National Market System						
NYS		New York Stock Exchange						
OSA		Osaka Stock Exchange						
OSL		Oslo Stock Exchange						
PAR		Paris Stock Exchange						
PSE		Not Setup						
STO		Stockholm Stock Exchange						
SWX		Swiss Stock Exchange						
TOR		Toronto Stock Exchange						
TYO		Tokyo Stock Exchange						
VTX		VIRT-X Exchange						
Totals:								

**EQUITY PORTFOLIO ANALYSIS**  
**[Exchange Breakdown]**

SELL							
Code		Name		Weight	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)
ADC		Not Setup					
ADF		Not Setup					
AMS		Amsterdam Stock Exchange					
ASE		American Stock Exchange					
ASX		Australian Stock Exchange					
BRU		Brussels Stock Exchange					
GER		XETRA					
GSA		Not Setup					
HEX		Helsinki Stock Exchange					
JSD		JSDA OTC Market					
MCE		Madrid Stock Exchange					
MIL		Milan Stock Exchange					
NAS		NASDAQ					
NMS		NASDAQ National Market System					
NSM		NASDAQ National Market System					
NYS		New York Stock Exchange					
OSA		Osaka Stock Exchange					
OSL		Oslo Stock Exchange					
PAR		Paris Stock Exchange					
STO		Stockholm Stock Exchange					
SWX		Swiss Exchange					
TOR		Toronto Stock Exchange					
TYO		Tokyo Stock Exchange					
VTX:		VIRT-X Exchange					
Totals:							

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Appendix V – Page 6

**EQUITY PORTFOLIO ANALYSIS**  
**[Index Breakdown]**

BUY											
Index	Last Value	Weight	Index Trk.	Beta	Residual Risk	Volatility	C-Volatility	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)	
AEX											
ASX200											
BEL20											
CAC40											
DAX30											
ETOP100											
ETOP300											
HEX25											
IBEX35											
MDAX											
MIB30											
MSCI-CANADA											
MSCI-EMGMKT											
MSCI-US											
MSCI-WORLD											
NASDAQ											
NIKKEI-1225											
Non-Index											
OBX											
OMX											
S&P500											
SMI											
SPMIB40											
TOPX											
TXS60											
TSX Composite											
Totals:											

**EQUITY PORTFOLIO ANALYSIS**  
**[Index Breakdown]**

SELL											
Index	Last Value	Weight	Index Trk.	Beta	Residual Risk	Volatility	C-Volatility	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)	
AEX											
ASX200											
BEL20											
CAC40											
DAX30											
ETOP100											
ETOP300											
HEX25											
IBEX35											
MDAX											
MIB30											
MSCI-CANADA											
MSCI-EMGMKT											
MSCI-US											
MSCI-WORLD											
NASDAQ											
NIKKEI-1225											
Non-Index											
OBX											
OMX											
S&P500											
SMI											
SPMIB40											
TOPX											
TXS60											
TSX Composite											
Totals:											



**EQUITY PORTFOLIO ANALYSIS**  
**[Industry Breakdown]**

<b>BUY</b>								
<b>Industry</b>	<b>Last Value</b>	<b>Weight</b>	<b>Volatility</b>	<b>C-Volatility</b>	<b>% of Avg. Volume</b>	<b>Mid Spread (BPS)</b>	<b>Mkt. Impact (BPS)</b>	
Advertising								
Aerospace/Defense								
Agriculture								
Airlines								
Apparel								
Auto Manufacturers								
Auto Parts & Equipment								
Banks								
Beverages								
Biotechnology								
Building Materials								
Chemicals								
Closed-end Funds								
Coal								
Commercial Services								
Computers								
Cosmetics/Personal Care								
Distribution/Wholesale								
Diversified Finan Serv								
Electric								
Electrical Comp&Equip								
Electronics								
Energy-Alternate Sources								
Engineering & Construction								
Entertainment								

**EQUITY PORTFOLIO ANALYSIS**  
**[Industry Breakdown]**

BUY								
Industry		Last Value	Weight	Volatility	C-Volatility	% of Avg. Volume	Mid Spread (BPS)	Mkt. Impact (BPS)
Environmental Control								
Food								
Food Service								
Forest Product & Paper								
Gas								
Hand/Machine Tools								
Healthcare-Products								
Healthcare-Services								
Holding Companies-Diversified								
Home Builders								
Home Furnishings								
Household Products/Wares								
Housewares								
Insurance								
Internet								
Investment Companies								
Iron/Steel								
Leisure Time								
Lodging								
Machinery-Const&Mining								
Machinery-Diversified								
Media								
Metal Fabricate/Hardware								
Mining								
Miscellaneous Manufactur								
Office Furnishings								

**EQUITY PORTFOLIO ANALYSIS**  
**[Industry Breakdown]**

<b>BUY</b>								
<b>Industry</b>		<b>Last Value</b>	<b>Weight</b>	<b>Volatility</b>	<b>C-Volatility</b>	<b>% of Avg. Volume</b>	<b>Mid Spread (BPS)</b>	<b>Mkt. Impact (BPS)</b>
Office/Business Equip								
Oil & Gas								
Oil & Gas Services								
Packaging & Containers								
Pharmaceuticals								
Pipelines								
REITS								
Real Estate								
Retail								
Savings & Loans								
Semiconductors								
Shipbuilding								
Software								
Storage/Warehousing								
Telecommunications								
Textiles								
Toys/Games/Hobbies								
Transportation								
Trucking & Leasing								
UNKNOWN								
Venture Capital								
Water								
Totals:								

**EQUITY PORTFOLIO ANALYSIS**  
**[Industry Breakdown]**

<b>SELL</b>								
<b>Industry</b>	<b>Last Value</b>	<b>Weight</b>	<b>Volatility</b>	<b>C-Volatility</b>	<b>% of Avg. Volume</b>	<b>Mid Spread (BPS)</b>	<b>Mkt. Impact (BPS)</b>	
Advertising								
Aerospace/Defense								
Agriculture								
Airlines								
Apparel								
Auto Manufacturers								
Auto Parts & Equipment								
Banks								
Beverages								
Biotechnology								
Building Materials								
Chemicals								
Coal								
Commercial Services								
Computers								
Cosmetics/Personal Care								
Distribution/Wholesale								
Diversified Finan Serv								
Electric								
Electrical Comp&Equip								
Electronics								
Energy-Alternate Sources								
Engineering & Construction								
Entertainment								
Environmental Control								
Food								

**EQUITY PORTFOLIO ANALYSIS**  
**[Industry Breakdown]**

<b>SELL</b>								
<b>Industry</b>		<b>Last Value</b>	<b>Weight</b>	<b>Volatility</b>	<b>C-Volatility</b>	<b>% of Avg. Volume</b>	<b>Mid Spread (BPS)</b>	<b>Mkt. Impact (BPS)</b>
Food Service								
Forest Product & Paper								
Gas								
Hand/Machine Tools								
Healthcare-Products								
Healthcare-Services								
Holding Companies-Diversified								
Home Builders								
Home Furnishings								
Household Products/Wares								
Housewares								
Insurance								
Internet								
Investment Companies								
Iron/Steel								
Leisure Time								
Lodging								
Machinery-Const&Mining								
Machinery-Diversified								
Media								
Metal Fabricate/Hardware								
Mining								
Miscellaneous Manufactur								
Office Furnishings								
Office/Business Equip								
Oil & Gas								

**EQUITY PORTFOLIO ANALYSIS**  
**[Industry Breakdown]**

<b>SELL</b>								
<b>Industry</b>		<b>Last Value</b>	<b>Weight</b>	<b>Volatility</b>	<b>C-Volatility</b>	<b>% of Avg. Volume</b>	<b>Mid Spread (BPS)</b>	<b>Mkt. Impact (BPS)</b>
Oil & Gas Services								
Packaging & Containers								
Pharmaceuticals								
Pipelines								
REITS								
Real Estate								
Retail								
Savings & Loans								
Semiconductors								
Shipbuilding								
Software								
Storage/Warehousing								
Telecommunications								
Textiles								
Toys/Games/Hobbies								
Transportation								
Trucking & Leasing								
UNKNOWN								
Venture Capital								
Water								
Totals:								

From: "Rick Doucette" <rdoucette@gweiss.com>  
To: Frank X Nelson/db/dbcom@DBAMERICAS  
cn=joe genovese/ou=db/o=dbcom@dbamericas  
CC: Joe Genovese/db/dbcom@DBAmericas  
"Marcus Peckman" <mpeckman@gweiss.com>  
"Steve Kleinman" <skleinman@gweiss.com>  
Date: Feb 26 2009 15:17:05  
Subject: RE: MAPs comments

Frank

11:00 AM tomorrow is ok with us. Should we call you or you call us?

Rick

From: Frank X Nelson [mailto:frank.x.nelson@db.com]  
Sent: Thursday, February 26, 2009 1:26 PM  
To: Rick Doucette  
Cc: Joe Genovese; Marcus Peckman; Steve Kleinman  
Subject: Re: MAPs comments

How does 11am tomorrow work for a call?

"Rick Doucette" <rdoucette@gweiss.com>  
02/25/2009 06:33 PM

To

Frank X Nelson/db/dbcom@DBAMERICAS

cc

"Marcus Peckman" <mpeckman@gweiss.com>, "Steve Kleinman"  
<skleinman@gweiss.com>,  
Joe Genovese/db/dbcom@DBAmericas

Subject

MAPs comments

Permanent Subcommittee on Investigations

EXHIBIT #25

Frank

I have owed you a response on the documentation for the new MAPs structure. We have a series of issues we would like to highlight. Some are more discussion/negotiating items, some cause us to have to change the way we operate, and others are potential deal breakers. Let me explain.

Things that could be deal breakers:

a. Loss of time premium in the event of: 1) breaking through the barrier, 2) misbehavior, 3) default under ISDA terms, and 4) additional termination events(?).

a. We would lose the unamortized premium under the above situations if DB decided not to buy back the option. That value could be as much as 20% in the early stages of the options life, (which is much shorter, 18 to 24 months, than our other options, 5 years plus).

i. Another problem is that with the sale of the option is that there is no pre-set determination of how the value of the option would be determined (intrinsic value, plus liquidity haircut) and what bid/offer spread would be used for the proffer.

b. The financing is applied on the full notional value of the option, not the actual notional that is invested in the underlying portfolio.

a. This is potentially an enormous cost that penalizes us significantly when there is stress in the markets and we reduce our invested balances in order to reduce the risk of draw-downs, an action that is also in the best interest of DB. This doesn't seem fair.

Things that cause us to change the way we operate:

a. Loss of the cross collateralization (ability to borrow against the excess equity) of the option.

a. Historically, we have been able to fund the operating expenses of our business by borrowing against the excess equity value of the option. Additionally, we have been able to use the MAPs account as our primary asset because we can access capital to fund positions held in our OGI, LLC prime brokerage accounts with Deutsche Bank (for non-allowable securities) and our other prime brokers (UBS; Citigroup and Credit Suisse).

b. The loss of this flexibility will cause us to reduce the amount of capital we can invest in the MAPs product to insure that we have sufficient resources to fund our business expenses and outside capital requirements. I believe that this would reduce the amount of capital we can invest by 40% to



60%. We can adjust how we handle our cash management to reflect this new paradigm, but it will take some time to determine how much outside liquidity we need to maintain in order to meet our obligations outside of the MAPs product. This will cause us to use conservative assumptions until we have enough practical experience to know the expectational range that would be required.

Things we would like to negotiate:

a. The liquidation process of the option.

a. We need to negotiate the ability to cross sell the positions in the MAPs account into our prime brokerage account for OGI as the cash to fund the purchases will be tied up in the option until settlement. We would like to propose a simultaneous purchase and sale of the option and the underlying, in effect, we would like to get a payment in kind of the underlying securities on the liquidation of the option.

b. The barrier concept.

a. When we meet with you and Satish, we discussed the concept of doing away with the barrier structure and instead using a level leverage function that would cap the leverage of the notional at 10 times the equity of the option. If the value of the option drops, the amount of the notional exposure underlying the option would drop, much the same as the delta notional value of an option drops as the underlying stocks price moves farther out-of-the-money. In effect, the leverage would be fixed at 10 times to the equity value of the option, subject to some minimum dollar threshold.

b. Additionally, the barrier price was raised substantially from the level used for our other options. Our other options used a price of 94 as the knockout price. The proposed structure uses 97.7, which we believe is too tight.

c. The maturity of the option.

a. Is it possible to extend the maturity of the option beyond the 18 to 24 month target?

Frank, give me a call so we can talk about the above. The obvious big issues are the first two. It would be inappropriate for us to strike a new option if we cannot get any resolution to these items. I will be in Hartford [redacted] tomorrow and Friday. Thanks,

Rick

**[redacted] = Redacted by the Permanent Subcommittee on Investigations**

This e-mail is being sent to you for your information pursuant to your request.

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From: Satish Ramakrishna <satish.ramakrishna@db.com>  
To: Bill Broeksmit <bill.broeksmit@db.com>  
cn=bill broeksmit/ou=db/o=dbcom@dbamericas  
Date: Aug 25 2009 06:44:45  
Subject: Re: RenTech MAPS

Bill - couple of clarifications  
- deleveraging is smooth, not only "if half the capital is depleted" - it starts from 100.

A  
- RoA when I looked at it last was closer to 110 bps. I will check and let you know.

Best Regards,  
Satish Ramakrishna  
Deutsche Bank AG, London  
Global Markets Equity  
Global Prime Finance Risk & Complex Prime Finance  
# 1342, 60 Wall Street, New York  
+ 1 212 250 4928 New York

**Redacted by the Permanent  
Subcommittee on Investigations**

+ 1. 212 250 4051 Asst: Magdalena Pisarczyk

----- Original Message -----

From: Bill Broeksmit  
Sent: 08/25/2009 10:47 AM GDT  
To: Anshu Jain  
Cc: Satish Ramakrishna; Jonathan Hitchon; Barry Bausano  
Subject: RenTech MAPS

The Renaissance synthetic, non-recourse PB facility (MAPS) tends to use around \$15 billion of BS and produces ROA in area of 80 bps. Current facility is up for renewal in early 2010. We think we and one other PB (Barclays or CS, don't know their size) are only providers MAPS to client. AUM in relevant fund (Medallion) is almost all partners' wealth and friends and family. This is the fund with the legendary track record (35% average annual returns over past 20Y). (Somewhat puzzlingly, the Renaissance fund open to outside investors (RIEF, a 175/75 S+P plus style) has badly underperformed S+P this year and AUM is down from \$25 billion to less tha \$10 billion).

Following is a more detailed description of the MAPS facility:

The Renaissance MAPS trade is a synthetic, non-recourse PB-inspired facility. We carry the equity longs and shorts, as directed by Renaissance, on our BS and pass the performance of portfolio to Renaissance via swap. Equity longs we carry on behalf of Renaissance show up as trading assets for DB and shorts appear as securities borrowed (asset) and securities sold but not yet purchased (liability).

This trade format is much less BS efficient than a traditional PB account because in a PB account I can net receivables and payables with same customer. So if an equity long/short account has equal amount of longs (financed by us) and shorts (borrowed from us versus posting of cash collateral), PB receivable wrt that account nets to zero.

Renaissance trade is only different from a straight synthetic PB facility in that it is non-recourse. Facility allows client maximum of 18X NAV in gross value of longs plus shorts, or a 9X9 long versus short portfolio. Diversification requirements and other sub-limits are tighter than more

**Permanent Subcommittee on Investigations**

**EXHIBIT #26**

traditional equity long/short PB facilities - EM exposures are restricted, as are illiquid and concentrated positions. If client started the day with maximum leverage (it has never done so), longs would have to underperform shorts by 11% to burn through capital and put us into non-recourse loss territory. We have triggers in place that allow us to seize control of the portfolio at any point during the day if half of the capital is depleted (ie, 5.5% long underperformance of shorts). Biggest risk is an August 2007 event when equity long/short trades got too crowded and there was a sudden shake-out - they were then running at 12x leverage and they delevered immediately.. Since they stagger their individual MAPS trades, if one option ran into trouble, they could redistribute the long/short portfolio into the other (deeper-in-the-money and hopefully less levered) options.

This structure (long option on underlying portfolio) is a capital asset if held by the partners for more than one year. Size of portfolio tends to be between \$8 and 12 billion long and same amount of short. Maximum allowed usage is \$16 billion X \$16 billion, though this has never been approached.

Pricing is: we lend to finance longs at FF+37.5 bps and borrow cash pledged against securities borrowed at FF-37.5 bps. Most of the money is actually made by lending them specials that we have on inventory and they pay far above the regular rates for that. In addition, their positions help us internalize other clients' exposures, so it helps reduce financing cost across the platform.

Bill Broeksmit  
Office: +44 (0)20 7545 7899  
[REDACTED]  
US Mobile: +1 917 301 3003

[REDACTED] = Redacted by the Permanent  
Subcommittee on Investigations

EXECUTION COPY

Deutsche Bank 

Deutsche Bank AG London<sup>1</sup>  
c/o Deutsche Bank Securities Inc.  
60 Wall Street  
New York, NY 10005  
Telephone: 1-212-250-2500

MOSEL EQUITIES L.P.  
c/o Renaissance Technologies LLC  
800 Third Avenue  
New York, NY 10022  
Attn: Mark Silber / Carla Volpe Porter  
Tel: (212) 486-6780  
Fax: (212) 758-7136

**BARRIER OPTION TRANSACTION – Cash Settled –**  
**DBSI Reference No. 941-50310**

Dear Sirs:

The purpose of this letter agreement (this "Confirmation") is to confirm the terms and conditions of the transaction entered into between **DEUTSCHE BANK AG, LONDON BRANCH** ("Party A" or "Seller") and **MOSEL EQUITIES L.P.** ("Party B," or "Buyer," and together with Party A, the "Parties") on the Trade Date specified below (the "Transaction"). This Confirmation constitutes a "Confirmation" as referred to in the ISDA Master Agreement specified below. This Confirmation constitutes the entire agreement and understanding of the parties with respect to the subject matter and terms of the Transaction and supersedes all prior or contemporaneous written or oral communications with respect thereto.

**DEUTSCHE BANK AG IS NOT REGISTERED AS A BROKER DEALER UNDER THE U.S. SECURITIES EXCHANGE ACT OF 1934. DEUTSCHE BANK SECURITIES INC. ("DBSI" or "DESIGNATED AGENT") HAS ACTED SOLELY AS AGENT IN CONNECTION WITH THIS TRANSACTION AND HAS NO OBLIGATION, BY WAY OF ISSUANCE, ENDORSEMENT, GUARANTEE OR OTHERWISE WITH RESPECT TO THE PERFORMANCE OF EITHER PARTY UNDER THE TRANSACTION. DEUTSCHE BANK AG, LONDON BRANCH IS NOT A MEMBER OF THE SECURITIES INVESTOR PROTECTION CORPORATION (SIPC).**

1. The definitions and provisions contained in the 2000 ISDA Definitions (the "Swap Definitions") and in the 2002 ISDA Equity Derivatives Definitions (the "Equity Definitions", and together with the Swap Definitions, the "Definitions"), in each case as published by the International Swaps and Derivatives Association, Inc. are incorporated into this Confirmation. In the event of any inconsistency between the Swap Definitions and the Equity Definitions, the Equity Definitions will govern. In the event of any inconsistency between either set of Definitions and this Confirmation, this Confirmation will govern. For purposes of the Equity Definitions, the Transaction shall constitute an "Index Option Transaction".

---

<sup>1</sup> Deutsche Bank AG is regulated by the FSA for the conduct of designated investment business in the UK, is a member of the London Stock Exchange and is a joint stock corporation with limited liability incorporated in the Federal Republic of Germany HRB No. 30 000 District Court of Frankfurt am Main; Branch Registration No. in England and Wales BR000005, Registered address: Winchester House, 1 Great Winchester Street, London EC2N 2DB, Telephone: +44 20 7545 8000.

Chairman of the Supervisory Board: Clemens Börsig. Board of Managing Directors: Josef Ackermann, Hermann-Josef Lamberti, Hugo Banziger, and Stefan Krause.

NEWYORK\53397

1.

Permanent Subcommittee on Investigations

**EXHIBIT #27**

This Confirmation constitutes a "Confirmation" as referred to in, and supplements, forms a part of and is subject to, the 1992 ISDA Master Agreement, including the Schedule thereto dated as of December 15, 2008 as amended and supplemented from time to time (the "Agreement"), between Party A and Party B. For the avoidance of doubt, the Transaction shall not be subject to the provisions of any other agreement between Party A and Party B, including any other ISDA Master Agreement and any Credit Support Annex thereto. All provisions contained in the Agreement govern this Confirmation except as expressly modified below. All provisions contained or incorporated by reference in the Agreement will govern this Confirmation, except that, without limiting the foregoing, in the event of any inconsistency between this Confirmation and any provisions contained or incorporated by reference in the Agreement with respect to any payment obligations of Party A or Party B, the terms of this Confirmation shall govern. For the avoidance of doubt, notwithstanding anything in Section 6(d) or Section 6(e) of the Agreement to the contrary, any payment or delivery required to be made in connection with the termination of the Transaction shall be calculated and paid in accordance with the provisions contained in this Confirmation.

**2. The terms of the particular Transaction to which the Confirmation relates are as follows:**

**General Terms**

Trade Date:	October 8, 2009, which is the first date on which trading in the Basket (as defined below) can occur.
Effective Date:	The Trade Date
Term:	The period from and including the Trade Date to but excluding the Final Valuation Date.
Tenor:	The number of days in the period from and including the Premium Payment Date to but excluding the Scheduled Expiration Date.
Option Type:	Call
Option Style:	European
Buyer:	Party B
Seller:	Party A
Index:	The NAV Index Level
Business Day:	New York
Business Day Convention:	Following Business Day.
Exchange Business Day:	For each Exchange (as defined below), any Scheduled Trading Day on which such Exchange is open for trading during its regular trading session notwithstanding such Exchange closing prior to its Scheduled Closing Time.

**Transaction Details**

Number of Options: One  
Strike Price: 100  
Notional Amount: USD3,600,000,000  
Initial Leverage: USD2,825,000,000  
Premium: USD400,000,000  
Premium Payment Date: The third (3rd) Business Day immediately following the Trade Date.  
Calculation Agent: Designated Agent

**Procedure for Exercise**

Expiration Time: 5 p.m. (local time in New York City).  
Expiration Date: The date which is the earliest of: (i) December 18, 2010, (the "Scheduled Expiration Date"), (ii) the first date on which the NAV Index Level is at or below the Barrier NAV Index Level (such event and date described in this clause (ii) shall be referred to herein as an "Early Expiration Event" and an "Early Expiration Date", respectively) and (iii) any other date on which the Transaction is terminated or expires in accordance with the Confirmation or the Agreement.

Automatic Exercise: Applicable.

Seller's Agent's Telephone Number and Facsimile Number and Contact Details for Purpose of Giving Notice:

Seller's Agent's Name: Satish Ramakrishna  
Specified Location: 60 Wall Street, 4<sup>th</sup> Floor  
New York, NY 10005  
Tel: (212) 250-4928  
Fax: (212) 797-9358  
Email: satish.ramakrishna@db.com

**Valuation**

Final Valuation Date: The last Pricing Day in the Pricing Period.  
Pricing Period: The period commencing on, and including, the Expiration Date and ending on, and including, the earlier of (i) the Expiration Date, or if such day is not a Pricing Day, then the first (1st) Pricing Day immediately following the Expiration Date, and (ii) the 14th Business Day immediately following the Expiration Date, provided, however, that the Pricing Period shall not be deemed to

commence until the earlier of (a) the Advisor (as defined in Master Investment Advisory Agreement (as defined below)) commencing a Liquidation (as defined therein) of the Sub-Account (as defined therein) relating to the Basket and (b) the Seller having the right, under the Master Investment Advisory Agreement, to take control of the Sub-Account relating to the Basket, provided, further, that the Pricing Period may be a longer or shorter period as mutually agreed upon by the Parties, provided, further, that the Pricing Period shall be deemed to continue until such time as the Calculation Agent has determined, in accordance with customary practices, that it has ended. In the event that the Buyer disputes the Calculation Agent's determination of the Pricing Period and can reasonably demonstrate that an investment manager could have liquidated and reduced to cash a portfolio substantially similar to the Basket in a shorter period subject to the same conditions considered by the Calculation Agent in determining the Pricing Period, then Buyer and Seller shall mutually determine in good faith any adjustment to the Pricing Period and the Pricing Period shall end on the last day of such adjusted period. Notwithstanding the foregoing, if an Early Expiration Event has occurred, the commencement and termination of the Pricing Period will be as determined by the Calculation Agent at such time.

Valuation Method:

Upon the expiration or termination of the Transaction, for purposes of establishing the NAV Index Level used to calculate the Cash Settlement Amount, it shall be assumed that (i) all Effected Positions shall be liquidated during the Pricing Period and (ii) each Designated Position shall be deemed liquidated at such time and price as the Investment Advisor, the Seller or any manager chosen by the Seller would have liquidated in conformity with the liquidation provisions of the Master Investment Advisory Agreement (as defined below). It also shall be assumed that Seller, or any manager chosen by Seller to exercise control over the Basket, shall, commencing on the Expiration Date or as soon as is practicable thereafter, conduct an orderly liquidation and reduction to cash of all Effected Positions contained in the Basket, in a commercially reasonable manner and in accordance with the provisions of the Master Investment Advisory Agreement relating to effecting a liquidation, with the objective of minimizing market impact and preserving the remaining equity value of the Basket. Except in the case of an Early Expiration Event, it shall be assumed, in conducting the liquidation, Seller or any manager chosen by Seller to exercise control over the Basket (if applicable) shall give due regard to effecting proportionate reductions of any economic long positions and economic short positions. Notwithstanding the foregoing, if Section 9(b) of the Master Investment Advisory Agreement applies and the Investment Advisor has advised the Seller in a timely fashion to accept the



bid that established the Market Bid Level (as defined therein), then for purposes of establishing the NAV Index Level used to calculate the Cash Settlement Amount, the Basket shall be deemed to have been liquidated at the Market Value (as defined in the Master Investment Advisory Agreement).

Pricing Day: For each Trading Basket, an Exchange Business Day on which a Market Disruption Event has not occurred.

**Settlement Terms:**

Cash Settlement: Applicable

Settlement Currency: USD

Term Rate: 2.07%

Debit Spread: The Spread applied to the Basket Debit Balance in accordance with the U.S. Spread Schedule (as outlined below).

Remaining Tenor: As of any day during the period from and including the Premium Payment Date to but excluding the Scheduled Expiration Date, the number of days remaining in the Tenor, from and including the day on which such determination is being made to but excluding the Scheduled Expiration Date.

Optionality Value: As of any day during the period from and including the Trade Date to but excluding the Premium Payment Date, an amount equal to:

$$\frac{\text{Initial Leverage} \times (\text{Term Rate} + \text{Debit Spread}) \times \text{Tenor}}{365 + (\text{Term Rate} \times \text{Tenor})}$$

; and as of any other day during the Term of this Transaction, the **greater of** (i) zero and (ii) an amount determined by the difference of (a) the Optionality Value calculated for the previous day **minus** (b) the quotient of (x) the Optionality Value as of the Trade Date **divided by** (y) Tenor.

Intrinsic Value: As of the Trade Date, an amount equal to (i) the Premium **minus** (ii) the Optionality Value as of the Trade Date (the "Initial Intrinsic Value"); and as of any other day during the Term of this Transaction, an amount (which may be positive or negative) equal to the sum of (a) the Intrinsic Value calculated for the previous day **plus** (b) the change in Basket Base Performance for such day (which may be a positive or negative number).

NAV Index Level: As of each day during the Term of this Transaction, an amount determined as follows:

$$100 + \left( 100 \times \frac{\text{Intrinsic Value as of such date}}{\text{Notional Amount}} \right)$$

Barrier NAV Index Level:

As of the Trade Date, 106.604597; and as of each day during the Term of this Transaction, an amount determined as follows:

$$100 \times \left( .977 + \frac{\text{Premium} - \text{Optionality Value}}{\text{Notional Amount}} \right)$$

Cash Settlement Amount:

Cash Settlement Scenario "A" or Cash Settlement Scenario "B" (each, a "Cash Settlement Scenario"), as specified herein, determined as of the Final Valuation Date. Except as otherwise stated herein, if for any reason this Transaction is terminated or expires prior to the Scheduled Expiration Date, the measure for any payment owed shall be Cash Settlement Amount Scenario "A". For the avoidance of doubt, if a Party delivers a notice specifying an Expiration Date and the grounds on which such termination notice is being delivered, the Cash Settlement Scenario associated with such grounds shall be the Cash Settlement Amount, notwithstanding the occurrence, between the delivery of the termination notice and the Expiration Date specified therein, of circumstances or events giving rise to the alternative Cash Settlement Scenario.

(i) For the avoidance of doubt, without limitation, the following events will result in the Cash Settlement Amount being Cash Settlement Scenario "A:"

(a) a termination of the Transaction, effected by Buyer, as the result of the occurrence of an Additional Termination Event described in Paragraph 4(d)(i), Paragraph 4(d)(iii) or Paragraph 4(d)(iv) of this Confirmation;

(b) a termination of the Transaction, effected by Buyer, as the result of the occurrence of an Additional Termination Event described in Paragraph 4(e) of this Confirmation;

(c) a termination of the Transaction resulting from the occurrence of an Event of Default other than one described in paragraph (ii)(c) below;

(d) a termination of the Transaction resulting from the occurrence of a Termination Event other than one described in paragraph (ii)(d) below; and

(e) all other events that result in the Transaction being terminated, either automatically under the terms of this Agreement, or by action of one of the Parties, where the Cash Settlement Amount is not otherwise specified.

(ii) For the avoidance of doubt, without limitation, the following events will result in the Cash Settlement Amount being Cash Settlement Scenario "B":

(a) a termination of the Transaction, effected by Buyer, as the result of the occurrence of an Additional Termination Event described in Paragraph 4(d)(ii) of this Confirmation;

(b) a termination of the Transaction, effected by Buyer, as the result of the occurrence of an Additional Termination Event described in Paragraph 4(f) of this Confirmation;

(c) a termination of the Transaction effected by Buyer as the result of the occurrence of one of the following Events of Default:

(1) a breach by Seller of an agreement in accordance with Section 5(a)(ii) of the Agreement;

(2) a misrepresentation by Seller in accordance with Section 5(a)(iv) of the Agreement;

(3) a default by Seller under Section 5(a)(v)(2) of the Agreement;

(4) a default by Seller under Section 5(a)(vi) of the Agreement;

(5) the occurrence of an event described in Section 5(a)(vii) of the Agreement in respect of the Seller; and

(6) a "merger without assumption" in respect of the Seller as described in Section 5(a)(viii) of the Agreement;

and

(d) a termination of the Transaction resulting from the occurrence of one of the following Termination Events:

(1) an Illegality in accordance with Section 5(b)(i) of the Agreement in respect of which the Seller is the sole Affected Party;

(2) a Tax Event in accordance with Section 5(b)(ii)(y) of the Agreement in respect of which

the effective date of the Change in Law has not yet occurred and Seller has delivered notice to terminate the Transaction;

(3) (X) an Additional Termination Event described in the second paragraph of Paragraph 4(l) of this Confirmation or (Y) the designation by Seller of an Early Termination Date in accordance with Paragraph 4(n) of this Confirmation, provided that in the case of (X) or (Y) above, such Termination Event occurs in respect of any change in applicable law or Change in U.S. Tax Law, as applicable, that has not become effective; and

(4) a Tax Event Upon Merger in accordance with Section 5(b)(iii) of the Agreement in respect of which Seller is the sole Affected Party;

(for the avoidance of doubt, each reference to provisions in the Agreement are as amended by the Schedule thereto).

Cash Settlement Scenario "A":

The **greater** of (i) zero, and (ii) an amount determined as follows:

$$(\text{NAV Index Level} - \text{Strike Price}) \times \frac{\text{Notional Amount}}{100}$$

Cash Settlement Scenario "B":

The **greater** of (i) zero, and (ii) an amount determined as follows: the sum of (a):

$$(\text{NAV Index Level} - \text{Strike Price}) \times \frac{\text{Notional Amount}}{100}$$

**plus** (b) the Optionality Value.

Cash Settlement Payment Date:

The third (3rd) Exchange Business Day immediately following the Final Valuation Date.

Early Settlement Amount:

Without altering the foregoing or the final determination of the Cash Settlement Amount or the Seller's obligations in respect thereof, from time to time on any day during the Pricing Period, Buyer may request, and upon such request Seller shall make, a payment to Buyer (all such payments less all repayments of such payments by Buyer to Seller being, the "Early Settlement Payment") in an amount equal to the Available Early Settlement Amount (as defined below). If such request is made by Buyer on or prior to 5:00 p.m., New York time, on a Business Day then Seller shall make such payment to Buyer prior to 2:00 p.m., New York time on

the next Business Day. If such request is made after 5:00 p.m., New York time, on a Business Day, Seller shall make such payment to Buyer prior to noon, New York time, on the second succeeding Business Day. If the Seller determines that the Early Settlement Payment on any day during the Pricing Period exceeds the Early Settlement Amount for such day, then the Seller shall so notify Buyer and prior to 5:00 p.m., New York time on the next Business Day, Buyer shall repay such excess to Seller. For each day in the Pricing Period, the Early Settlement Payment on such day shall bear interest at a rate equal to the overnight USD-Federal Funds - H.15 for such day. On the Cash Settlement Payment Date, Buyer shall repay to Seller an amount equal to the Early Settlement Payment together with interest accrued thereon.

For these purposes, at any time:

(i) "Available Early Settlement Amount" equals the excess, if any, of the Early Settlement Amount at such time over the Early Settlement Payment at such time;

(ii) "Early Settlement Amount" means (x) if the Net Hedge Ratio is greater than or equal to .05, zero and (y) otherwise, the amount that equals the product of .75 multiplied by (Intrinsic Value - (Gross Basket Value/(Notional Amount x 1.60)/Premium));

(iii) "Gross Basket Value" means the sum of (x) the total USD market value of all Basket Positions held long plus (y) the absolute value of the total USD market value of all Basket Positions held short;

(iv) "Net Hedge Ratio" means the absolute value of the amount determined by the following formula: (x) total USD market value of all Basket Positions held long less the absolute value of the total USD market value of all Basket Positions held short divided by (y) Gross Basket Value.

**Adjustments For Potential Adjustment Events:**

Calculation Agent Adjustment (as defined below)

**Consequences of Merger Events:**

Calculation Agent Adjustment (as defined below)

**Nationalization or Insolvency:**

Calculation Agent Adjustment (as defined below)

**Calculation Agent Adjustment:**

For purposes of Adjustments for Potential Adjustment Events, Consequences of Merger Events and Nationalization or Insolvency, all with respect to the relevant Basket Positions which comprise the Basket from time to time, the Calculation Agent will make such adjustments to the Share price, the then applicable Basket Base Performance, the NAV Index Level and any other variable relevant to the exercise, settlement or

payment terms of the Transaction, as the Calculation Agent, acting in good faith and commercially reasonable manner, determines appropriate, with reference (as deemed appropriate) to any relevant adjustment rules and precedents in effect for any primary options exchange for exchange-traded options contracts on the relevant affected Basket Positions and in consultation with Buyer.

### Additional Terms

The following additional terms shall apply to this Transaction.

#### 3. Further Definitions:

##### The Basket—

“Basket” means a record maintained by the Calculation Agent for this Transaction identifying, at all times, all of the positions that (i) actually result from transactions specified by the Investment Advisor (as defined below) to be included in such record (the “Effected Positions”) or (ii) are Designated Positions (as such term is defined in the Master Investment Advisory Agreement, the Designated Positions together with the Effected Positions, the “Basket Positions”). For the avoidance of doubt, any dividend, interest or any other income that would have been received or accrued on or in respect of, or any expense incurred with respect to, any Designated Position, will be deemed credited or debited to the Basket as Basket Income or Basket Expenses, as the case may be. If a Designated Position would have been entered into but for the fact that the intended Designated Position violated the Investment Guidelines and Compliance Restrictions (as defined below) at the time such transaction was specified by the Investment Advisor, then such position shall be void *ab initio* and therefore not, at any time, a component of the Basket. To the extent that a Designated Position subsequently violates the Investment Guidelines and Compliance Restrictions, it shall be deemed to have been (X) in the case of a long position, sold, and (Y) in the case of a short position, covered, as of the time such Investment Guideline violation occurred. The Basket may be divided, at any time, into sub-records, each constituting either a Trading Basket or a Term Basket (each as defined below).

“Basket Base Performance” means, during a period, the sum (expressed in USD), during such period, of (i) Basket Gains and Losses **plus** (ii) Basket Income and Expenses.

“Basket Gains and Losses” means, during a period, the difference (expressed in USD), during such period, of (i) realized and unrealized gains in respect of the Basket Positions **minus** (ii) realized and unrealized losses in respect of the Basket Positions.

“Basket Income and Expenses” during a period means (i) Basket Income **minus** (ii) Basket Expenses.

“Basket Income” during a period means: the sum, expressed in USD, of (i) dividend income (determined based on ex-dividend dates that have occurred during such period), net of the non-U.S. and U.S. withholding taxes, if any, that would be imposed on a holder of the relevant position that (a) is a resident of the Federal Republic of Germany, (b) is entitled to the benefits of income tax treaties between the Federal Republic of Germany and other countries, (c) properly treats such dividend income as effectively connected with its U.S. trade or business and (d) has provided properly completed and executed certifications claiming such treaty or effectively connected income status; provided, however, in the case of Effected Positions, dividend income will be further reduced by any additional taxes (and penalties and interest associated therewith) incurred by Seller that would not have been incurred by the Seller in the absence of the relationship between Seller and Buyer under this Transaction, **plus** (ii) interest income, receivable and received, on any USD Basket Credit Balance, such interest calculated at the relevant Benchmark Rate minus the Spread applicable to the USD Basket Credit Balance (as stated below) **plus** (iii) the product of (a) the Rebate Share Value (as defined below) on the USD Trading Basket

**multiplied** by (b) the difference of (1) the relevant Short Benchmark Rate (as defined below) **minus** (2) (A) to the extent such Rebate Share Value is not composed of Hard-To-Borrow Shares (as defined below), the relevant Spread on such Rebate Share Value (stated in the U.S. Spread Schedule below) and (B) to the extent such Rebate Share Value is composed of Hard-to-Borrow Shares, a short spread reflective of the Hard-To-Borrow nature of such Shares as determined by the Calculation Agent, **plus** (iv) interest income receivable on any Non-USD Basket Credit Balance, in each case such interest calculated at the relevant Benchmark Rate minus the Spread applicable to such Non-USD Basket Credit balance, **plus** (v) the product of the Rebate Share Value for each Non-USD Trading Basket **multiplied** in each case by the relevant Benchmark Rate, **plus** (vi) total accrued and paid interest income on Term Basket realized gains and dividend income, that have been realized or paid respectively between Term Basket Reset Dates, calculated at the LIBOR Rate, **plus** (vii) all other income enumerated in the Basket Performance Report. Each interest calculation under this definition shall be performed using the currency associated with the specified Trading Basket for such Trading Basket and all non-USD amounts shall be converted to USD at the spot rate for such currency at the time the Basket Income calculation is performed. As relates to Basket Income, with respect to any Basket Position, "withholding taxes" shall include stamp and excise taxes whether or not collected by withholding.

"Basket Expenses" during a period means: the sum, expressed in USD, of (i) payments in lieu of dividends (including any U.S. or non-U.S. withholding taxes required to be withheld by Seller with respect to such payments in lieu of dividends), provided, however, that in the case of Effected Positions, Basket Expenses will be increased by any additional taxes (and penalties and interest associated therewith) incurred by Seller that would not have been incurred by Seller in the absence of the relationship between Buyer and Seller under this Transaction, **plus** (ii) any interest expenses, excluding accrued interest expenses on any USD Basket Debit Balance, **plus** (iii) total accrued and paid interest expense on the USD Basket Debit Balance, calculated at the Debit Rate on the USD Basket Debit Balance (using the applicable Spread from the U.S. Spread Schedule below), **plus** (iv) total accrued and paid interest expense on any Non-USD Basket Debit Balance, in each case calculated at the Debit Rate on such Non-USD Basket Debit Balance (using the applicable Spread from the Non-U.S. Spread Schedule below), **plus** (v) total accrued and paid interest expense on any Term Basket open long position, in each case calculated at the Debit Rate on such Term Basket open long position's notional amount (using the applicable Spread from the Non-U.S. Spread Schedule below), **plus** (vi) the stock borrow fee payable on any Non-USD Trading Basket, in each case such fee calculated as the product of the Rebate Share Value for such Non-USD Trading Basket **multiplied** by (a) to the extent such Rebate Share Value is not composed of Hard-To-Borrow Shares, the relevant Spread on such Rebate Share Value (as stated in the Non-U.S. Spread Schedule below) and (b) in the case of Hard-to-Borrow Shares composing such Rebate Share Value, a short spread reflective of the Hard-To-Borrow nature of such Shares as determined by the Calculation Agent, **plus** (vii) the stock borrow fee payable on any Term Basket open short position, in each case such fee calculated as the product of the Term Basket open short position's notional amount **multiplied** by (a) to the extent such Term Basket open short position's notional amount is not composed of Hard-to-Borrow Shares, the relevant Spread on such Term Basket open short position's notional amount (as stated in the Non-U.S. Spread Schedule below) and (b) in the case of Hard-to-Borrow Shares composing such Term Basket open short position's notional amount, a short spread reflective of the Hard-to-Borrow nature of such Shares as determined by the Calculation Agent, **plus** (viii) total accrued and paid interest expense on Term Basket realized losses and payments in lieu of dividends, that have been realized or paid respectively between Term Basket Reset Dates, calculated at the LIBOR Rate, **plus** (ix) all other expenses enumerated in the Basket Performance Report, **plus** (x) any investment advisor fees accrued during such period, whether or not actually paid by Seller. Each interest calculation under this definition shall be performed using the currency associated with the specified Trading Basket for such Trading Basket and all non-USD amounts shall be converted to USD at the spot rate for such currency at the time the Basket Expenses calculation is performed. As relates to Basket Expenses, with respect to any Basket Position, "withholding taxes" shall include stamp and excise taxes whether or not collected by withholding.

"Basket Performance Report" means a periodic report prepared and compiled by the Calculation Agent in its sole discretion (but after consultation with the Investment Advisor), setting forth (among other things) the Basket Base Performance, as well as such other items the Calculation Agent determines, in its

sole discretion, affects the performance of the option. The most current Basket Performance Report as of any date shall be available to Buyer on a daily basis.

"Benchmark Rate" means, (i) for the USD Trading Basket, as of any day, the **FEDSOPEN Rate** for such day (or if such day is not a Business Day as of the preceding Business Day) determined by reference to the **FEDSOPEN Index** as published by the Federal Reserve and as disseminated via Bloomberg and (ii) for each Non-USD Trading Basket, the applicable rate specified in the Non-USD Benchmark Rate Schedule on Schedule II hereto, or if no rate is so specified, the recognized overnight rate for the applicable currency as determined by the Calculation Agent, in good faith, or if such overnight rate is not available, the one week rate for such currency as determined by the Calculation Agent, in good faith.

"Debit Rate" means the sum of (i) the Benchmark Rate for any Trading Basket or the LIBOR Rate (as defined below) for any Term Basket, as the case may be plus (ii) for both USD Basket Positions and Non-USD Basket Positions, the Spread for the Basket Debit Balance as listed in the applicable Spread Schedule below.

"Exchange" means, in respect of each Basket Position or the related underlying security, the primary exchange or quotation system (or any successor thereto), if any, on which such underlying security is actively traded or quoted.

"Hard-to-Borrow Shares" means, as determined by the Calculation Agent, (i) in respect of Basket Positions recorded under the USD Trading Basket, any Shares that are components of the USD Trading Basket from time to time for which the market rebate rate is lower than the normal rebate rate received on "general collateral" shares in connection with a theoretical stock borrow arrangement, and (ii) in respect of Basket Positions recorded under a Non-USD Trading Basket, any Shares that are components of such Non-USD Trading Basket from time to time for which the market fee rate is higher than the normal fee rate paid on "general collateral" shares in connection with a theoretical stock borrow arrangement.

"LIBOR Rate" means, in respect of each Term Basket, the one-month LIBOR interest rate on the Start Date (as defined below), and on each Term Basket Reset Date.

"Non-USD Basket Credit Balance" means, for each Non-USD Trading Basket, at any time, the excess, if any, of (i) the sum of (a) the cumulative realized gains on all former Basket Positions in such Non-USD Trading Basket, plus (b) the Short Proceeds Amount for such Non-USD Trading Basket, over (ii) the sum of (a) the aggregate of the initial "cost basis" of all open long Basket Positions in such Non-USD Trading Basket, plus (b) the cumulative realized losses on all former Basket Positions in such Non-USD Trading Basket, and (c) all adjustments, as determined by the Calculation Agent, for any other paid income and expense items allocable in a currency other than USD to the Basket, but excluding accrued and unpaid income and expense items. Non-USD Basket Credit Balance determinations shall be made on a Share "settlement date" basis and shall be denominated in the currency associated with such Non-USD Trading Basket.

"Non-USD Basket Debit Balance" means, with respect to each Non-USD Trading Basket, at any time, the excess, if any, of (i) the sum of (a) the aggregate of the initial "cost basis" of all open long Basket Positions in such Non-USD Trading Basket, plus (b) the cumulative realized losses on all former Basket Positions in such Non-USD Trading Basket, over (ii) the sum of (a) the cumulative realized gains on all former Non-USD Basket Positions in such Trading Basket, plus (b) the Short Proceeds Amount for such Non-USD Trading Basket, and (c) all adjustments, as determined by the Calculation Agent, for any other paid income and expense items allocable in a currency other than USD to the Basket, but excluding accrued and unpaid income and expense items, provided, that, for all Non-USD Basket Debit Balances greater than zero, solely for purposes of determining Basket Expenses, the Calculation Agent shall reduce any such Non-USD Basket Debit Balances by subtracting from the aggregate of such amounts the Unused Initial Leverage (any portion of the Unused Initial Leverage not so subtracted, the "**Remaining Unused Initial Leverage**"). The specific Non-USD Basket Debit Balances from which any Unused Initial Leverage is subtracted shall be determined by the Calculation Agent in its sole discretion but in no event shall any Non-



USD Basket Debit Balance be reduced below zero. Non-USD Basket Debit Balance determinations shall be made on a Share "settlement date" basis and shall be denominated in the currency associated with such Non-USD Trading Basket.

"Non-USD Basket Positions" means the Basket Positions recorded in a Non-USD Trading Basket.

"Non-USD Sub-Basket" means, for a given currency specified in respect of a Non-USD Trading Basket, a record maintained by the Calculation Agent identifying, at all times, all of the Non-USD Trading Baskets specifying that same currency. The Calculation Agent may elect to include in a Basket Performance Report information relating to any or all Non-USD Sub Baskets, which information shall be reported in the currency associated with such Non-USD Sub-Basket. By way of example and not of limitation, a report relating to a Non-USD Sub-Basket for a period may state (among other things) the Basket Credit Balances or Basket Debit Balances (as the case may be) of the relevant Non-USD Trading Baskets for such period, the stock borrow fees on such Non-USD Trading Baskets payable during such period, and any other information selected by the Calculation Agent for inclusion in such report, with all amounts reported in the applicable currency.

"Non-USD Trading Basket" means each Trading Basket that shall contain all Basket Positions representing Shares in respect of which the Exchange is not located in the United States.

"Rebate Share Value" means, at any time, in respect of any Trading Basket, the market value from time to time of all Basket Positions in such Trading Basket that represent open short sales of equity securities. For the avoidance of doubt, a separate Rebate Share Value may be specified for each Trading Basket, including the USD Trading Basket and all Non-USD Trading Baskets. The Rebate Share Value for a given Trading Basket shall be specified in the currency associated with such Trading Basket.

"Related Exchange(s)" means, in respect of each Basket Position or the related underlying security, the primary exchange or quotation system (or any successor thereto), if any, on which futures and/or options contracts with respect to such underlying security are actively traded or quoted.

"Remaining Unused Initial Leverage" is as defined above in the definition of Non-USD Basket Debit Balance.

"Short Benchmark Rate" means, in respect of the USD Trading Basket, (i) for any day prior to the Scheduled Expiration Date, (a) to the extent the Rebate Share Value of the USD Trading Basket is less than or equal to the Initial Leverage, the Term Rate, and (b) for any Rebate Share Value of the USD Trading Basket in excess of the Initial Leverage, the Benchmark Rate (which rate can be expressed as a weighted average rate for the purposes of calculation and reporting); and (ii) for any day during a Pricing Period occurring on or after the Scheduled Expiration Date, the Benchmark Rate.

"Short Proceeds Amount" means, for each Trading Basket, at any time, the sale price(s) received for the Basket Positions that represent open short sales of equity securities in such Trading Basket. A Short Proceeds Amount shall be expressed in the currency of the associated Trading Basket.

"Term Basket" means a record maintained by the Calculation Agent in respect of which all of the following characteristics have been specified: (i) a country, (ii) a currency, (iii) the date on which such record is established (the "Start Date"), (iv) the relevant LIBOR Rate and (v) the date on which all of the Basket Positions included in such record are scheduled to be liquidated (the "End Date"); and that identifies, at all times, all of the outstanding Basket Positions designated by the Investment Advisor to be included in such record. Solely for purposes of calculating "Basket Expenses" the Calculation Agent shall reduce (but not below zero) the notional amount of open long positions in Term Baskets by subtracting from the aggregate of such notional amounts any Remaining Unused Initial Leverage. The specific open long positions from which any Remaining Unused Initial Leverage is subtracted shall be determined by the Calculation Agent in its sole discretion.

"Term Basket Reset Date" means, in respect of a Term Basket, the 15th day of each calendar month on a Modified Following Business Day Convention.

"Trading Basket" means a record maintained by the Calculation Agent in respect of which all of the following characteristics have been specified: (i) a country and (ii) a currency; and that identifies, at all times, all of the outstanding Basket Positions designated by the Investment Advisor to be included in such record.

"Unused Initial Leverage" means, at any time of determination, (i) if USD Basket Debit Balance is a negative amount, the absolute value of such amount, otherwise (ii) zero.

"USD Basket Credit Balance" means, at any time, the excess, if any, of (i) the sum of (a) the Initial Intrinsic Value, plus (b) the cumulative realized gains on all former USD Basket Positions, plus (c) the Short Proceeds Amount for the USD Trading Basket, over (ii) the sum of (a) the aggregate of the initial "cost basis" of all open long USD Basket Positions, plus (b) the cumulative realized losses on all former USD Basket Positions, plus (c) the absolute value of the Rebate Share Value for the USD Trading Basket, and (d) all adjustments, as determined by the Calculation Agent, for any other paid income and expense items allocable in USD to the Basket, but excluding accrued and unpaid income and expense items. Basket Credit Balance determinations shall be made on a Share "settlement date" basis.

"USD Basket Debit Balance" means (i) on any day prior to the Scheduled Expiration Date the difference, whether positive or negative, between (a) the sum of (1) the aggregate of the initial "cost basis" of all open long USD Basket Positions, plus (2) the cumulative realized losses on all former USD Basket Positions, plus (3) the absolute value of the Rebate Share Value for the USD Trading Basket, and (4) all adjustments for any other paid income and expense items allocable in USD to the Basket, but excluding accrued and unpaid income and expense items, minus (b) the sum of (1) the Initial Intrinsic Value, plus (2) the Initial Leverage, plus (3) the cumulative realized gains on all former USD Basket Positions, plus (4) the Short Proceeds Amount for the USD Trading Basket; and (ii) during any period beginning on the Scheduled Expiration Date and ending on the Final Valuation Date, the difference, whether positive or negative, between (a) the sum of (1) the aggregate of the initial "cost basis" of all open long USD Basket Positions, plus (2) the cumulative realized losses on all former USD Basket Positions, plus (3) the absolute value of the Rebate Share Value for the USD Trading Basket, and (4) all adjustments, as determined by the Calculation Agent, for any other paid income and expense items allocable in USD to the Basket, but excluding accrued and unpaid income and expense items, minus (b) the sum of (1) the Initial Intrinsic Value, plus (2) the Short Proceeds Amount for the USD Trading Basket, plus (3) the cumulative realized gains on all former USD Basket Positions provided that, in the case of (i) and (ii), if on any day such difference is negative then for purposes of calculating "Basket Expenses" for such day the "USD Basket Debit Balance" shall be deemed to be zero. Basket Debit Balance determinations shall be made on a Share "settlement date" basis.

"USD Basket Positions" means the Basket Positions recorded in the USD Trading Basket.

"USD Trading Basket" means the Trading Basket that shall contain all Basket Positions in respect of which the Exchange is located in the United States.

**U.S. SPREAD SCHEDULE**  
Applies to the USD Trading Basket

Type	Spread
Rebate Share Value	37.5 basis points (0.375%)
Basket Credit Balance	25 basis points (0.25%)
Basket Debit Balance	37.5 basis points (0.375%)

**Non-U.S. SPREAD SCHEDULE**  
 Applies to all Non-USD Trading Baskets  
 and all Term Baskets

Type	Spread
Rebate Share Value in respect of Non-USD Trading Baskets and Term Baskets using a Benchmark Rate of One-Month USD-LIBOR-BBA	60 basis points (0.60%)
Basket Credit Balance in respect of Non-USD Trading Baskets and Term Baskets using a Benchmark Rate of One-Month USD-LIBOR-BBA	25 basis points (0.25%)
Basket Debit Balance in respect of Non-USD Trading Baskets and Term Baskets using a Benchmark Rate of One-Month USD-LIBOR-BBA	35 basis points (0.35%)
Rebate Share Value in respect of all other Non-USD Trading Baskets and Term Baskets	As determined in good faith by the Calculation Agent upon consultation with the Investment Advisor
Basket Credit Balance in respect of all other Non-USD Trading Baskets and Term Baskets	As determined in good faith by the Calculation Agent upon consultation with the Investment Advisor
Basket Debit Balance in respect of all other Non-USD Trading Baskets and Term Baskets	As determined in good faith by the Calculation Agent upon consultation with the Investment Advisor

**4. Additional Provisions:**

(a) Basket Position Composition: A Basket Position is a record reflecting the purchase or sale of any of the following: any equity securities in a company and listed on a recognized exchange, depositary receipts listed on a securities exchange in the United States of America, equity linked securities, OTC derivatives, index futures, exchange-traded funds, other equity linked securities (besides OTC derivatives, index futures, and exchange-traded funds), interest rate and currency transactions, or any other financial instruments that may be agreed to between the parties together with such other securities and assets arising by reason of any Potential Adjustment Events or Merger Events in respect of shares comprising the Basket from time to time (in each case, a "Share" and collectively, "Shares"). For the avoidance of doubt, Basket Positions may be records of purchase and sale transactions not actually executed.

(b) Share Pricing Method: Shares that are traded on a U.S. national securities exchange or the NASDAQ National Market System shall be valued at any time at the last sale price quoted for Shares on the Consolidated Tape on the date and at the time for which value is being determined, or, if no sale occurred on such date, then at the mean between the "bid" and the "asked" prices on such date as reported in any recognized interdealer quotation system. Other Shares traded over-the-counter shall be valued at the mean between the "bid" and the "asked" prices quoted for such Shares. Shares not so traded as described herein shall be valued at their fair market price, as determined in a commercially reasonable manner by the Calculation Agent; the Calculation Agent shall perform valuation of such

Shares in accordance with criteria regarding valuation times and share pricing methods communicated by Seller in writing to Buyer in a Basket Performance Report or otherwise. With respect to any position not described above, the Calculation Agent in valuing stocks, securities or other investments, may select such other methods of valuation as it in good faith shall deem appropriate under the circumstances and, once determined, all such valuations shall be final and conclusive in the absence of manifest bad faith. The Calculation Agent shall use the actual trade execution pricing for selling and/or acquiring the Shares (the "Share Execution Price") in connection with (i) any option expiration (including any Early Expiration Event), and (ii) determinations of any Basket Debit Balances or Basket Credit Balances. In the case of Designated Positions, except as otherwise described herein, the timing and price for the deemed selling and/or acquiring of a Designated Position shall be as determined by the Calculation Agent in good faith and a commercially reasonable manner, at such prices as would reasonably be expected to be the execution prices if the trade giving rise to the Designated Position had actually and timely been executed. The Calculation Agent's valuation of the Basket or its valuation methodology may differ from the valuation methodology it uses for its own books and records or other internal purposes.

(c) Termination and Early Expiration Notices: In connection with Termination Events under this Confirmation in which Buyer is an Affected Party and Seller has the right, upon delivery of notice to Buyer, to terminate this Transaction, then Seller may exercise such right to terminate by delivery of a Seller Termination Notice, substantially in the form attached hereto as Annex I. In connection with Termination Events under this Confirmation in which Seller is an Affected Party and Buyer has the right, upon delivery of notice to Seller, to terminate this Transaction, then Buyer may exercise such right to terminate by delivery of a Buyer Termination Notice, substantially in the form attached hereto as Annex II. Notwithstanding the provisions of Section 6(a) of the Agreement, the Early Termination Date in respect of this Transaction shall be the day on which the Seller Termination Notice or Buyer Termination Notice, as relevant, is effectively delivered provided that if such day is not an Exchange Business Day, the Early Termination Date shall be the first Exchange Business Day to occur after such day.

If an Early Expiration Event occurs, this Transaction will automatically expire at the time of such occurrence. In such instance, Seller may, solely as a courtesy and without obligation, give notice to Buyer of the occurrence of such Early Expiration Event. If Seller determines to provide such notice, it may do so substantially in the form attached hereto as Annex I. For the avoidance of doubt, notwithstanding the delivery or non-delivery of such a notice, an Early Expiration Event occurs automatically at the time the conditions described in clause (ii) of the definition of Expiration Date have occurred.

Except as otherwise specified herein, upon the occurrence of an event or circumstances giving Buyer the right to terminate this Transaction prior to the Scheduled Expiration Date (excluding an Event of Default in respect of Seller under Section 5(a)(vii) of the Agreement, but including, without limitation, any other Event of Default in respect of Seller or any Termination Event in respect of Seller), Buyer shall deliver a Buyer Termination Notice within 15 days of the accrual of such right to terminate this Transaction or Buyer shall be deemed to have waived such right to terminate this Transaction as the result of the occurrence of such event or circumstances, provided that for the purpose of determining when a Buyer's right to terminate this Transaction accrues under Section 5(a)(ii) of the Agreement or as the result of a Termination Event, Buyer shall be deemed to have delivered any notice required to be delivered by Buyer under Section 5(a)(ii) or Section 6(b)(i) of the Agreement, as the case may be, at the time Buyer learned of Seller's breach of agreement or obligation hereunder or of the facts giving rise to such Termination Event, as the case may be.

(d) Investment Advisor: Buyer acknowledges that **Renaissance Technologies LLC** (the "Investment Advisor") has been engaged by Seller to manage the composition of the Basket on a discretionary basis for the account of Seller, pursuant to (a) the Investment Guidelines and Compliance Restrictions (the "Master Investment Guidelines and Compliance Restrictions ") set forth in the Master Investment Advisory Agreement dated as of December 15, 2008, between Seller (or its specified affiliate) and the Investment Advisor (the "Master Investment Advisory Agreement,") and (b) the Supplemental Investment Guidelines and Compliance Restrictions (the "Supplemental Investment Guidelines and Compliance Restrictions," and together with the Master Investment Guidelines and Compliance

Restrictions, the "Investment Guidelines and Compliance Restrictions") set forth in the Supplemental Investment Advisory Agreement dated December 15, 2008, as may be amended from time to time, between the parties to the Master Investment Advisory Agreement, (the "Supplemental Investment Advisory Agreement," and together with the Master Investment Advisory Agreement, the "Investment Advisory Agreement"). While Seller, in the normal course of its business, shall review Investment Advisor's compliance with the Investment Guidelines and Compliance Restrictions, Seller shall have no liability to Buyer – and Buyer hereby waives any rights of action against Seller – in connection with Investment Advisor's non-compliance with said Investment Guidelines and Compliance Restrictions – or any other terms of the Investment Advisory Agreement.

If (i) the Investment Advisory Agreement or the Supplemental Investment Advisory Agreement is terminated after notice of termination by Seller for cause (as set out in the Master Investment Advisory Agreement); (ii) Seller delivers notice that it is terminating the Supplemental Investment Advisory Agreement without cause under the provisions of the Master Investment Advisory Agreement and either (x) the Investment Advisor has delivered notice, in accordance with the Master Investment Advisory Agreement, that it shall commence and manage the Liquidation or (y) three Exchange Business Days have passed without the Investment Advisor delivering such a notice, (iii) Investment Advisor delivers notice that it is terminating the Investment Advisory Agreement for cause (as set out in the Master Investment Advisory Agreement) and either (x) the Investment Advisor has delivered notice, in accordance with the Master Investment Advisory Agreement, that it shall commence and manage the Liquidation or (y) three Exchange Business Days have passed without the Investment Advisor delivering such a notice, or (iv) the Investment Advisory Agreement or the Supplemental Investment Advisory Agreement should terminate for any other reason, then for purposes of Section 5(b)(v) of the Agreement the occurrence of any of clause (i), (ii), (iii) or (iv) above shall be an Additional Termination Event with this Transaction as the sole Affected Transaction and Seller as the sole Affected Party. Upon the occurrence of such an Additional Termination Event, Seller shall timely deliver to Buyer notice of such event and Buyer shall have the right, but not the obligation, within 3 days of effective delivery of such notice (but not more than 3 days), to terminate this Transaction, by delivery of a notice to Seller substantially in the form attached hereto as Annex II. In the case of (i), (iii) or (iv), if this Transaction is terminated, the Cash Settlement Amount shall be Cash Settlement Scenario "A." In the case of (ii), if this Transaction is terminated, the Cash Settlement Amount shall be Cash Settlement Scenario "B."

(e) Additional Termination Event Relating to Seller CDS Spreads: The occurrence, from time to time, of a CDS Spread Event X or of a CDS Spread Event Y shall constitute an Additional Termination Event in respect of which Seller shall be the sole Affected Party and this Transaction and all other Transactions between Seller and Buyer shall be Affected Transactions. Notwithstanding the provisions of Section 6(b)(iv)(2) of the Agreement or any other provision of the Agreement to the contrary, in the event that such an Additional Termination Event occurs (the date of such occurrence being a "Trigger Date") and Buyer does not designate, as a result thereof, an Early Termination Date in respect of all (and not less than all) Transactions within fifteen (15) days of the related Trigger Date then Buyer shall be deemed to have waived such Additional Termination Event and no CDS Spread Event X or CDS Spread Event Y, whichever gave rise to such Additional Termination Event, may again occur during the ninety (90) day period that commenced on the related Trigger Date.

For purposes hereof the "CDS Spread" on any Business Day shall be the average of the mid-market (average of bid and offer for USD100,000,000 notional protection) five year senior debt credit default swap ("CDS") spreads in respect of Seller, as quoted by: Barclays Capital Inc., Citigroup Global Markets Inc., Goldman, Sachs & Co., J. P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated (each, and any successor thereto, a "Reference Dealer") (quoted at Bloomberg function CDSW, although if Buyer in good faith and in a commercially reasonable manner determines such a quote available at Bloomberg function CDSW is inconsistent with market conditions, it may confirm the quote directly with such Reference Dealer and such directly confirmed quote shall be used in place of the applicable one found at Bloomberg Function CDSW, if different), measured as of 3:00 p.m. New York time on such Business Day. In the event that, at such time, any one or more of the Reference Dealers specified above has not provided a quote of the CDS spreads in respect of Seller, the CDS Spread shall be the average of the CDS spreads quoted at such time by the other Reference Dealers provided that if,

at such time, fewer than three of such Reference Dealers have provided such a quote, Buyer and Seller shall reasonably agree to include, in the averaging calculation, the quote of another recognized dealer or dealers, so that three such quotes have been averaged, for the purpose of determining the CDS Spread; provided, however, that if one or more Reference Dealer provides such a quote and the Buyer and Seller are unable to reasonably agree as to an additional recognized dealer or dealers (as applicable), the average of the quotes obtained from available Reference Dealers (or if only one Reference Dealer is providing a quote, such quote) shall be used to determine the CDS Spread. A CDS Spread Event X will occur if the CDS Spread is 325 basis points or more on at least three (3) consecutive Business Days. A CDS Spread Event Y will occur if the CDS Spread is at least 450 basis points on any Business Day. Buyer shall not buy, sell or otherwise engage in transactions with respect to CDS of the Seller. No affiliate of Buyer may engage in transactions with respect to CDS of the Seller for the purpose or with the intent of increasing such spread in order to trigger the provisions of this Paragraph.

(f) Fundamental Change to the Investment Guidelines and Compliance Restrictions: If Seller makes a fundamental change to the Investment Guidelines and Compliance Restrictions, as determined by Seller in its reasonable discretion, then Seller shall notify Buyer of such change and Buyer shall have the right, but not the obligation, to terminate this Transaction, by delivery of a notice to Seller substantially in the form attached hereto as Annex II. If Buyer elects to terminate this Transaction pursuant to this paragraph, the Cash Settlement Amount shall be Cash Settlement Scenario "B."

(g) Post-Settlement Adjustments: Notwithstanding anything to the contrary in the Agreement, if, (i) after the Transaction has terminated and any Cash Settlement Amount has been paid, Seller or Buyer becomes aware of (a) an operational misbooking or (b) any accrued but unpaid income or expense (as of the Final Valuation Date) that, (1) differed from the amount actually paid, (2) was determined to be in error or (3) was not actually paid in accordance with the value at which it had been booked by the Seller, and (ii) the occurrence of a situation described in clauses (a) or (b) affected the calculation of the Cash Settlement Amount, then the Party that becomes aware of such fact will notify the other Party, and the Parties will negotiate in good faith to allocate any payment adjustment between them. This provision shall survive the termination of this Confirmation or the Agreement.

(h) Change in Definition of Indemnifiable Tax: Solely for the purposes of this Transaction, the term Indemnifiable Tax will be defined to exclude any tax imposed on any payment under this Transaction that is based on, related to, in respect of, or measured by, in whole or in part, the declaration, payment or receipt of any dividend on any Shares comprising from time to time the Basket.

(i) Taxes: For purposes of determining Basket Base Performance, Basket Gains and Losses, Basket Income and Expenses, Basket Credit Balance, Basket Debit Balance and any other item used to calculate or affecting any of such amounts, gain, loss and any other income or expense items will be computed and taken into account without giving effect to any Tax that might be imposed in respect or by reason thereof (except to the extent that withholding taxes (including any penalties and interest associated with such taxes) are expressly included in Basket Income or in Basket Expenses).

(j) Non-Confidentiality: Except as otherwise hereinafter set forth in this paragraph, the parties hereto agree and acknowledge that the structure and tax aspects of the Transaction and all materials provided by either party with respect to such structure and tax aspects are, and have always been, non-confidential, and are not the proprietary information of either party. Notwithstanding anything herein to the contrary, each party and each Affiliate thereof (and each employee, representative, or other agent of any of the foregoing) may disclose, and has always been entitled to disclose, to any and all persons, without limitation of any kind, the tax treatment and tax structure of the Transaction and all materials of any kind (including opinions or other tax analyses) that are provided to such party (or Affiliate) relating to such tax treatment and tax structure (provided, however, that the names and all other identifying information of all entities and persons have been properly erased from such materials prior to the disclosure thereof unless and to the extent such information is necessary or helpful in understanding the tax treatment or tax structure of the transaction). Each party otherwise agrees not to disclose any proprietary, non-public information regarding the other party ("Confidential Information") it may have received in connection with the Transaction, including, without limitation, that such party has entered into

the Transaction with the other party, and agrees that it shall not disclose or use the name of the other party (or any Affiliate thereof) for marketing or other purposes not directly relating to the implementation of the Transaction hereunder. Notwithstanding the foregoing, either party may disclose any such Confidential Information if required by law or required or requested by any judicial, governmental or other regulatory body, provided it gives prior written notice of such required disclosure to the other party. Confidential Information of a party shall not include any information in the public domain or information obtained from any third party not under a duty not to disclose it.

(k) Reporting. Seller represents that for tax purposes, it and any Affiliate thereof will report the Transaction, as a derivative financial instrument, and, for accounting, regulatory, tax and all other purposes, it and any Affiliate thereof will treat and report the Effected Positions and any other assets or positions that may be credited to or included within the Baskets (other than in respect of Designated Positions) as assets and positions of which Seller is the sole legal and beneficial owner and to which Seller is the party, as the case may be; provided, that in the event of a dispute between the parties as to the proper characterization of the Transaction and related assets subsequent to a Change in U.S. Tax Law, Seller will in good faith make its own determination of such characterization and treat and report the Transaction and related assets in accordance with its good faith determination. Seller represents that for U.S. federal income tax purposes all payments received under the Transaction will be treated as effectively connected with the conduct of a trade or business within the United States and as attributable to a trade or business carried on by it through a permanent establishment in the United States. (For purposes of this section the term "Change in U.S. Tax Law" means the (a) enactment, promulgation, execution or ratification of, or any change in or amendment to, the U.S. Internal Revenue Code of 1986, as amended, or the Treasury Regulations promulgated thereunder (including any proposed changes that are not required under such proposal to be prospective only) or (b) the announcement of the application or official interpretation thereof by the United States Internal Revenue Service or the United States Department of the Treasury, as the context requires), or (c) any action taken by a taxing authority, or brought in a court of competent jurisdiction, on or after the date on which the Transaction is entered into (regardless of whether such action is taken or brought with respect to a party to the Agreement) (which includes, for the avoidance of doubt, the commencement of a tax audit of Seller (that occurs on or after the date on which the Transaction is entered into) in which Seller believes, in its sole discretion, that the auditor will propose that Seller treat the Transaction in a manner other than described above).

(l) Additional Termination Events. Notwithstanding the provisions of Section 5(a)(iv) of the Agreement, if any of the representations made by Buyer in Part 2(b) of the Schedule to the Agreement in respect of this Transaction proves to have been incorrect or misleading in any material respect when made or repeated or deemed to have been made or repeated, such incorrect or misleading representations shall constitute an Additional Termination Event under Section 5(b)(v) of the Agreement, and Buyer shall be the sole Affected Party and this Transaction shall be the sole Affected Transaction.

If during the term of the Transaction (and solely with respect to this Transaction), as a result of any event described in clauses (x) or (y) of Section 5(b)(ii) of the Agreement, (which clause (x) will include, for the avoidance of doubt, the commencement of a tax audit of Seller), Seller makes its own reasonable determination, after consultation with Buyer, that it is substantially likely that either it is under an obligation to withhold or remit any tax on account of, or relating to, the declaration, payment or receipt of any dividend on any Shares comprising from time to time the Basket, or it will receive dividends on such Shares net of withholding tax, in each case due to the relationship between Seller and Buyer under this Transaction, then such determination shall constitute an Additional Termination Event under Section 5(b)(v) of the Agreement, and Buyer shall be the sole Affected Party and this Transaction shall be the sole Affected Transaction.

(m) Transferability. The option constituting the Transaction shall not be transferable by Seller without the prior written consent of Buyer which consent shall not unreasonably be withheld or delayed. The option constituting the Transaction shall be transferable by Buyer (and any transferee of the option constituting the Transaction) in whole or in part at any time to another U.S. Person (other than U.S. trusts under section 7701(a)(30) of the Code unless Seller in its sole discretion consents) with the written consent of Seller upon written notice, which consent shall not be unreasonably withheld and shall be

delivered within a reasonable period of time. Without limitation to the foregoing, for purposes of this provision, it shall not be unreasonable for Seller to withhold consent if the transferee (x) is not a customer of Seller (or a related party thereto) and is unwilling or unable to meet Seller's then standards for customers (y) would otherwise violate Seller's standard operating procedures (for example, on account of know-your-customer rules or limits on exposure to any particular customer) or (z) would, in the reasonable belief of Seller, increase any risk (including, without limitation, tax risk) to Seller. Any purported transfer in violation of this provision shall be void and of no effect.

(n) Termination Following Regulatory Change. Notwithstanding anything to the contrary in this Confirmation, Seller may designate an Early Termination Date and terminate this Transaction upon not less than fifteen (15) Business Days prior written notice to Buyer, in the event that in the reasonable opinion of Seller (supported by the written opinion of nationally recognized counsel reasonably acceptable to Buyer): (i) any change after the Trade Date in applicable law (including, without limitation, any laws, treaties, ordinances, rules, regulations, rulings, interpretations and authorizations of the United States or of any political subdivision, regulatory body having authority over Seller) materially and adversely affects Seller's capital charges directly resulting from the Transaction and Buyer declines (in its sole judgment) to make any additional payments determined by Seller (in its sole judgment) that would make Seller indifferent to such change, or (ii) Seller's tax position with respect to the Transaction is affected due to any Change in U.S. Tax Law (as defined in "Reporting" above). If Seller elects to terminate the Transaction pursuant to this paragraph, the Cash Settlement Amount shall be (i) Cash Settlement Scenario "A" if the change in applicable law or Change in U.S. Tax Law has become effective or (ii) Cash Settlement Scenario "B", otherwise.

#### 5. Additional Representations:

Buyer and Seller each make (and as indicated, Buyer makes) the following additional representations:

(i) it is entering into the Transaction as principal and not as agent or in any other capacity, fiduciary or otherwise and no other person has an interest herein.

(ii) it has, in connection with the Transaction (a) the knowledge and sophistication to independently appraise and understand the financial and legal terms and conditions of the Transaction and to assume the economic consequences and risks thereof and has, in fact, done so as a result of arm's length dealings with the other party; (b) to the extent necessary, consulted with its own independent financial, legal or other advisors and has made its own investment, hedging and trading decisions in connection with the Transaction based upon its own judgment and the advice of such advisors and not upon any view expressed by the other party; (c) not relied upon any representation (whether written or oral) of the other party, other than the representations expressly set forth hereunder and is not in any fiduciary relationship with the other party; (d) not obtained from the other party (directly or indirectly through any other person) any advice, counsel or assurances as to the expected or projected success, profitability, performance, results or benefits of the Transaction; and (e) determined to its satisfaction whether or not the rates, prices or amounts and other economic terms of the Transaction and the indicative quotations (if any) provided by the other party reflect those in the relevant market for similar transactions.

(iii) it is not a private customer (as defined in the Rules of The Securities and Futures Authority).

(iv) it understands that the offer and sale of the option constituting the Transaction is intended to be exempt from registration under the US Securities Act of 1933, as amended (the "Securities Act"), by virtue of Section 4(2) thereof. In furtherance thereof, it represents and warrants that (a) it is experienced in investing in or otherwise entering into options and other financial instruments similar to the Transaction and has determined that the Transaction is a suitable investment for it, and (b) it is an institution which qualifies as an "accredited investor" or "qualified institutional buyer" as such terms are defined under relevant regulations promulgated under the Securities Act.



(v) Buyer understands and specifically acknowledges and agrees that the composition of the Basket as well as the Basket Base Performance shall be under the sole discretionary trading authority of Investment Advisor, an investment advisor independent of Seller. A copy of the Investment Advisory Agreement has been previously made available to, and has been reviewed by, Buyer. Buyer has obtained all the information it desires regarding the Investment Advisor, including, for the avoidance of doubt, investment advisor fees. Buyer agrees and acknowledges that neither Seller nor the Designated Agent take any responsibility for such information. Buyer has made an independent judgment of the experience and expertise of the Investment Advisor. Buyer agrees that it shall not attempt to direct or influence the choice of investments in the Basket. Buyer acknowledges and agrees that Buyer has no rights under the Investment Advisory Agreement and is not a third party beneficiary thereto.

(vi) Buyer represents to Seller, that Buyer has sufficient experience with derivative transactions or similar securities or instruments to make a determination to enter into a Transaction linked to the securities underlying or referred to in such derivative transactions, and has the capacity and authority to invest directly in the securities underlying or referred to in such derivative transactions. This representation shall be deemed to be true and accurate on each day that this Confirmation remains in force and effect.

(vii) Buyer acknowledges that Basket Positions may exist in the absence of actually executed transactions. Buyer understands that the existence of a Basket Position does not necessarily indicate that an actual purchase or sale of Shares occurred, and that the Basket Base Performance and the value of the Cash Settlement Amount may be affected by records of transactions that did not actually occur. Buyer and Seller agree that nothing in this Confirmation obligates the Seller to actually purchase or sell any of the underlying securities from which a Basket Position is derived.

(viii) Buyer has received an opinion of counsel from its own tax advisor with respect to the Transaction.

(ix) Buyer and Seller acknowledge that Buyer has no rights in the Basket, including rights to receive distributions on, the proceeds from disposition of, or information received in respect of, the Basket.

(x) Buyer acknowledges that it has no voting rights in respect of any security which may be held by Seller. Buyer and Seller acknowledge and agree that Seller will not take account of the interests of the holder of the option constituting the Transaction or any third party in voting or otherwise exercising any of its rights, as owner, in the Basket.

(xi) It is the intention of the parties that the obligations of Seller in respect of the Transaction evidenced by this Confirmation are general recourse obligations of Seller. To the extent that, in any relevant proceeding or under any applicable law, Buyer should have the right to marshal, to appoint a receiver over, or otherwise have recourse to, the ownership or equity interest of Seller in the Basket, Buyer hereby waives, and agrees not to enforce, such rights provided that such waiver and agreement shall not reduce or limit the obligations of Seller hereunder.

**6. GOVERNING LAW:** THIS CONFIRMATION WILL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN THE STATE.

7. The time of dealing will be confirmed by Seller upon written request.

8. Deutsche Bank AG London is regulated by the Securities and Futures Authority.

**9. Account Details:**

Payment to **Party A:**                      The Bank of NY  
    ABA 021-000-018  
    Account # 8900-353570  
    Account Deutsche Bank

Payment to **Party B:**                      To be, and as, provided by Party B.

**10. Notices and other Communications:**

Contact particulars for notices and other communications (including reports) shall be delivered in accordance with Section 12 of the Agreement to the relevant person or persons specified in Schedule I, hereto. Notwithstanding anything in Section 12 of the Agreement to the contrary, notices sent by e-mail shall be deemed delivered when sent.

Each Party has agreed to make payments to the other in accordance with this Confirmation. Please confirm that the foregoing correctly sets forth the terms of our agreement by sending a return executed acknowledgment hereof to such effect to the attention of Adam Tolchinsky, Legal Division (Fax No. (212) 797-4562).

[Signature Page Follows]

We are very pleased to have concluded this Transaction with you.

Regards,

**DEUTSCHE BANK AG LONDON**

By: Satish Ramakrishna  
Name: Satish Ramakrishna  
Title: Attorney-in-Fact

By: Christopher Caruso  
Name: Christopher Caruso  
Title: Attorney-in-Fact

**DEUTSCHE BANK SECURITIES INC.,**  
acting solely as Agent in connection with  
this Transaction

By: Satish Ramakrishna  
Name: Satish Ramakrishna  
Title: Managing Director

By: Christopher Caruso  
Name: Christopher Caruso  
Title: Managing Director

Confirmed and Acknowledged as of the date first above written:

**MOSEL EQUITIES L.P.**  
By Renaissance Technologies LLC,  
Its General Partner

By: \_\_\_\_\_  
Name:  
Title:

[Signature page to Confirmation]

NEWYORK\53397

We are very pleased to have concluded this Transaction with you.

Regards,

**DEUTSCHE BANK AG LONDON**

By: \_\_\_\_\_  
Name: Satish Ramakrishna  
Title: Attorney-in-Fact

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: Attorney-in-Fact

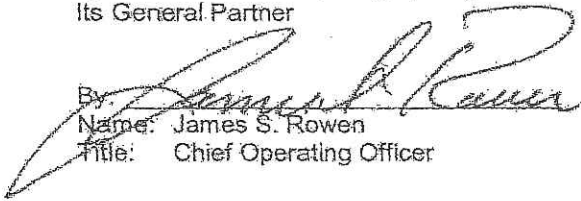
**DEUTSCHE BANK SECURITIES INC.,**  
acting solely as Agent in connection with  
this Transaction

By: \_\_\_\_\_  
Name: Satish Ramakrishna  
Title: Managing Director

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Confirmed and Acknowledged as of the date first above written:

**MOSEL EQUITIES L.P.**  
By Renaissance Technologies LLC,  
Its General Partner

By:   
Name: James S. Rowen  
Title: Chief Operating Officer

[Signature page to Confirmation]

NEWYORK\53397

**SCHEDULE I**  
**Contact Particulars for Notices and Other Communications**

**Contact Particulars for Party A:**

Copies of All Notices: RentecNotification@list.db.com

*Specified Contacts:*

Confirmations: Adam Tolchinsky  
Telephone: (212) 250-2537  
Fax No.: (212) 797-4562  
E-mail: adam.tolchinsky@db.com

Payments/Fixings: Vincent Capone  
Telephone: (212) 250-7221  
Fax No.: (212) 797-4932  
E-mail: vincent.j.capone@db.com

Basket Base Performance; NAV Index Levels; Basket Performance Reports:  
Peter Brophy  
Telephone: (212) 250-7626  
Fax No.: (212) 797-8733  
E-mail: Peter.Brophy@db.com

Early Expiration Event/Notice: Satish Ramakrishna  
Telephone: (212) 250-4928  
Fax No.: (212) 797-9358  
E-mail: satish.ramakrishna@db.com

**Contact Particulars for Party B:**

Early Expiration Event/Notice:	Peter Brown Bob Mercer	Thomas Kerns Mark Silber Carla Volpe Porter James Rowen
Telephone:	(631) 444-7000	(212) 486 -6780
Fax:	(631) 689-4495	(212) 758-7136
Email:	Peter@rentec.com Mercer@rentec.com TKerns@rentec.com Silber@rentec.com Carla@rentec.com JRowen@rentec.com	

Basket Base Performance; NAV Index Levels; Basket Performance Reports:  
Thomas Kerns  
Scott Chinsky  
Telephone: (212) 486-6780  
Fax No.: (212) 486-7291  
Email: TKerns@rentec.com  
Scott@rentec.com

---

Confirmations:  
Telephone:  
Fax No.:  
Email:

Mark Silber / Carla Volpe Porter  
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(212)758-7136  
Silber@rentec.com  
Carla@rentec.com

NEWYORK\53397

Schedule I - 2

**SCHEDULE II**

**Non-USD BENCHMARK RATE SCHEDULE**

Applicable to the specified Non-USD Trading Basket and the Term Basket

<u>Country / Exchange on which securities trade</u>	<u>Benchmark Rate</u>
Australia / Australian Stock Exchange (ASX)	One-Month USD-LIBOR-BBA <sup>2</sup>
Belgium / Euronext Brussels / NYSE Euronext	One-Month USD-LIBOR-BBA
Canada / Toronto Stock Exchange (TSE)	One-Month USD-LIBOR-BBA
Finland / Helsinki Stock Exchange (HEX)	One-Month USD-LIBOR-BBA
France / Euronext Paris / NYSE Euronext	One-Month USD-LIBOR-BBA
Germany / Frankfurt Stock Exchange	One-Month USD-LIBOR-BBA
Ireland / Irish Stock Exchange (ISE)	One-Month USD-LIBOR-BBA
Italy / Borsa Italiana	One-Month USD-LIBOR-BBA
Japan / Tokyo Stock Exchange (TSE)	One-Month USD-LIBOR-BBA
Mexico / Bolsa Mexicana de Valores (BMV)	DB Internal Funding Rate
Netherlands / Euronext Amsterdam/ NYSE Euronext	One-Month USD-LIBOR-BBA
Norway / Oslo Bors	One-Month USD-LIBOR-BBA
Singapore / Singapore Exchange (SGX)	DB Internal Funding Rate
South Africa / Johannesburg Stock Exchange (JSE)	One-Month ZAR-JIBAR-SAFEX
Spain / Bolsa de Madrid	One-Month USD-LIBOR-BBA
Sweden / Stockholmsborsen AB	One-Month USD-LIBOR-BBA
Switzerland / Swiss Exchange (SWX)	One-Month USD-LIBOR-BBA

<sup>2</sup> As used on this Schedule II, "USD-LIBOR-BBA" shall have the meaning specified in the 2006 ISDA Definitions.

ANNEX I

[DATE]

MOSEL EQUITIES L.P.  
[FULL ADDRESS]

Attn: [            ]  
Tel: [            ]  
Fax: [            ]

[EARLY EXPIRATION] [SELLER TERMINATION] NOTICE

Dear Sirs:

The purpose of this notice is to inform the Buyer that pursuant to the original terms of the Barrier Option Transaction (the "Subject Transaction"), entered into between the Buyer and the Seller, and identified by the Confirmation bearing DBSI Reference Number 941-50310 (the "Confirmation"):

[At the close of business on [            ], the NAV Index Level is at [            ] which is less than or equal to the Barrier NAV Index Level. This constitutes an Early Expiration Event. The Subject Transaction has expired in accordance with the terms of the Confirmation.]<sup>3</sup>

[The Seller is electing to terminate the Subject Transaction, under the terms of the Confirmation, in accordance with [DESCRIBE RELEVANT CONFIRMATION PROVISION], upon receipt of this notice.]<sup>4</sup>

Capitalized terms used but not defined herein shall have the meanings set forth in the Confirmation.

Very truly yours,

DEUTSCHE BANK SECURITIES INC.

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:

<sup>3</sup> Delete if this notice not is not being delivered pursuant to an Early Expiration Event.

<sup>4</sup> Delete if this notice is being delivered pursuant to an Early Expiration Event.



ANNEX II

[DATE]

**DEUTSCHE BANK AG LONDON**

c/o Deutsche Bank Securities Inc.

60 Wall Street

New York, NY 10005

Attn: Satish Ramakrishna/[Kam Singh]

Tel: (212) 250-4928

BUYER TERMINATION NOTICE

Dear Sirs:

Reference is made to the Barrier Option Transaction (the "Subject Transaction"), entered into between Mosel Equities L.P. (the "Buyer") and Deutsche Bank AG, London Branch (the "Seller"), and identified by the Confirmation bearing DBSI Reference Number 941-50310 (the "Confirmation").

Capitalized terms used but not defined herein shall have the meanings set forth in the Confirmation.

The purpose of this notice is to inform the Seller that the Buyer is electing to terminate the Subject Transaction, under the terms of the Confirmation, in accordance with [DESCRIBE RELEVANT CONFIRMATION PROVISION], upon receipt of this notice.

Very truly yours,

MOSEL EQUITIES L.P.

By: \_\_\_\_\_  
Name:  
Title:

From: CN=Frank X Nelson/OU=db/O=dbcom  
To: rdoucette@gweiss.com  
cn=joe genovese/ou=db/o=dbcom@dbamericas  
CC: CN=Joe Genovese/OU=db/O=dbcom@DBAmericas  
Date: Oct 12 2009 09:23:35  
Subject: Re: FW: DB Option - possible new development

We'll reach out to both our internal and external tax counsels and revert back. thanks.

"Rick Doucette"  
<rdoucette@gweiss.com>

Joe Genovese/db/dbcom@DBAmericas,  
10/12/2009 09:10 AM Frank X Nelson/db/dbcom@DBAMERICAS

To

cc

Subject  
FW: DB Option - possible new development

Frank and Joe

Both Steve and Bob, (our best tax minds), are concerned about the risk of passage and its affects on the MAPs product. Id be interested in hearing what your people and counsel feel about the risks. Talk to you later this week.

Rick

From: Robert Gendreau  
Sent: Tuesday, October 06, 2009 6:50 PM  
To: Steve Kleinman; Rick Doucette  
Cc: Marcus Peckman; Jeffrey Dillabough  
Subject: RE: DB Option - possible new development

I agree that the codification of the economic substance doctrine would be a powerful tool for the IRS. According to Joshua Odintz, Acting Treasury Tax Legislative Counsel, codification of the economic substance doctrine is now likely. However, questions remain about ironing out differences between the various versions proposed by the administration and both houses of Congress.

For instance, Section 453 of the proposed Health Act (H.R. 3200) would institute new non-economic substance penalties ranging from 20% to as high as 40% (for transactions not adequately disclosed on the taxpayers tax return). The Health Act proposes to create a strict liability penalty one to

which  
there is no defense of substantial authority, disclosure plus  
reasonable  
basis, basic reasonable cause and good faith, or even enhanced  
reasonable  
cause and good faith in the case of any underpayment attributable to any  
disallowance of claimed tax benefits by reason of a transaction lacking  
economic substance.

In addition, the proposed codification of the economic substance doctrine contains significant ambiguity, in that it would provide: The determination of whether the economic substance doctrine is relevant to a transaction (or a series of transactions) shall be made in the same manner as if this subsection had never been enacted. In other words, the code section, if enacted, will tell us how certain computations relevant to application of the economic substance doctrine are to be performed, but it will not resolve the more controversial and difficult questions when to apply the doctrine and which transactions (or portions of transactions) need to be tested separately under the doctrine. Accordingly, there is likely to be room for a large amount of good faith dispute as to the existence (or lack of existence) of any underpayment at all in many cases in which the IRS asserts that the economic substance doctrine, even in its codified form, should apply.

Again, significant details still need to be worked out as a number of versions are still floating around. However, it looks to be quite certain the codification of the economic substance doctrine will happen. It will be interesting to see how the final code section is worded, and to what extent penalties are increased.

- - Bob

From: Steve Kleinman  
Sent: Tuesday, October 06, 2009 5:24 PM  
To: Rick Doucette  
Cc: Marcus Peckman; Robert Gendreau; Jeffrey Dillabough  
Subject: DB Option - possible new development

Below is an article about the codification of the economic substance doctrine which, if enacted, could have serious implications with respect to the DB option transaction. While this proposal will not completely eliminate the benefit of the option structure, nevertheless, this will be a powerful tool for the IRS. It appears to be able to apply retroactively.

Jeff and Bob, do you agree?

Steven C. Kleinman  
CFO Emeritus  
Weiss Multi-Strategy Advisers LLC  
One State Street  
Hartford CT 06103

Tel: 860.240.8974  
Fax: 860.240.8924

Joint Committee explains economic substance codification

Commentary from: "Corporate Tax Insights on Checkpoint" by Jack Cummings

In September the Joint Committee on Taxation issued JCS-3-09 describing in great detail the President's 2010 Omnibus Budget's proposal to codify the economic substance doctrine (ESD). Of course the proposal, and earlier proposals in the Senate and the House, do not really undertake to fully codify the doctrine, but rather only to codify the test applied once the doctrine is determined to apply. Indeed, the proposal's signal feature is defining a test for economic substance while not defining when the ESD is to be applied to a taxpayer's case.

However, statements in the JCT Description make it clear that the ESD is now, and is expected to continue to be, applied as if the following were a section of the Code:

Sec. xxx. ECONOMIC SUBSTANCE DOCTRINE

GENERAL PROVISIONS. - A taxpayer whose facts (as properly determined) otherwise satisfy the requirements (as properly interpreted) for a tax benefit (whether viewed as a benefit to taxpayers generally, or beneficial due to the particular facts of the case), shall be denied that tax benefit if:

the transaction underlying those facts was motivated by a purpose to obtain that tax benefit;

the benefit was not intended by congress; and

the taxpayer fails to prove satisfaction of the statutory economic substance test once the Service asserts application of the ESD.

EXCEPTION FOR INDIVIDUALS. - This section shall not apply to a tax benefit claimed by an individual taxpayer with respect to a transaction that is not part of a trade or business or profit making activity.

ECONOMIC SUBSTANCE TEST. [the two-prong test]

PENALTIES AND INTEREST ON UNDERSTATEMENTS. - Liability for additional tax determined in whole or in part through the application of this section shall be increased by a strict liability penalty of 30 percent (20 percent for disclosed positions) of the related understatement of tax; in addition the taxpayer may not deduct interest attributable to such an understatement.

Conclusion. Of course the actual wording of the statutory language proposed does not include subsection (a). This is rather odd, once you realize what might be in subsection (a). But the proposal is not really that interested in making clear the unknown. The JCT Description states: ...the codification and

penalty regime intends to change the taxpayer's cost-benefit analysis and deter some aggressive taxpayer behavior.

In other words, the legislation is a partial substantive rule of law that is both severe and vague enough to hopefully scare taxpayers away from the line up close to which taxpayers frequently desire to walk. Enactment is expected this year or next.

JCS-03-09 can be viewed/downloaded at:  
<http://www.jct.gov/publications.html?func=startdown&id=3576>

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From: "Jeffrey Dillabough" <jdillabough@gweiss.com>  
To: Frank X Nelson <frank.x.nelson@db.com>  
cc=peter brophy/ou=db/o=dbcom@dbamericas  
CC: Peter Brophy <peter.brophy@db.com>  
"Rick Doucette" <rdoucette@gweiss.com>  
"Steve Kleinman" <skleinman@gweiss.com>  
"Marcus Peckman" <mpeckman@gweiss.com>  
"Robert Gendreau" <rgendreau@gweiss.com>  
Date: Oct 26 2009 15:07:50  
Subject: DB/Weiss MAPS option

Hi Frank,

We have had an opportunity to walk our outside tax counsel through the revised option program, the history of negotiations and where we are to date. In doing so, our tax counsel had a number of questions. Accordingly, I put together a brief issues list below that can serve as the agenda for discussion at our meeting Wednesday. Please feel free to forward it to your outside tax counsel.

- 1) Cash Settlement Amount: Scenario A versus Scenario B. The difference between these two scenarios is that Scenario A involves an additional forfeiture by Weiss of the optionality value of the premium (20%). Weiss does not feel it should incur a Scenario A event unless it relates to an item under Weiss control. This flows through a number of critical events, including adverse changes in law and tax law or environment, audit events, DB credit events, unintentional breach of the investment management agreement (including investment restrictions) by Weiss, etc.
- 2) Cross margining: Under the old MAPS structure, Weiss could use 100% of the options market value to cross collateralize its OGI account. Under the proposed structure, DB advises that only 25% cross collateralization is permissible.
- 3) Cross selling: DB will not allow Weiss to cross sell positions held in the DB account to other prime brokers in connection with its routine rebalancing activities.
- 4) Moving positions in the case of option termination: DB will not permit Weiss to cross the positions at the end of the option into a Weiss account.
- 5) Third party custodian: In the event that DB's credit deteriorates in terms of CDS spread or agency ratings, Weiss requested that DB be required to transfer some of the account balance to a third party custodian. DB advises that it cannot permit this in conjunction with the 25% cross margining described in 2) above.

Please let us know if there are any items you would like to add to this list.

Kind regards,

Jeff

Jeffrey D. Dillabough

General Counsel

Weiss Multi-Strategy Advisers LLC

320 Park Avenue, 21st Floor

New York, NY 10022

Tel: (860) 240-8941

Fax: (860) 240-1256

Email: [jdillabough@gweiss.com](mailto:jdillabough@gweiss.com)

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From: Parag Patel <parag.patel@db.com>  
To: Satish Ramakrishna <satish.ramakrishna@db.com>  
CC: Kam Singh <kam.singh@db.com>  
Date: Nov 25 2009 05:56:03  
Subject: Re: Rentec Mosel EurOption #4

Satish, could you confirm you agree we should not hedge this latest option ;

Rentech Option 4:

Term Rate = 1.88375%  
Optionality Value = \$60,093,490  
Trade = Nov 20, 2009  
Expiry = Dec 28, 2010  
3mL = 26.063bps @ close 24th Nov

(See attached file: MAPs Checklist - Op#4 - 11.20.2009.xls)

WE RECEIVE FIXED Act/360 / PAY FLOAT 3mL Qtrly Act/360

Current aggregate unhedged rate exposure = \$172m

\$60m	option 4	exp 12/10
\$72m	option 3	exp 12/10
\$40m	option 2	exp 06/10
hedged	option 1	exp 12/09

Parag Patel  
Tel: +44 20 7545 5212

Deutsche Bank AG  
GPF Risk & Complex Prime Finance  
Global Markets  
London

Peter  
Brophy/db/dbcom@DB  
AMERICAS  
Satish  
20/11/2009 14:14  
INT  
cc  
Frank X Nelson/db/dbcom@DBAmericas,  
Kevin Harrison/db/dbcom@DBAmericas,  
Parag Patel/NewYork/DBNA/DeuBa@DBEMEA  
Subject  
Re: Rentec Mosel EurOption #4  
(Document link: Parag Patel)

To  
Ramakrishna/db/dbcom@DBAMERICAS@DEUBA

Permanent Subcommittee on Investigations

EXHIBIT #30



Term rate for Oct deal was 2.07% = Libor 1.22 + .85  
Financing Tenor was 430 days  
Initial Leverage was 7.06X

Term rate proposed for this deal 1.884% = Libor 1.034 + .85  
Financing Tenor 391 days  
Initial Leverage 8.45X

Problem is they were targeting the 7X Init Leverage again but that only gets us to a 16.6% Optionality Val.  
We either need 8.45X Init Leverage or Libor + 133bps Term Rate?????

---

Peter P. Brophy  
Global Head of Client Reporting  
DB GME Global Prime Finance  
60 Wall St. NY, NY 10005  
Office 212-250-7626 Cell 732- 552-6308

---

Satish  
Ramakrishna/db/dbc  
om@DBAMERICAS

To

Peter  
11/19/2009 09:55 Brophy/db/dbcom@DBAmericas@DEUBAINT,  
PM Parag  
Patel/NewYork/DBNA/DeuBa@DBEMEA,  
Kevin Harrison/db/dbcom@DBAmericas,  
Frank X Nelson/db/dbcom@DBAMERICAS  
cc

Subject  
Re: Rentec Mosel EurOption #4  
(Document link: Peter Brophy)

No issues. What Libor rate was used on the last one and the new one?

Best Regards,  
Satish Ramakrishna  
Deutsche Bank AG, London  
Global Markets Equity  
Head, Prime Services Risk & Complex Prime Financing  
# 1342, 60 Wall Street, New York

+ 1 212 250 4928 New York

+ 1. 212 250 4051 Asst: Magdalena Pisarczyk

----- Original Message -----

From: Peter Brophy

Sent: 11/19/2009 08:44 PM EST

To: Satish Ramakrishna; Parag Patel; Kevin Harrison; Frank Nelson

Subject: Rentec Mosel EurOption #4

Per my conversation late this afternoon with Tom Kerns and Dan Korani - Mosel has increased the size of the Option they are interested in entering into to \$300M Premium with a \$2.7B Notional level.

They want to execute the tomorrow or Monday at the latest.

1) Current Rolled up Levels are:

Cash \$ 3.5B

LMV \$10.5B

SMV \$10.5B

2) Old American style option will be exercised early before y/e.

Cash outflow \$2B

3) EurOption #1 expires 12/22.

Cash outflow \$500M

4) Dan Korani predicts Dec 31 Rolled up Levels to be

Cash \$ 1.5B

LMV \$8B

SMV \$8B

So at year end balance sheet usage, leverage and cash balances will all be down compared to current levels..

Rentec is looking for our approval on the \$300M terms tomorrow morning.

Peter P. Brophy

Global Head of Client Reporting

DB GME Global Prime Finance

60 Wall St NY, NY 10005

Office 212-250-7626 Cell [REDACTED]

=

[REDACTED] = Redacted by the Permanent  
Subcommittee on Investigations

From: Satish Ramakrishna <satish.ramakrishna@db.com>  
To: Eamon McCooley <eamon.mccooley@db.com>  
CC: Matthew Schwartz <matthew.schwartz@db.com>  
Scott Carter <scott.carter@db.com>  
Frank X Nelson <frank.x.nelson@db.com>  
John Arnone <john.arnone@db.com>  
John Cogman <john.cogman@db.com>  
Date: Feb 17 2012 09:26:10  
Subject: Re: Two Sigma Follow-up

I spoke to Matt about this. MAPS or no MAPS, how much capital are they willing to contribute? I can't see this working if, as Matt was suggesting, that we contribute all the equity, participate only in downside and receive financing spread.

I asked Matt to come back with how much equity they can contribute, haven't heard back yet. Non-recourse financing is one option (MAPS is just a name for that) - there is no MAPS trade without a MAPS premium, so they can't get a MAPS option for free. If they want to get an equity investment, that's worth investigating.

Satish

Best Regards,  
Satish Ramakrishna  
Managing Director | Head, Prime Finance Americas & Global Prime Finance Risk

Deutsche Bank Securities Inc. & Deutsche Bank AG London  
Global Markets

60 Wall Street, 10005-2836 New York, NY, USA  
+1 (212) 250 4928 Fax  
+1 [REDACTED]  
+1 [REDACTED]

[REDACTED] = Redacted by the Permanent  
Subcommittee on Investigations

satish.ramakrishna@db.com

From: Eamon McCooley  
To: Satish Ramakrishna  
Cc: Matthew Schwartz; Scott Carter; Frank X Nelson; John Arnone; John Cogman  
Sent: Fri Feb 17 08:16:32 2012  
Subject: Two Sigma Follow-up

Satish,

I was wondering if we could have 15 minutes next week to discuss an issue Two Sigma recently presented to us and are looking to see if we could provide a structure which could work for them. Their issue is as follows -

Background

Two Sigma has historically run a US focused high frequency equity & ETF marketing making business in their HF business (called Galileo). As you can imagine, this business is flat at days end and there is zero financing business to be had - however there is good potential for additional DMA

Permanent Subcommittee on Investigations

EXHIBIT #31

commissions and liquidity benefits to DB. However, they trade a ton in this strategy and quarterly they do an index rebalance arb trade as well.

Historically, due to borrow constraints as far as availability and sometimes due to cost reasons (ETFs) become expensive on the HTB front, they have tried to come up with solutions around this. Through their own internal research they found out that if they moved this strategy into their US B/D called Two Sigma Securities they then can leverage the market maker exemption rule and not have to deal w/ borrow requests ( for costs, availability, etc. reasons)

However, if they move this strategy to their own BD they then run into net capital requirements, mainly due to intra-day leverage constraints which prohibits them from running this strategy effectively.

In our discussions we had thought that a MAPS "like" structure maybe a potential solution and wanted to get your feedback, We thought of doing a series short dated (1 week) MAPS like options where they trade a portfolio for DB so they can market maker exemptions and capital relief. As stated above there would be no to little financing revenue as the portfolio would be essentially flat at day end but it would be good opportunity to strengthen our relationship with the client.

Please let me know if you are around next week to discuss.

Kind regards,  
Eamon McCooley

— = Redacted by the Permanent  
Subcommittee on Investigations

---

Eamon McCooley  
Managing Director | Head of Prime Brokerage - Americas

Deutsche Bank - Global Prime Finance  
60 Wall Street, 10005-2836 New York, NY, USA  
Tel. +1(212) 250-6856  
Mobile [REDACTED]  
Email eamon.mccooley@db.com

Visit us: <https://globalprime.db.com/>

Assistant: Cipriana Pascual +1(212)250-7649

From: Satish Ramakrishna <satish.ramakrishna@db.com>  
To: Barry Bausano <barry.bausano@db.com>  
Date: Sep 14 2011 14:11:09  
Subject: FW: quick summary on Rentec [I]

Classification: For internal use only

fyi

From: Satish Ramakrishna  
Sent: Wednesday, September 14, 2011 2:09 PM  
To: Roger Naylor  
Subject: quick summary on Rentec [I]

Classification: For internal use only

Im hoping you have a rough idea of the situation re the MAPS trades.

In order to resolve the question of

- Owner of option controlling the entire underlying
- Option (really the earliest version) looks like a margin account

I was thinking of using a CPPI like structure

Equity starts at 100

Risky Index starts at 100, goes up/down every day based on the sum of

1) the performance of 100% investment in a model Long/Short portfolio (max 900/900, so max leverage 18x on the equity), run by Mosel Equities (which is the Renaissance manager) MINUS

2) the performance of 100% investment of above equity in (say) the S&P500 or some liquid benchmark index

We use the following expression for equity invested in the Risky Index

$Q = (\text{CPPI} - 80)$  leads to a multiplier  $M$

$Q > 15$ ,  $M = 1$

$0 < Q < 15$ ,  $M$  goes from 0 to 1, as  $Q$  goes from 0 to 15.

We would hedge, as usual, for a CPPI, by being long index A, short index B and would charge the index every day for financing and borrow cost charges.

On day 1, the client would pay, say 20, for this CPPI option. If the next day, the Rentec index did not budge, SPX were to gap up 20%, the option would knock out (completely delevered, so no chance of going on again and we would write that language in) and we would lose 20 on our SPX hedge, which would be compensated by the amount we got for the option.

So we would have

- independence of (large part of the) asset and option buyer
- real option CPPIs are totally legitimate transactions in the US and elsewhere
- we have gap risk, but nothing we dont already have in the transaction.

Tell me if this passes the smell test for the structure. I will obviously have to get Tax to opine SETG structurers I asked seemed to like it reminds them of a different counterpartys option that Rentec was considering.

Best Regards,

Satish Ramakrishna

Managing Director | Head, Prime Services Risk and Complex Financing

Deutsche Bank Securities Inc. & Deutsche Bank AG London

Global Markets

60 Wall Street, 10005-2836 New York, NY, USA

Tel. +1(212)250-4928

Fax +1(646) 461 2661

[REDACTED]

Email satish.ramakrishna@db.com

cid:image004.png@01CC72E7.D5DB6980

**[REDACTED] = Redacted by the Permanent Subcommittee on Investigations**

From: Satish Ramakrishna <satish.ramakrishna@db.com>  
To: Anthony Tuths <anthony.tuths@db.com>  
Diana Nott <diana.nott@db.com>  
Date: Nov 13 2011 17:56:55  
Subject: RE: Rentec [I]

Yes, but I know what they are going to want....

Best Regards,

Satish Ramakrishna  
Managing Director | Head, Prime Services Risk and Complex Financing

Deutsche Bank Securities Inc. & Deutsche Bank AG London  
Global Markets  
60 Wall Street, 10005-2836 New York, NY, USA  
Tel. +1(212)250-4928  
Fax +1(646) 461 2661  
Mobile [REDACTED]  
Email satish.ramakrishna@db.com

[REDACTED] = Redacted by the Permanent  
Subcommittee on Investigations

-----Original Message-----

From: Anthony Tuths  
Sent: Sunday, November 13, 2011 05:53 PM Eastern Standard Time  
To: Satish Ramakrishna; Diana Nott  
Subject: Re: Rentec [I]

Classification: For internal use only

That's the result of having a real option. They shouldn't mind this -- its the cost of the option economics they're receiving. You could subtract the cost from strategy financing but that's not economically correct.

----- Original Message -----

From: Satish Ramakrishna  
To: Anthony Tuths; Diana Nott  
Sent: Sun Nov 13 15:47:57 2011  
Subject: Rentec

I have to work thru this slight issue. Way it works now, they don't get back any of the premium they pay us at the start, the 5.55 amt. To get it back we need to sell the put back to them after 13m, if spot were 100, for 5.55.

Need to think this thru...

Best Regards,  
Satish Ramakrishna

Managing Director | Head, Prime Services Risk and Complex Financing

Permanent Subcommittee on Investigations

EXHIBIT #33

Deutsche Bank Securities Inc. & Deutsche Bank AG London  
Global Markets

60 Wall Street, 10005-2836 New York, NY, USA

+1(212) 250 4928Fax

+1

+1

satish.ramakrishna@db.com

**— = Redacted by the Permanent  
Subcommittee on Investigations**



From: Satish Ramakrishna <satish.ramakrishna@db.com>  
To: Frank X Nelson <frank.x.nelson@db.com>  
Date: Dec 16 2011 17:20:16  
Subject: Re: Rentec confirm and IMAs [I]

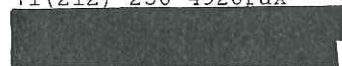
Thanks.

Best Regards,  
Satish Ramakrishna

Managing Director | Head, Prime Services Risk and Complex Financing

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Global Markets

60 Wall Street, 10005-2836 New York, NY, USA  
+1(212) 250 4928Fax



satish.ramakrishna@db.com

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Subcommittee on Investigations**

From: Frank X Nelson  
To: Satish Ramakrishna  
Sent: Fri Dec 16 15:57:18 2011  
Subject: RE: Rentec confirm and IMAs [I]

Classification: For internal use only

Sorry to hear that. Hang in there

Kind regards,

Frank Nelson



Frank Nelson

Deutsche Bank Securities Inc.

Global Markets

**Permanent Subcommittee on Investigations**  
**EXHIBIT #34**

60 Wall Street, 10005-2836 New York, NY, USA

Tel. +1(212)250-2983

Mobile [REDACTED]

Email frank.x.nelson@db.com

[REDACTED] = Redacted by the Permanent  
Subcommittee on Investigations

cid:image002.png@01CCBC13.C4ABDDA0

From: Satish Ramakrishna  
Sent: Friday, December 16, 2011 4:56 PM  
To: Frank X Nelson  
Subject: Re: Rentec confirm and IMAs [I]

[REDACTED]

Best Regards,  
Satish Ramakrishna

Managing Director | Head, Prime Services Risk and Complex Financing

Deutsche Bank Securities Inc. & Deutsche Bank AG London  
Global Markets

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+1(212) 250 4928Fax

[REDACTED]

satish.ramakrishna@db.com

[REDACTED] = Redacted by the Permanent  
Subcommittee on Investigations

From: Frank X Nelson  
To: Satish Ramakrishna  
Sent: Fri Dec 16 15:53:18 2011  
Subject: RE: Rentec confirm and IMAs [I]

Classification: For internal use only

[REDACTED]

Kind regards,

Frank Nelson

Frank Nelson

**— = Redacted by the Permanent  
Subcommittee on Investigations**

Deutsche Bank Securities Inc.

Global Markets

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[REDACTED]

Email frank.x.nelson@db.com

cid:image006.png@01CCBC13.35A5A370

From: Satish Ramakrishna  
Sent: Friday, December 16, 2011 4:47 PM  
To: Frank X Nelson  
Subject: Re: Rentec confirm and IMAs [I]

Not me. I was hoping you were. Maybe Jon???

Best Regards,  
Satish Ramakrishna

Managing Director | Head, Prime Services Risk and Complex Financing

Deutsche Bank Securities Inc. & Deutsche Bank AG London  
Global Markets

60 Wall Street, 10005-2836 New York, NY, USA  
+1(212) 250 4928Fax

[REDACTED]

satish.ramakrishna@db.com

From: Frank X Nelson  
To: Satish Ramakrishna  
Sent: Fri Dec 16 15:16:30 2011


Subject: RE: Rentec confirm and IMAs [I]

Classification: For internal use only

More than happy to help but Im flying blind. Who has been privy to these conversations? They need to be involved

Kind regards,

Frank Nelson

 = Redacted by the Permanent Subcommittee on Investigations

---

Frank Nelson

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Email frank.x.nelson@db.com

cid:image002.png@01CCBC0E.11A48360

From: Satish Ramakrishna  
Sent: Friday, December 16, 2011 3:28 PM  
To: Frank X Nelson  
Subject: Fw: Rentec confirm and IMAs [I]

I never heard they wanted changes to the confirm before. Some of this is stuff that appears to need agreement with Jim. Shall we call him?

Best Regards,  
Satish Ramakrishna

Managing Director | Head, Prime Services Risk and Complex Financing

Deutsche Bank Securities Inc. & Deutsche Bank AG London  
Global Markets

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+1(212) 250 4928Fax



**Redacted by the Permanent  
Subcommittee on Investigations**

satish.ramakrishna@db.com

From: Anthony Tuths  
To: Satish Ramakrishna; Vincent J Capone  
Cc: Eamon McCooey; Manuel J Schnaidman; Diana Nott  
Sent: Fri Dec 16 14:15:11 2011  
Subject: RE: Rentec confirm and IMAs [I]

Classification: For internal use only

Satish

Please see below the changes to the Rentec confirm suggested by U.S. tax. I note that some of these changes are in response to changes suggested by Rentecs counsel, Winston & Strawn. I have not been privy to such communications. I trust you have been involved.

Basket Income during a period means: the sum, expressed in USD, of (i) dividend income (determined based on ex-dividend dates that have occurred during such period), net of the non-U.S. and U.S. withholding taxes, if any, that would be imposed on a holder of the relevant position that is either (i) (a) is a resident of the Federal Republic of Germany, (b) is entitled to the benefits of income tax treaties between the Federal Republic of Germany and other countries, (c) properly treats such dividend income as effectively connected with its U.S. trade or business and (d) has provided properly completed and executed certifications claiming such treaty or effectively connected income status or (ii) a United States person (as defined in section 7701(a)(30) of the U.S. Internal Revenue Code of 1986, as amended (the Code); provided, however, in the case of Effected Positions, dividend income will be further reduced by any additional taxes (and penalties and interest associated therewith) incurred by Seller that would not have been incurred by the Seller in the absence of the relationship between Seller and Buyer under this Transaction

(k) Reporting. Seller represents that for tax purposes, it and any Affiliate thereof will report the Transaction as a derivative financial instrument, and, for accounting, regulatory, tax and all other purposes, it and any Affiliate thereof will treat and report the Effected Positions and any other assets or positions that may be credited to or included within the Baskets (other than In respect of Designated Positions) as assets and positions of which either Seller or any Affiliate is the sole beneficial owner and to which either Seller or any Affiliate is the party, as the case may be; provided, that in the event of a dispute between the parties as to the proper characterization of the Transaction[al] and related assets subsequent to a Change in U.S. Tax Law, Seller will in good faith make its own determination of such characterization [Rider 1] and treat and report (or cause its Affiliate to treat and report) the Transaction and related assets in accordance with its good faith determination. [Rider 2] Seller represents that for U.S. federal income tax purposes all payments received under the Transaction will be treated either as received by an Affiliate that is a United States person (as defined in section 7701(a)(30) of the Code) or as effectively connected with the conduct of a trade or business carried on by Seller within the United States []. For purposes of this section the term "Change in U.S. Tax Law" means the (a) enactment, promulgation, execution or ratification of, or any change in or amendment to, the Code , or the Treasury Regulations promulgated thereunder (including any proposed changes that are not required under such proposal to be prospective only) or (b) the announcement of the application or official interpretation thereof by the United States Internal Revenue Service (IRS) or the United States Department of the Treasury, as the context requires), or (c) any action taken by a taxing authority, or brought in a court of competent jurisdiction, on or after the date on which the Transaction is entered into (regardless of whether such action is taken or brought with respect to a party to the Agreement) (which includes, for the avoidance of doubt, the commencement of a tax audit of either Seller or Buyer, which commencement occurs on or after the date on which the Transaction is entered into) in which, as to an audit of the Seller, the Seller has received a notification of a proposed audit adjustment with respect to the Transaction, and Seller believes, in its sole discretion, that the proposed audit adjustment may require it to treat the Transaction in a manner other than described above, and in which, as to an audit of the Buyer, the Buyer has received a notification of a proposed audit adjustment with respect to the Transaction auditor propose that the which adjustment would cause the Buyer to treat the Transaction in a manner other than described above;

Each party will provide the other party with notice of said audit proposal, as applicable. ]Riders to DB/Mosel Option Confirmation W&S DRAFT 12-7-11

Rider 1: original deleted language: [provide Buyer with notice of such determination and, unless Buyer provides Seller with an opinion of tax counsel

in form and substance reasonably satisfactory to Seller within 90 days of such notice, Seller may]

based on written advice of counsel concluding that, as a result of such Change in U.S. Tax Law, a material risk exists in continuing to treat and report the Transaction in the manner set forth above, and will provide Buyer with notice of such determination; Seller will

Rider 2:

Buyer represents that for tax purposes, it will report the Transaction as a derivative financial instrument generating short-term capital gain at exercise or maturity.

Rider 3: deleted language: [For purposes of this section, an action taken by the IRS pursuant to the current audits of Buyer (or the commencement of additional audits of Buyer) shall not be considered a Change in US Tax Law taking place on or after the date the Transaction is entered into]

**— = Redacted by the Permanent  
Subcommittee on Investigations**

Anthony Tuths  
Global Structuring, Strategic Transactions  
Deutsche Bank AG  
60 Wall Street, 10005-2836 New York, NY, USA  
Tel. +1(212) 250-4997  
[REDACTED]

Email [anthony.tuths@db.com](mailto:anthony.tuths@db.com)

From: Vincent J Capone  
Sent: Wednesday, December 14, 2011 3:14 PM  
To: Satish Ramakrishna  
Cc: Anthony Tuths; Eamon McCooey  
Subject: RE: Rentec confirm and IMAs [I]

Classification: For internal use only

All attached Please advise if any questions or additional information required.

Thanks

Vince

From: Satish Ramakrishna  
Sent: Wednesday, December 14, 2011 3:05 PM  
To: Vincent J Capone  
Cc: Anthony Tuths; Eamon McCooey  
Subject: Rentec confirm and IMAs [I]

Classification: For internal use only

Vince :

Please send the latest Rentec (your choice of trade there are two live ones) confirm and IMA (supplemental as well as global) to Anthony Tuths asap.

Best Regards,

Satish Ramakrishna

Managing Director | Head, Prime Services Risk and Complex Financing

Deutsche Bank Securities Inc. & Deutsche Bank AG London

Global Markets

60 Wall Street, 10005-2836 New York, NY, USA

Tel. +1(212)250-4928



— = Redacted by the Permanent  
Subcommittee on Investigations

Fax +1(646) 461 2661



Email satish.ramakrishna@db.com

Applies only to current trade

## INVESTMENT ADVISORY AGREEMENT

THIS AGREEMENT is made as of September 1, 2002 by and between RENAISSANCE TECHNOLOGIES CORP., a corporation organized under the laws of Delaware (the "Advisor"), and BASS EQUITIES LTD., an exempted company organized under the laws of Bermuda (the "Client").

The Client hereby engages Advisor to perform the investment management services described herein, and Advisor hereby accepts such engagement, pursuant to the following terms and conditions:

1. **Investment Management Services.** The Client hereby authorizes and appoints Advisor to manage the investment of all cash, commodities, securities and other assets comprising the investment portfolio placed under the supervision of Advisor by the Client (which portfolio, together with all additions, withdrawals, substitutions and alterations occurring during the term of this Agreement, is referred to herein as the "Account"). Advisor is authorized, without further approval by or notice to the Client, to make all investment decisions concerning the Account, including allocating any portion of the Account or the entire Account to other investment managers (the "Investment Managers"), and to further authorize such Investment Managers to make purchases and sales and otherwise to effect transactions in securities, commodities, currencies and other assets in the Account (including without limitation entering into short sales and securities lending activities). Advisor is authorized to sign, as attorney-in-fact on behalf of the Client, any documents and take any other actions which Advisor considers necessary or advisable in order to carry out the portfolio allocation or the trading for the Account, including but not limited to the following:

(a) to make all decisions relating to the allocation of the Account to the Investment Managers, including the selection of Investment Managers and amount of allocation, and to delegate such powers to Investment Managers as are necessary or advisable in order to carry out their duties;

(b) to effect (both directly or indirectly through Investment Managers) purchases and sales (including short sales) of (i) securities of any type whatsoever, denominated in any currency, whether or not issued by government entities, partnerships, trusts or corporations, (ii) any put or call options thereon (including the writing of options, whether covered or uncovered), and (iii) other securities and instruments (including derivative transactions) consistent with the Client's investment policies and program;

(c) to make (both directly or indirectly through Investment Managers) all decisions relating to the manner, method and timing of investment transactions, and to select, or to authorize the Investment Managers to select, brokers and dealers for the execution, clearance and settlement of any transactions;

(d) to trade (both directly or indirectly through Investment Managers) on margin, to borrow from banks, brokers or other financial institutions and to pledge assets of the Client in connection therewith;

(e) to direct (both directly or indirectly through Investment Managers) custodians to deliver funds or securities for the purpose of effecting transactions, and to instruct custodians to exercise or abstain from exercising any privilege or right attaching to such assets; and

(f) to make and execute, in the name and on behalf of the Client, all such documents (including, without limitation, customer agreements and other documents in connection with the establishment and maintenance of brokerage accounts) and to take all such other actions as the Investment Advisor considers necessary or advisable to carry out its investment management duties hereunder.

2. **Brokerage.** The Client hereby delegates to Advisor (which power may be further delegated to the Investment Managers) authority to designate the broker or brokers through whom all transactions on behalf of the Account will be made. Advisor (or the Investment Managers) will determine the rate or rates to be paid for brokerage services provided to the Account. In the course of selecting brokers, dealers, banks and financial intermediaries to effect transactions for the Account, Advisor (or the Investment Managers) may agree to such commissions, fees and other charges on behalf of the Account as it (or they) shall deem reasonable in the circumstances, taking into consideration all such factors as Advisor deems (or the Investment Managers deem) relevant, including the quality of research, execution and other services made available to it (or them). It is understood that the cost of such services will not necessarily represent the lowest costs available, that such services may not be used by Advisor (or the Investment Managers) for the exclusive benefit of the Account, and that Advisor is (or the Investment Managers are) under no obligation to combine or arrange orders so as to so reduce charges.

3. **Fees and Expenses.** (a) Advisor will not charge the Client a management or performance fee, it being understood that such fees are subsumed in the management and performance fees charged to the Medallion feeder funds, which own all of the shares of Medallion Holdings Ltd., which owns all of the shares of the Client.

(b) Advisor shall bear its own overhead and other internal operating costs. Operational expenses of the Client, such as interest, custodial, legal, audit and brokerage fees and any subscription or redemption charges imposed by funds in which the Client invests will be borne by the Client. The Client will also bear indirectly its proportionate share of the fees and expenses of the funds in which it invests. Organizational expenses and start-up costs of the Client will be borne by the Client and will be expensed as incurred.

4. **Investment Activities for the Account of Others.** (a) Advisor and its directors, employees and beneficial owners (and the Investment Managers and their directors, employees and

beneficial owners) may from time to time acquire and dispose of securities or other investment assets for their own accounts, for the accounts of their families, for the account of any entity in which they have a beneficial interest or for the accounts of others for whom they may provide investment advisory or other services (collectively, a "Managed Account"), notwithstanding the fact that the Client may have or may take an investment position for the Account; provided, however, that Advisor (or the Investment Managers) shall not cause the Client to purchase any asset from or sell any asset to Advisor (or the Investment Managers), or any of its (or their) partners or employees or any account or entity controlled by such persons, without the consent of the Client.

(b) It is understood that when Advisor determines (or the Investment Managers determine) that it would be appropriate for the Client and one or more Managed Accounts to participate in an investment opportunity, Advisor (or the Investment Managers) will seek to execute orders for the Client and for such Managed Accounts on an equitable basis. In such situations, Advisor (or the Investment Managers) may place orders for the Client and each Managed Account simultaneously, and if all such orders are not filled at the same price, Advisor (or the Investment Managers) may cause the Client and each Managed Account to pay or receive the average of the prices at which the orders were filled for the Client and all Managed Accounts. If all such orders cannot be fully executed under prevailing market conditions, Advisor (or the Investment Managers) may allocate the securities traded among the Client and the Managed Accounts in a manner which it considers (or they consider) equitable, taking into account the size of the order placed for the Client and each such Managed Account.

5. **Scope of Duties.** The Client recognizes that the opinions, recommendations and actions of Advisor will be based on advice and information deemed to be reliable, but not guaranteed by or to Advisor. Advisor shall have no duties or obligations to the Client pursuant to this Agreement other than as set forth herein, and Advisor shall not be liable to the Client for any act or omission in the absence of gross negligence or willful misconduct.

6. **Indemnification.** The Client shall indemnify Advisor, which shall include solely for purposes of this Section any of its directors, officers, and employees against and hold them harmless from any expense, loss, liability or damage arising out of any claim asserted or threatened to be asserted by any third party, in connection with Advisor's serving or having served as such pursuant to this Agreement; provided, however, that Advisor shall not be entitled to indemnification with respect to any expense, loss, liability or damage which was caused by its own gross negligence, willful misconduct or reckless disregard of its duties hereunder.

7. **Termination.** The Client or Advisor may terminate this Agreement at any time upon written notice, which shall be effective when received by the other party.

8. **Entire Agreement; Binding Effect; Assignment.** This Agreement represents the entire agreement among the parties, shall be binding upon and inure to the benefit of the parties hereto and their respective successors, and their rights and obligations hereunder shall not be

assignable, transferable or delegable without the written consent of the other party hereto. Any attempted assignment, transfer or delegation hereof without such consent shall be void.

9. **Waiver; Modification.** No provision of this Agreement may be waived or modified other than by a writing signed by the party to be charged with such waiver or modification. This Agreement constitutes the entire agreement between the Client and Advisor. Any supplement to this Agreement shall be in writing, signed by the parties hereto.

10. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to conflicts of laws.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the day and year first above written.

BASS EQUITIES LTD.

By: 

\_\_\_\_\_  
Mark Silber  
Vice President and Director

RENAISSANCE TECHNOLOGIES CORP.

By: 

\_\_\_\_\_  
Mark Silber  
Vice President

Project COLT

## New Product Proposal

**Confidential**

28 May, 2002

Product Sponsors

Jonathan Zenios (SCM), Jerry Smith (SCM), Marty Malloy (EFG), and Mark D'Andrea (Prime Brokerage)

## BUSINESS PROPOSAL

### 1. Executive summary

COLT is an investment product for hedge funds ("Funds") and is based largely on the normal operation of the Prime Brokerage business that has already received approval from the US New Product Committee. In its original form, **the SCM Approvals Committee approved COLT on 27 March, 2002 and the Global New Product Committee approved COLT on 8 April, 2002.** Both approvals were subject to FSA approval to treat the SUB as a trading book for regulatory purposes. FSA approval is still outstanding, but will be obtained prior to closing the transaction.



#### *Changes to Existing Approved Product COLT Structure*

This product proposal differs from the previously approved structure in the following ways:

1. US Equities Added – Overall Leverage Levels Enhanced - US equity securities were added to the securities eligible for Project COLT. This change enhanced the Fund's tax analysis and enabled Prime Brokerage to get additional business from the transaction and gain diversity across markets. The diversity across markets was an important factor in Prime Brokerage setting the haircuts for the transaction (i.e., 5% haircut, or \$200m in-the-money amount times 20 for gross trading limit of \$4,000m that is split between long and short positions).
2. US Tax Opinion Required and Received - SUB's profits from the transaction will be taxed in the US. We received an opinion from counsel (Akin, Gump) [REDACTED].
3. Regulatory Opinion Required and Received - SUB will borrow money from BB PLC (to accommodate the change in form of the call option as noted in #4 below). Since SUB will use that money in part to purchase US equity securities, it is important for regulatory purposes that SUB not be considered a Regulation X borrower. We received an opinion from counsel (Sullivan & Cromwell) [REDACTED].
4. Different Call Option Mechanics - Although the option written by SUB continues to be economically a zero-strike option, the mechanics of the option have been changed to enhance the Funds' tax position. Specifically, instead of a \$212m premium and a zero strike price over a PB Account with a starting NAV of \$200m, the new structure shows a \$212m premium with an effective \$1800m strike price<sup>1</sup> over a PB Account with a starting NAV of \$2,000m. In each case, the option is in-the-money by \$200m, and the overall leverage allowable in the transaction would be \$3,800m (i.e., a haircut of 5%, which level is set

<sup>1</sup> Actual strike price would be \$2,000m, but the Settlement Amount on the Call Option will in all cases be increased by \$200m, which results in an effective strike price of \$1,800m.

and monitored by Prime Brokerage on the in-the-money amount). The only practical difference is that the new version contemplates \$1,800m (of the total \$3,800m available) leverage through the option, where the original version had all leverage "outside" the option.

5. 2 Prime Brokerage Accounts - In addition to a prime brokerage account with Barclays Capital Securities Limited ('BCSL'), SUB will also open a prime brokerage account with Barclays Capital Inc ('BCI'). Both accounts will be governed by standard Prime Brokerage Agreements.
6. No BCSL Put Option – The BCSL Put Option has been removed from the transaction. Originally, the BCSL Put Option was used to explicitly place the catastrophic risk with Prime Brokerage, which takes that risk daily in its business. Subsequently, it was determined that a put option was not necessary to shift that risk, since Prime Brokerage takes that risk by entering into a prime brokerage account with SUB (since SUB has no other funds). Importantly, this is similar to risks it takes in every agreement and is identical to the risk it takes when it accepts all of a funds' equity as margin.
7. Synthetic Short Sales in PB Account, as Opposed to Actual Short Sales (To address Uptick Rules) – Short sales by the SUB (i.e., borrow stock from BCI or BCSL and sell it on the open market) would be restricted by the uptick rule, which generally prevents short sales of a security at the current market price if the share price has been declining. To manage this restriction, SUB will create a perfectly hedged position (i.e., pool of long equity positions in original PB Account that it would purchase from BCSL with an identical short total return equity swap position– counterparty BCSL) at the beginning of the transaction with respect to each security in the S&P 500. Since SUB will be treated as owning the securities in the PB Account (notwithstanding short TRS position held in another account); any sales of securities from that pool of long equity positions will be treated as sales of long positions (not affected by uptick rules), not short sales. The result is a synthetic short sale (i.e., the TRS is a short with respect to the securities that have been sold) that should not be constrained by the uptick rules. In substance, there should be no change to the underlying transaction or the infrastructure areas. However, certain issues are raised:
  - a. US Legal –   

  - b. Risking Systems – It will be necessary for the TRS to go through Prime Brokerage's existing risk system (i.e., GEFFE, which feeds EDICT). An existing project that accomplishes that task is nearing completion (should be available by end of May/first week in June).

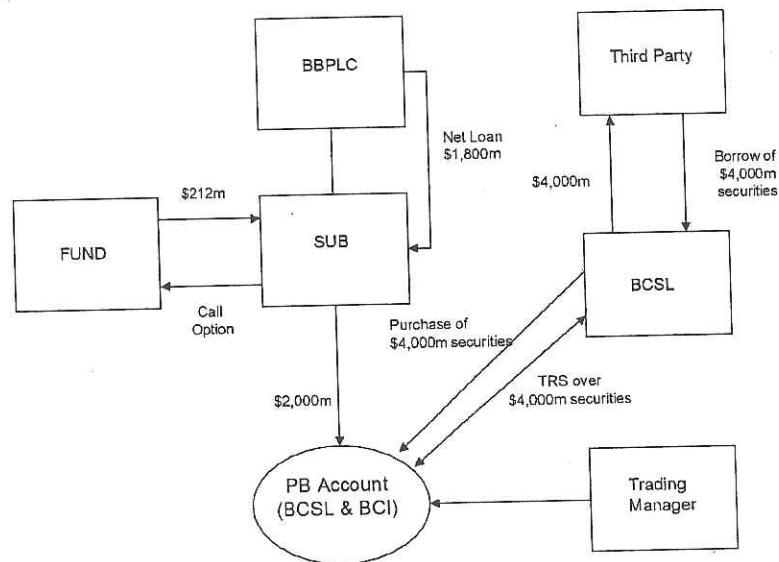
#### **General Description of Product COLT Structure**

COLT is targeted at those Funds with a high proportion of US individual investors, stable year-on-year returns and strategies involving short-term trading. This gives rise to significant short-term capital gains for the investors regardless of whether or not they are invested in the fund for the shorter or



	<p>longer term.</p> <p>COLT provides an after tax benefit to these investors through the conversion of their return from the fund from short term capital gains (taxed at 39.6%) to long term capital gains (taxed at 20%).</p> <p>This would be achieved by substituting the Fund's direct execution of its trading strategy with a cash settled call option over a SUB's proprietary account whose performance <i>substantially</i> replicates the Fund's trading strategy. Any gain on the call option would be long-term gain provided the call option is held by the Fund for at least 12 months.</p> <p>Due to the Call Premium (defined below) and rigorous controls (explained below), including de-leveraging and daily risk monitoring, the economic risk to Barclays in the transaction would be confined to a one-day catastrophic risk (i.e. gap risk). Structurally, this risk would reside in BCSL and BCI, specifically within their prime brokerage divisions ('<b>Prime Brokerage</b>'). Notably, Prime Brokerage currently undertakes this same risk in its day-to-day relationships with hedge funds.</p> <p>The intended launch date is Q2 of 2002 although pre-marketing is expected to start in Q1 of 2002.</p> <p>SCM would earn fee income at the onset of the transaction of approximately \$12 million. Further, it is anticipated that increased revenue will be created in certain other areas within Barclays Capital: approximately \$7m p.a. to \$10m p.a. from increased clearing charges and execution revenue for Prime Brokerage. Further, Renaissance (the Fund that is the first target) has indicated that it will move its account to another bank if we do not provide them with this product, which would result in approx. \$6m per year of lost revenue to Prime Brokerage.</p>
--	---

2. Business Proposal description	<i>Structure Diagram</i>
----------------------------------	--------------------------



#### *Establishment of SUB*

BB PLC would form a subsidiary ("SUB"), which would be located outside the UK (e.g., Cayman Islands). A SUB is utilized, in part, to eliminate trade reporting obligations that would be required if BB PLC participated in the transaction directly.

#### *Loan Arranged By BCSL (EFG)*

SUB would borrow \$2,000m from BB PLC on an unsecured basis (the "Net Loan" would equal \$1,800m, since \$200m would be immediately repaid from the proceeds of the Call Option). Note that this would be from EFG's existing line with BB PLC. Therefore, COLT does not require a new loan and does not create any new issues with respect to large exposure reporting (as EFG's line is already covered in that regard).

#### *Establishment of PB Account*

- a. SUB would establish prime brokerage trading accounts with BCSL and BCI (collectively, these will be referred to as the "PB Account").
- b. SUB would place \$2,000m into the PB Account to be used as collateral for a strategy identical to that utilized by the Fund ("Trading Strategy"). To replicate the Fund's strategy, SUB would hire the Fund's own investment manager ("Trading Manager") to manage the investments. The relationship of the amount of collateral to the riskiness of the Trading Strategy will be analysed under existing Prime Brokerage standards.

#### *Call Option*

- a. Simultaneous with the establishment of the PB Account, SUB would write an American-style call option to the Fund with respect to the value of the PB

Accounts (the 'Call Option'), for which the Fund would pay a premium ('Call Premium') made up of the following components:

- \$200m representing the collateral for the Trading Strategy; and
- an amount representing SCM's fee from the transaction (\$12m in the diagram).

b. The Call Option would have a term of 3 years and would be cash settled. The strike price of the Call Option effectively would be \$1,800m plus appropriate charges for the leverage ('Call Strike').<sup>2</sup>

*BCSL Borrows \$4,000m of securities and SUB purchases same from BCSL in PB Account*

a. With existing collateral in PB Account (\$2,000m) and borrowing through normal Prime Brokerage, SUB will purchase a basket of securities worth \$4,000m from BCSL, which BCSL will borrow from a third party.

b. At the same time, SUB will enter into a total return swap to BCSL over the same securities just purchased, through which SUB will pay out all dividends and receive interest.

c. In its PB Account, SUB will sell \$2,000m worth of the securities it purchased from BCSL, leaving it with \$2,000m worth of long positions and a short TRS position of \$4,000m, or a net \$2,000m short position with respect to the equities sold (a "Synthetic Short Position").

d. The \$2,000m proceeds from the sale in "c" above would be used to purchase \$2,000m of new securities (the "Long Position").

e. The Long Position and the Synthetic Short Position create the same type of matched position (i.e., \$2,000m long and \$2,000m short) planned prior to the introduction of this technique.

#### *Risk Mitigation and Acceleration*

a. The Trading Strategy will be executed through a prime brokerage account, for which the \$2,000m will serve as collateral. As a result, the Trading Strategy will be subject to the risk parameters approved for the Prime Brokerage group<sup>3</sup> (similar but slightly more restrictive). BCSL's risk to the Trading Strategy will be managed in the following ways:

- De-leveraging:
  - Description in Original Approvals Paper - Suppose that the \$200m of collateral provided through the Call Premium supports \$4,000m gross positions (i.e., 20 times multiple), which would allow \$2,000m of long positions and \$2,000m of short positions in the Trading Strategy. If the Trading Strategy loses \$10m, only \$190m of collateral would remain. Since \$190m would only support \$3,800m of gross positions,

<sup>2</sup> See Footnote #1, which discusses the effective strike price.

<sup>3</sup> Prime Brokerage clears trades for hedge funds and provides leverage with respect to trading levels, based upon i) collateral received from the hedge fund, ii) ongoing risk analysis of the strategies employed, and iii) the market environment. As losses reduce collateral on hand, Prime Brokerage manages risk of loss in two ways: i) it can request increased collateral to rationalize the same trading level, or ii) it can force a reduction of positions to conform the trading level to an acceptable risk profile.

the Trading Manager would be forced to liquidate enough of its positions to meet those parameters. [REDACTED]

[REDACTED] Although more labour intensive, the deleveraging process should manage risk as effectively as requesting more collateral.

- o Change due to increased collateral – The result would be precisely the same in the new version, but the formula would be slightly different (because the initial collateral would be \$2000m instead of \$200m). In this version, gross trading level would be calculated as 20 times (collateral less \$1,800m). Therefore, on a loss of \$10m, the gross trading level would be \$3,800m, calculated as 20 times (\$1,990m less \$1,800m).
- Removal of Manager: ultimately if the collateral dropped sufficiently, the Trading Manager could be fired and the positions could be liquidated.

b. The Trading Strategy will allow the Trading Manager to execute trades with other broker-dealers that are cleared with Prime Brokerage. That ability to "trade away" must be controlled to ensure that the Trading Manager does not exceed daily trading limits during the course of the day. A tri- party agreement between the Trading Manager, executing broker and SUB would specify the daily notional buy/sell limits that the executing broker must adhere to. All trades will be reported to Prime Brokerage at the end of the day and if limits are exceeded Prime Brokerage (on behalf of SUB) would have the right, at its discretion, to reject the trades that exceed the limits. In addition, the executing brokers that could be used by the Trading Manager will be limited and pre-approved before trading. The agreement and limited executing brokers will be used to control the executing risk for the structure.

#### *Targeted Funds*

Transacting with hedge funds can be risky (a notable example is LTCM), but careful selection of a hedge fund and appropriate ongoing risk analysis can make it both safe and profitable. Hedge funds range from aggressive growth funds to the more conservative market neutral funds. For COLT, we intend to target the more conservative market neutral funds, which focus on obtaining returns that have a low correlation to the market.<sup>4</sup> Generally, these strategies involve paired positions (*i.e.*, long and short positions) designed to take advantage of market inefficiencies. In fact, most will be "relative value/arbitrage" strategies, which rely on the expected convergence of a long and short strategy.

This approval is confined to Funds that trade equities (long and/or short). In the current case, Renaissance employs a strategy or portfolio construction general known as "Statistical Arbitrage" or equity relative value trading. They have a proprietary (and closely guarded) trading model which generates short, medium, and long term buy and sell signals based on statistically significant historical indicators. While the trading crosses many asset classes for the

<sup>4</sup> Initial targets are Funds that already utilize BB PLC's Prime Brokerage, but new Funds will also be targeted in this process.

	fund, it is only their equity specific models that we are considering for the initial COLT product.
3. Strategic overview	This product is part of the strategy to build significant presence in the hedge fund market through the trading of structured products with high added value yielding strong P/L.
4. Financial Projections	<p>SCM's fee (i.e. \$12m in the illustration) would be determined at the onset of the transaction as a percentage of Fund's principal investment. The minimum SCM fee approved in the SCM Approvals process is \$6m, without vesting.</p> <p>In addition, BCSL would earn i) increased revenue from additional volume in Prime Brokerage, which has been estimated at between \$7m p.a. and \$10m p.a. ii) increased revenue from volumes of trades executed with Barclays' traders, and iii) increased exposure for our hedge fund sales team.</p> <p>Further, this trade with Renaissance has the added benefit that it would prevent Prime Brokerage from losing their account, which accounts for approximately \$6m p.a.</p> <p><b>Estimated Costs</b> Legal fees for documentation of each trade. Initial cost of SUB and any annual cost of maintaining books and records.</p>
5. Projected Trade volumes, Clients and Markets	<p><i>Trade Volume</i></p> <p>It is anticipated that 1 to 3 transactions would be completed in 2002, with an investment from each client equal to approximately \$100 million to \$200 million (USD).</p> <p><i>Clients</i></p> <p>Initial targets are Funds that already utilize Prime Brokerage, but new Funds will also be targeted in this process.</p> <p><i>Markets</i></p> <p>Publicly traded equities [long and short, including synthetic shorts utilizing a total return swap].</p>
<b>INFRASTRUCTURE AREAS</b>	
6. Operations Betsy Konvalinka – (UK) [(US) – John Brosnan/John Rodefeld]	No Issues.
7. Information technology Marty Malloy (EFG) (Collateralized Finance and prime brokerage) [(US) Stuart Writtle]	<p>Prime Brokerage systems would track each investment in the same manner that the system tracks positions of its customers. In the normal course of its business, Prime Brokerage automatically feeds the position information into EDICT, which is the credit monitoring system that determines the worst expected loss from the portfolio.</p> <p>In addition, Prime Brokerage securities are automatically sent to Compliance for determining whether Barclays has exceeded any percentage ownership</p>

	<p>limitations for companies located in various countries.</p> <p>In these respects, COLT will operate in the same manner as a typical third-party customer of Prime Brokerage. [With respect to the synthetic short sale positions involving total return swaps over equities, GEFFE and EDICT are being updated to accommodate risking these types of transactions.]</p> <p>On behalf of the SUB, SCM Product Control would receive a daily report of the positions in the PB Account. As an initial matter, SCM Product Control will coordinate with EFG Product Control and Paul Merriman to arrange an appropriate electronic feed from Prime Brokerage. As discussed below, SCM Product Control will input summary amounts into the appropriate systems (SOPHIS) to track the accounting and regulatory impact of the transaction.</p> <p>In addition, Market Risk (Alistair Rew or similar person) will receive a daily feed of the positions within the PB Account. Market Risk will review on a weekly basis whether the trading strategy has been confined to the investment guidelines agreed with each Trading Manager. If the positions are deemed to be outside the investment guidelines, Market Risk will immediately report such breach to SCM Product Control (Helen Macgregor) and Prime Brokerage (Mark D'Andrea and James Sixsmith).</p>
<p><b>8. Risk management</b>  <b>UK</b>  <b>Iain Douglas</b>  <b>Cindy Gargano</b>  <b>Simon Gurney</b>  <b>Alistair Rew</b>  <b>Simon Tweddle</b></p> <p><b>[US</b>  <b>Credit –</b>  <b>Ian Prior/Keith</b>  <b>Hafner/Charlie</b>  <b>Churchill/Cindy</b>  <b>Gargano</b></p> <p><b>Market Risk –</b>  <b>Adam Litke]</b></p>	<p>Risk in the PB Account is generally confined to catastrophic risk. That risk is drastically reduced by the fact that the PB Account is hedged by the Call Option. In fact, BB PLC's risk profile is much more akin to a collateralised Prime Brokerage relationship, where the risks generally are confined to catastrophic losses occurring over a short period of time.</p> <p>Therefore, risks of COLT generally are reduced by the risk management techniques approved for use by BCSL's Prime Brokerage group when transacting with hedge funds. In addition to those techniques, specific investment guidelines will be agreed with each prospective Trading Manager, and the Market Risk team will undertake to analyze adherence to those investment guidelines.</p> <p><i>Prime Brokerage Risk Management Techniques</i></p> <p>Trading levels will be constantly monitored and will be reduced as trading strategies become more risky.</p> <p>In a Prime Brokerage relationship, a Fund would post collateral, say \$200. BB PLC's internal risk analysts (both credit and market) would assign a multiple to the Fund based upon the relative risk of the strategy to be traded and the current market conditions. In the example of \$200 collateral, a multiple of 20 would mean that the Fund could acquire up to \$2,000 long positions and \$2,000 short positions (note that the multiple is for gross positions, or \$4,000 gross, but that is generally split between long and short positions, or \$2,000 each side). Two events could cause the maximum trading positions to be affected: i) BB PLC's internal risk analysts decide to lower the multiple to reflect increased risk in the strategy or in the market (i.e., lowering the multiple to 15 times means that at the same \$200 of collateral trading levels of only \$1,500 per side would be warranted), or ii) the Fund's strategy loses money, in which case the collateral is decreased and it can no longer support the same trading level (i.e., loss of \$10 means \$190 of collateral remaining, times gross multiple of 20 = gross maximum of \$3,800, or \$1,800 long and \$1,800 short positions).</p>

The only meaningful difference between a typical prime brokerage relationship and COLT relates to the possible remedies available with respect to the trading level. In a typical relationship, a Fund could do one of two things: i) provide more collateral to rationalize the same trading level (i.e., pay \$10 to bring the collateral up from \$190 to \$200 if the multiple remains at 20 times), or ii) remove positions to reduce the trading level to the currently authorized level (i.e., bring the long/short positions down from \$2,000 to \$1,800). For COLT, only the second remedy exists. Notwithstanding the fact that both remedies address the same concerns, risk limits typically rely more heavily on the notion that a Fund would be able to access more cash to increase collateral.

In the normal course of its business, Prime Brokerage automatically feeds the portfolio information into EDICT, which is the credit monitoring system that determines the worst expected loss from the portfolio (the outcome from which will enable Credit to establish whether appropriate leverage exists in the PB Account or, alternatively, whether deleveraging must occur). To be clear, however, deleveraging would occur in accordance with limits imposed by Prime Brokerage even if EDICT does not indicate that the collateral is insufficient. For example, if 20 times leverage on \$200m supports \$4,000m gross positions, a loss of \$50m would mandate a reduction of \$1,000m of gross positions, even if EDICT determined that a trading level of \$4,000m was still appropriate.

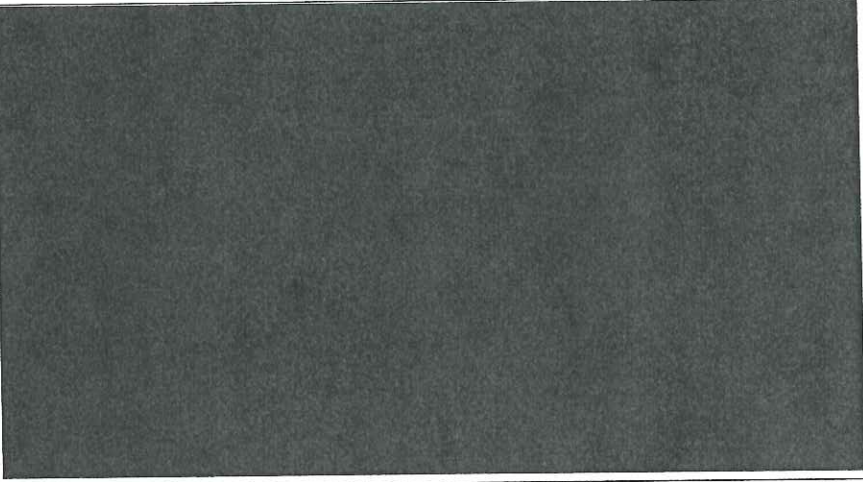
Credit (Cindy Gargano) will be responsible for interpreting the EDICT Data and notifying Prime Brokerage (Mark D'Andrea and/or James Sixsmith) when the risk level of the portfolio dictates that insufficient collateral is on hand. Prime Brokerage (Mark D'Andrea and/or James Sixsmith) will be responsible for conveying this information to SCM Product Control (Helen Macgregor) and to the Trading Manager. Further, Prime Brokerage (Mark D'Andrea and/or James Sixsmith) will be responsible to make sure that the portfolio has been reduced to a point that is supported by the collateral on hand.

Since COLT eliminates the ability to access more collateral from the Fund, the risk limits in the case of COLT would be slightly more conservative when compared to its existing prime brokerage business.

#### *Specific Investment Guidelines*

A limited framework must be agreed within which the portfolio will be managed and stress risks controlled. This framework will include measures to encourage portfolio diversification and minimise the related market risk, event risk and gap risk exposures. Market Risk and Credit Risk will sign-off on each proposed Trading Manager Agreement and proposed PB Account.

In addition, Market Risk (Alistair Rew or similar person) will receive a daily feed of the positions within the PB Account. Market Risk will review on a weekly basis whether the trading strategy has been confined to the investment guidelines agreed with the Trading Manager. If the positions are deemed to be outside the investment guidelines, Market Risk will immediately report such breach to SCM Product Control (Helen Macgregor) and Prime Brokerage (Mark D'Andrea and James Sixsmith). Upon consultation with Prime Brokerage, SCM Product Control will decide whether to fire the Trading Manager (See Product Control below).

<p><i>Julian Shaw</i></p>	<p><b>Modelling</b></p> <p>No Issues. Standard models will be used to risk the Call Option.</p>
<p><b>9. Legal</b>  <i>Alex Cameron &amp; Rod Smith (UK)</i>  <i>Richard Knaub (US)</i></p> <p>[[US) - Guy Dempsey/Alan Kaplan/Malyn Sheridan]</p>	
<p><b>10. Compliance (UK)</b>  <i>Frank Mcgarahan</i>  <i>Robert Nowicki</i>  <i>Tim Broome</i></p> <p>[[US)  <i>Steve Stombelline]</i></p>	<p><i>Controlling Trading Manager's Ability to "Trade Away"</i></p> <p>The Trading Strategy will allow the Trading Manager to execute trades with other broker-dealers that are cleared with Prime Brokerage. That ability to "trade away" must be controlled to ensure that the Trading Manager does not exceed daily trading limits during the course of the day. A tri- party agreement between the Trading Manager, executing broker and SUB would specify the daily notional buy/sell limits that the executing broker must adhere too. All trades will be reported to Prime Brokerage at the end of the day and if limits are exceeded Prime Brokerage (on behalf of SUB) would have the right, at its discretion, to reject the trades that exceed the limits. In addition, the executing brokers that could be used by the Trading Manager will be limited and pre-approved before trading. The agreement and limited executing brokers will be used to control the executing risk for the structure.</p> <p><i>Trade Reporting</i></p> <p>Since the SUB is not a regulated entity, the SUB would not be subject to the trade reporting requirements faced by BB PLC and/or BCSL with respect to the equities it trades.</p> <p><i>Notification of Significant Holdings in Various Jurisdictions</i></p> <p>Prime Brokerage must already report significant holdings to Compliance with respect to the trades it clears (since the securities are held as collateral in the name of BCSL). As a result, positions held through COLT's Prime Brokerage account will be reported in the same manner. Further, since Renaissance is an existing Prime Brokerage Client, COLT creates no additional burden.</p>
<p><b>11. Finance (UK)</b>  <i>Michael Blackburn</i>  <i>Pritesh Pankhania</i>  <i>John Shone</i></p>	<p><b>Accounting</b></p> <p>London Finance (Pritesh Pankhania) has provided advice, which has been agreed by PWC.</p> <p>a. SUB will be consolidated with BB PLC.</p>



[(US)  
Mike Montgomery  
Ray Garguilo]

b. COLT will be accounted for on trading book [and should be allocated to the US branch of BB PLC (in accordance with notion that accounting and tax books will be identical in the US)].

c. Fee income of \$12M should be recognizable immediately.

d. The Call Option and the PB Account would be marked to market and should offset in the income statement (i.e., there is no intrinsic value to the Call Option).

e. On the balance sheet, the mark-to-market value of the option and the Call Premium would be reported as "Amounts Arising from Off-Balance Sheet Derivatives", and the positions in the SUB would be reported as "Equity Securities" or other, depending upon the nature of the investments.

f. [The synthetic short position should not cause any difficulties from an accounting perspective, because the total return swap and the stock borrowing between BCSL and the SUB will be eliminated in consolidation.]

#### Regulatory<sup>5</sup>

Regulatory treatment has been agreed with Financial Control (John Shone and Michael Blackburn).

Since the analysis is very fact specific, it must be undertaken for each trade and will take into account the specific positions contemplated within the PB Account. Although specific treatment would vary with respect to each strategy, the general parameters are set forth below:

Positions would have to be analysed for Position Risk Requirement ('PRR') and Credit Risk Requirement ('CRR'). However, since the Call Option would offset PRR, and CRR would be mitigated by margin and various netting agreements, this number should be relatively small.

FSA approval will be sought for the SUB to treat its transactions as trading book transactions (following the accounting treatment). In that event, no WRAs would reside in the SUB, because a) the Call Option would offset the PRR inherent in the PB Account (except for catastrophic risk which would be valued at zero under the MARS model), and b) no CRR would be triggered by the PB Account, since the SUB would not be extending any credit in the transaction with Renaissance. This COLT approval will be subject to receiving this FSA approval.

The residual risk in the SUB is catastrophic risk (i.e. gap risk) that Prime Brokerage currently undertakes in its day-to-day relationships with hedge funds. GFRM (Iain Douglas, Simon Gurney, and Simon Tweddle) is

<sup>5</sup> Equity positions acquired by the SUB would be limited by BB PLC's FSA-imposed limitation related to investments in financial institutions. In that regard, BB PLC has received a trading book concession from the FSA, which allows BB PLC to invest up to 10% of its share capital (estimated limit is £880m) into shares of financial institutions. The FSA will be approached to extend this concession to the SUB. Once accomplished, part of the concession must be allocated to this trade. A further limitation would relate to how much BB PLC stock could be acquired by the SUB. Since this is a scarce resource, SUB will be prohibited from acquiring BB PLC stock.

	<p>comfortable with this type of risk (from experience in Derivatives Funds business and Prime Brokerage), and it believes that no WRAs would result from that type of market exposure. That is borne out by models that determine risk from options, given various volatilities and strike prices.</p>
<p><b>12. Product Control (SCM)</b>  <b>Andrew Westenberg</b>  <b>Helen Macgregor</b></p> <p><i>(Prime Brokerage/EFG)</i>  <b>Greg Stevens</b></p> <p><i>[US</i>  <b>Jim Kacergis]</b></p>	<p><i>Regulatory and Accounting feed into SOPHIS</i></p> <p>As noted above in the IT section, SCM Product Control would coordinate with Prime brokerage to arrange for an appropriate electronic feed from Prime Brokerage. The feed would provide information about each position and would sum the market values of each long position, short position and cash balance. On a periodic basis, SCM Product Control would feed these sums into SOPHIS to ensure that the appropriate accounting and regulatory information is captured.</p> <p><i>Directors</i></p> <p>Directors of the SUB would be US employees of BB PLC.</p> <p><i>Firing Trading Manager if transact outside investment guidelines.</i></p> <p>As noted above in the IT section, SCM Product Control (Helen Macgregor) would be notified by Market Risk (Alistair Rew) and/or Prime Brokerage (Mark D'Andrea or James Sixsmith) as to whether the Trading Manager has breached the investment guidelines associated with the PB Account. After consulting with Prime Brokerage, SCM Product Control will inform the directors of the breach and the directors will determine whether to terminate the Trading Manager.</p> <p><i>Executing agreements on behalf of SUB</i></p> <p>The directors of the SUB will have authority to execute contracts on the SUB's behalf. Further, to the extent authorized by the directors, the Trading Manager will have the authority to execute trades on the SUB's behalf.</p>
<p><b>13. Tax</b>  <b>UK – David Williams/Jon Taylor/Priya Shah</b></p> <p><i>[US – Barry Berlin]</i></p>	<p><u>UK Tax</u></p> <p>No Issues, but reserve the right to view each structure prior to close. Since the transaction will be completed by a Cayman Islands subsidiary of BB PLC, but will be managed and controlled from the United States, no UK tax would arise directly in the transaction. [REDACTED]</p> <p><u>US Tax</u></p> <p>SUB's profits from the transaction will be taxed in the US. [REDACTED]</p>

	<p>Withholding risk (relevant only if SUB is not treated as the tax owner of the underlying securities) will be borne by the counterparty in this transaction. The counterparty would arrange for a US nominee to receive all payments from SUB, which would transfer all US withholding obligation from SUB to the nominee. The counterparty would also grant SUB a complete indemnity for withholding taxes and penalties, if any.</p> <p>Information reporting risk (again, relevant only if SUB is not treated as the tax owner of the underlying securities) will be borne by counterparty.</p>
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**APPENDICES**

<p>1. SCM Approvals Paper (Approved 27/03/02)</p>	
<p>2. Global NPSO Approval Paper (Approved 08/04/02)</p>	
<p>3. Barclays' Reg. X Opinion from Sullivan &amp; Cromwell</p>	
<p>4. Barclays' US Tax Memorandum from Akin, Gump</p>	
<p>5. Barclays' UK Tax Memorandum from Freshfields</p>	

(FSA)  
DF  
JAS

Thursday, 4 July 2002

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**BARCLAYS**

Dear Ralph

**PROJECT COLT**

**INTRODUCTION**

With regard to project Colt we are seeking FSA's non objection to the following:

1. To extend the Barclays Bank consolidated trading book to include the subsidiary ('SUB'), which has been specifically formed to undertake the business described below.
2. An exemption from having to calculate PRR for the subsidiary on a daily basis. By virtue of the type of business undertaken by the SUB and the controls that it would be subjected to, no PRR charge would arise and that any exposures arising on the equity positions would be offset, so long as the option is in the money. Controls regarding the levels and type of business undertaken by the 'SUB' will minimise any losses resulting from extreme market moves.
3. An exemption from having to monitor exposures arising in the 'SUB' for the purposes of reporting large exposures. For the reasons explained in 2 above, there will be no exposure for purposes of large exposure reporting.

**BACKGROUND**

This transaction is designed to provide hedge funds with a tax effective means of undertaking the business and for Barclays it would generate both a structuring fee and additional volume for the prime brokerage business.

Project Colt is an investment product for hedge funds, ('FUND') whereby a newly incorporated subsidiary of the Barclays Group ('SUB') replicates the trading strategy of the FUND having an initial value of \$2bn. At the end of the period the Fund exercises a cash-settled call option with respect to the value of trading strategy. During the period of the transaction SUB funds its ongoing activities with margin received from the FUND, (by way of the premium on the call option) through prime brokerage facilities entered into with Barclays Capital Inc ('BCI') and Barclays Capital Securities Limited ('BCSL') (External prime brokers will not be used.). Whilst the SUB will engage the investment manager of the FUND to act as investment advisor regarding its trading strategies, Barclays controls the type and level of business undertaken using the prime brokerage agreement and the investment management agreement. The structure is designed to be market risk neutral, with the risk arising in SUB from the trading strategies being fully offset by the call option, so long as the option remains in the money. Controls exist within the prime brokerage business to ensure that the risk of loss is minimized, and this structure contemplates additional controls to further minimize the risk. Notwithstanding those controls, if the equity positions funded using the prime brokerage accounts lose enough to make the option go out of the money, the equity positions held by the SUB would cease to be

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Barclays Capital - the investment banking division of

Permanent Subcommittee on Investigations

EXHIBIT #37

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BARCLAYS-PSI-005241

hedged and give rise to equity exposure. However, the controls are designed to take effect before this occurs, and includes the ability to terminate, the services of the investment manager and to liquidate the equity positions (in the same manner as currently approved for the prime brokerage business). The option is structured with a strike price of \$2 bn which equates with the collateral placed with the Subs prime brokers. Thus this option will be in the money from the outset.

Further details of the structure are attached, including the additional transaction necessary at the outset to create a long position in US securities in subs.

The risk to the Barclays Group is controlled through the operation of the SUB's prime brokerage accounts opened with BCSL and BCI

1. The written call option by the SUB to the Fund ensures that any surplus on the prime brokerage account ('PB account') will be returned to the Fund (so upside on the PB account passes to the Fund).
2. The premium on the written call also acts as the mechanism for passing margin funds to the SUB's prime brokerage account. ('The Margin')
3. The Investment Management Agreement links the Investment Manager (the Fund's investment manager) to the performance of the PB agreement of the SUB and additionally sets boundaries on the type of trading allowed within the PB account. The boundaries on trading within the PB account act as an additional control to those normally in place with a PB relationship. Adherence to these controls will be monitored by Barclays Capital Market Risk. In the event of an exception the investment management agreement would be terminated, and SUB would be able to liquidate outstanding positions (through BCSL/BCI prime brokers in ordinary course of business).
4. The Prime Brokerage Agreements between the SUB and BCSL/BCI sets out the level of Equity required in the account. If this Equity level is not met then there are a number of remedies available to BCSL/BCI such as:-
  - (i) Deleverage of the account by the Investment Manager, ie selling positions to get above the required equity levels.
  - (ii) BCI/BCSL taking control of the account if the margin level is eradicated.

These are the same remedies that apply to dealing with any PB account, though the additional standard remedy in a PB relationship of obtaining additional margin is not available in this mechanism.

The operation of the SUB's PB account and review of the level of equity will take place through the current infrastructure around the PB business. As described above, there will be an additional control over the investment strategy of the PB account by Barclays Capital Market Risk reviewing the account on a daily basis to ensure it complies with the Investment Management Agreement.

Consequently the risk, both credit and market risk, of this structure is the same as any other prime brokerage ('PB') arrangement with a hedge fund. Therefore BCSL/BCI (as providers of the PB accounts) are subject to gap risk arising over a very short time frame (i.e. if the controls in place for prime brokerage do not operate in time to enable the positions to be deleveraged in order to ensure that an appropriate level of Margin continues to be maintained). In addition, although BBPLC is owner of the SUB it has no direct risk exposure to the positions in the PB account since the combination of the option and underlying positions in the PB Account transfer such risk to the Fund and BCSL/BCI, respectively.

#### TRADING BOOK TREATMENT

We seek to extend the scope of the trading book to include the activities of the SUB. The SUB will be holding short term positions in equities, funded using the prime brokerage accounts and held with trading intent. The trading strategy of the SUB will involve transacting a high volume of equity transactions, each position being held for a short period. We confirm that the positions would be marked to market daily on a prudent and consistent basis as part of the internal Product Control process. The prime brokerage

transactions would take the form of reverse repos which fall within the definition of a trading book asset per chapter CB SECTION 3.2.1

#### **CALCULATION OF THE POSITION RISK REQUIREMENT**

As explained above, the level of risk carried by the SUB is controlled through the operation of the prime brokerage accounts. In this way the option should, barring gap risk, always be in the money. In which case it will have a delta of 1 and provide a perfect offset against the net assets held by SUB. Consequently, as no equity PRR will arise in SUB we seek a dispensation from having to calculate the PRR for the SUB. This would apply so long as the option remains in the money.

#### **LARGE EXPOSURE REPORTING**

Similar to the analysis applied to the treatment of position risk above, individual exposures arising in the SUB will (so long as the call option is in the money) be offset by the synthetic exposures created by the call option. Consequently for the purposes of large exposure reporting, no exposures to the issuers of the equity would arise in these circumstances.

#### **SUMMARY**

We seek FSA's consent to extend the trading book to include the SUB. In addition we seek an exemption from having to calculate the PRR for the subsidiary on a daily basis as the structure is designed to be risk neutral and this would be ensured by applying the controls referred to above. Similarly no exposures would arise in the SUB for the purposes of large exposure reporting.

The first transaction is due to close at the end of July. We would be grateful if you could give this your consideration.

Yours sincerely

*John Shone*

**John Shone**

Director  
Financial Control

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Friday, 16 August 2002

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**BARCLAYS**

Dear Gareth,

**PROJECT COLT**

**INTRODUCTION.**

Further to a telephone conversation with Ralph, yesterday evening, I understand that the FSA may require the application of the carveout methodology to calculate the PRR arising on the sold covered call option. The purpose of this letter is to explain the approach we would propose to adopt.

Given the business deadlines we are seeking to progress this in Ralph's absence and are hoping it will be possible to arrange an opportunity to discuss it early next week.

**BACKGROUND.**

With respect to the subsidiary ("Palomino") in Project COLT, we believe that Palomino should be treated as having a Trading Book on the basis that

- a. The instruments (cash, equity securities and Call Option) booked in Palomino are each Financial Instruments, and
- b. Each Financial Instrument will be marked to market daily in appropriate systems; and
- c. The activities of the entity involve trading intent.

In response to Ralph's comments we would apply carve out methodology to calculate the PRR arising on the Call option in Palomino, as set out in chapter TE section 5.3.2 of the FSA's Interim Prudential Sourcebook for Banks. As a sold covered option, that is in the money, the PRR would be based upon the market value of the underlying position times P% less the mark to market value of the option.

Importantly, you should note that application of that methodology would in all cases result in nil capital for Palomino (see "Proof" below for a detailed discussion).

This result is based largely on the fact that all market risk that would otherwise be present in Palomino from the option arrangement has been passed to BCl and BCSL as a contractual

matter (this is discussed in more detail in the discussion below under the definition "Assets at Risk"). Although one might argue that Palomino is left with a credit exposure to BCI and BCSL, any such risk is an intra-group risk that would not trigger a capital charge.

Since, as discussed, Palomino will not have any risk to which capital should be attached, the remaining issue relates to the appropriate capital treatment of BCI and BCSL. In that regard, it is important to note that the risks borne by BCI and BCSL are the same risks borne by BCI and BCSL in the context of their prime brokerage business. For them, this transaction is no different than if a client deposited \$200m (i.e., the call option premium) directly with either of their prime brokerage divisions. In fact, but for some US regulatory efficiencies created for the client by using an option, the transaction would have been documented as a traditional prime brokerage account with \$200m as initial collateral.

#### Proof

Looking at the appropriate formula best supports the result of nil capital:

$$(\text{Assets at Risk}) \times (\text{PRA} = 16\%) - (\text{Value of Call Option}) = \text{Capital in Palomino}$$

"Assets at Risk" means the amount of equity securities and cash that are at risk at any time. On the numbers previously submitted, \$2,000m of equity and/or cash will be in Palomino's prime brokerage accounts (split between BCI and BCSL). With nothing further stated, one might conclude that \$2,000m would be the Assets at Risk for Palomino. However, that is not the case because of specific provisions in the prime brokerage agreements with BCI and BCSL that ensure that Palomino will in all cases receive at least \$1,800m back from BCI and BCSL (in relevant proportions). Given that, the true amount of "Assets at Risk" for Palomino is only \$200m (i.e., \$2,000m assets less \$1,800m in effect guaranteed by BCI and BCSL).

An example of the return profile for Palomino is as follows:

Total Value of Equities plus Cash at Termination (combined BCI and BCSL accts)	Amount returned by BCI prime brokerage to Palomino (assume 75% of portfolio)	Amount returned by BCSL prime brokerage to Palomino (assume 25% of portfolio)	Total Amount received by Palomino
\$2,500m	\$1,875m	\$625m	\$2,500m
\$1,900m	\$1,425m	\$475m	\$1,900m
\$1,700m	\$1,350m	\$450m	\$1,800m
\$0	\$1,350m	\$450m	\$1,800m

"PRA" means 'percentage risk addition', which we have assumed a value of 16%.

"Value of Call Option" means the value of the call option as determined by SOPHIS (our equity derivative reporting system), based upon the appropriate inputs, including the value of the underlying, the strike price, and applicable volatility numbers. Generally speaking, the value of the call option at any time will equal the value of the underlying less the strike price. Since, as described above, the value of the underlying will never fall below \$1,800m AND the strike price is set at \$1,800m, the option is really equivalent to an option over \$200m of underlying (i.e., \$2,000m of assets less \$1,800m) with a strike price of \$0. As such, the value of the option would always equal the amount by which the underlying assets exceed \$1,800m. In other words, the Value of the Call Option will always equal the Assets at Risk.



Given the above definitions, examples of the calculation of capital for Palomino using the Carve Out Methodology are as follows –

(a) Value Underlying	(b) Value at Risk = (a) less guaranteed return amount	(c) (b) times PRA (16%)	(d) Value of Call Option = (a) less strike price	(e) Capital = (c) less (d), but not less than \$0
\$2,000m	\$200m	\$32m	\$200m	\$0
\$2,100m	\$300m	\$48m	\$300m	\$0
\$2,500m	\$700m	\$112m	\$700m	\$0
\$3,000m	\$1,200m	\$192m	\$1,200m	\$0
\$1,900m	\$100m	\$16m	\$100m	\$0
\$1,850m	\$50m	\$8m	\$50m	\$0
\$1,800m	\$0	\$0	\$0	\$0
\$1,000m	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0

As suggested, we will ring Bas Rooijmans on Monday to discuss how best to progress this. Unfortunately, I am out of the office next week, in my absence Nadim Sheikh will be handling this matter.

Yours sincerely

*John Shone*

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Cc Ralph Mountford.

FSA File

Thursday, 5 September 2002

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Bas Rooijmans  
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Major Financial Groups Division  
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**BARCLAYS**

Dear Bas

**PROJECT COLT**

I am writing to respond to the various questions that the FSA have raised following the conference call held on Wednesday afternoon to discuss Project Colt.

1. Does the option give rise to market risk?

As a sold call option with effectively a zero strike price it does not give rise to market risk within Palomino Limited. As such it is equivalent to a forward sale.

2. Set out the basis for the proposed capital treatment.

Please refer to the attached paper, which specifically relates to BCSL. BCinc would follow the same principles. Both these entities are consolidated applying an aggregation plus based approach.

3. Provide confirmation as to the internal approvals obtained.

Within Barclays Capital the Executive Committee and New Products Committee have approved the structure. It has also been reviewed by the SCM Approvals Committee and is due to be submitted for final approval by this committee on Monday.

Group approvals obtained include Group Treasury, The Finance Director, The Group Risk Director and Capital Applications Process.

4. Leverage appears high for hedge fund business, is this prudent?

It is not possible to make a general statement about leverage with hedge funds, since the leverage level relates primarily to the level of risk in the strategy employed by the hedge fund (which vary markedly). This structure is targeted at more conservative market neutral hedge funds that trade equities and focus on obtaining returns that have a low correlation to the market. Generally, these strategies involve paired positions (i.e., long and short positions) designed to take advantage of market inefficiencies. In this transaction if the fund goes directional (either net long or short) then the margin requirement will be increased (and correspondingly the leverage levels will decrease). In fact, a full directional strategy will be allowed to have at most 4 times leverage.

Specific levels of leverage, which are in line with other transactions, have been agreed with GFRM as part of the approvals process.

5. What is the purpose of the transaction – why did we structure it this way?

The main reason for Barclays was cost efficiencies. We did not need this structure to get around any US regulatory constraints relating to leverage. In fact, we could have carried out the transaction using BCSL directly, but it would have been punitive re: costs in clearing US securities in BCSL through the DTC. The current structure avoids those costs and provides some tax efficiencies for the client.

Please do not hesitate to contact me should you wish to discuss any of these points further.

Yours sincerely



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13 September 2002

By e-mail and post

Dear John

### **PROJECT COLT**

I refer to your letter of 5 September 2002 to Bas in which you requested individual guidance on the regulatory capital treatment for Project COLT.

You have provided us with further information on this transaction in several letters, emails and meetings over the last few weeks. In the course of our discussions you have confirmed the following:

- Neither Barclays Bank plc nor BCSL/BCI incur market risk through the option contract with Palomino.
- Credit and operational controls around this transaction are equivalent to those that are in place for a standard prime brokerage transaction.
- All relevant internal approvals for this transaction have been obtained.
- The prime brokerage agreement between Palomino and BCSL/BCI complies with the requirements set out in annex 1 of IPRU (INV) Chapter 10 under 'reverse repurchase agreement'.

As a result, I confirm that you may calculate the capital charge for this transaction on the basis of IPRU(INV) Rule 10-173(2).

If you wish to use a similar structure for future transactions with other hedge fund counterparties I would be grateful if you could inform us advance.

John Shone

13 September 2002  
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I have written separately today to Richard Pattinson in response to his associated request for amended treasury concession limits.

The reliance that can be placed on the individual guidance in this letter is described in section 9.4 of the Supervision manual.

Please contact me or Bas if you have any queries.

Yours sincerely



**Gareth Truran**