TRANSLATION FROM THE FRENCH

SOCIETE GENERALE

GENERAL INSPECTION DEPARTMENT

MISSION GREEN

Summary report

- MAY 20, 2008 -

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On January 24, 2008, the General Inspection department (SEGL/INS) was entrusted by the Group's Executive Committee with the assignment of carrying out an investigation concerning the fraud committed by Jérôme KERVIEL (JK), trader on the Turbo warrants market within the equity derivatives division (see Focus no. 1).

The purpose of this assignment, approved by the Special Committee of Société Générale's Board of Directors, was (i) to describe the mechanism used to perpetrate the fraud in order to verify the accuracy of SG CIB's calculations concerning the value of the positions and losses, (ii) to search for JK's motives and any potential accomplices, (iii) to identify the malfunctioning of control procedures and responsibility for the late detection of the fraud, and (iv) to verify that no such fraud exists in other areas of SG CIB.

Concerning malfunctioning and responsibility, our investigations having focused exclusively on the scope of the fraud, our conclusions apply solely to the DELTA ONE desk within which JK operated and its immediate surroundings. The organization of SG, in particular that of DELTA ONE, is presented in Focus no. 2.

This report lays out the conclusions of this assignment as of May 20, 2008, the investigation of the fraud having been completed by that date (1).

1. MECHANISMS AND TIMETABLE OF THE FRAUD

- **Our investigations confirm the principal characteristics of the fraud as presented from January 24, 2008 onwards by our Bank to the supervisory authorities, to the Statutory Auditors and to the financial community.**

The fraud consisted of the taking of massive directional positions which JK hid, together with their risks and their earnings (see Focus no. 3), by means of a series of concealment techniques that can be divided into three categories:

- the entry and then the cancellation of fictitious transactions, concealing market risks and the latent earnings from unauthorized directional positions (2);

  JK recorded one or several false transactions in the systems in order for them to be taken into account in the calculation of risks and valuations. JK set the parameters of these transactions in such a manner as to use them to cover the fraudulent positions actually taken elsewhere. We have identified 947 transactions of this type.

- the entry of pairs of fictitious reverse transactions (purchase/sale) concerning equal quantities of the same underlying asset for different "off-market" prices, with the aim of hiding realized earnings, *i.e.* earnings generated following the unwinding of positions;

  For example: on March 1, 2007, purchase of 2,266,500 SOLARWORLD shares at EUR 63 and sale of 2,266,500 of the same shares at EUR 53, which leads to fictitious negative earnings of EUR -22.7 million without creating a position. We have identified 115 transactions of this type.

- the booking of intra-monthly provisions that temporarily cancel the earnings (latent or realized).

  JK made use of the possibility, normally limited to trading assistants only (but without traders being barred via the computer systems) for the purpose of correcting modeling bias, to record positive or

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1 We have been unable to complete our reconciliation tasks in relation to equity positions due to transversal reconciliation tasks underway within OPER. Our work also has not exhaustively covered the study of cash pending, the treatment of which is not broken down by operational center. Finally, we have focused our investigations on the examination of recordings of telephone conversations and on the review of the electronic mailboxes for the key parties and periods, but we have not exhaustively covered the period 2005–2008 for all parties involved.

2 Earnings generated by the daily valuation of the marked-to-market position.

negative provisions which modify the valuation calculated by the Front Office system. JK posted such entries in order to conceal the amount of earnings generated by his fraudulent positions during a given month (provisions are checked at month end only). We have identified at least nine transactions of this type.

The set of techniques used by JK (i) in order to conceal his positions and (ii) in order to bypass the control measures liable to reveal the fictitious or unwarranted character of the entries posted by him are set forth in Focus no. 4.

*Regarding fictitious trades, JK cancelled them before they gave rise to any confirmation, settlement or control. In order to do so, he used characteristics that allowed him the time to cancel the trades and replace them by new false trades. In particular, he made liberal use of trades with a deferred start date (*i.e. *with a value date considerably later than the transaction date) which, in accordance with market practice, are not confirmed until a few days before the value date, thereby leaving JK the time to cancel such trades.*

Furthermore, when faced with questioning from his hierarchical superiors or from control bodies, JK gave untruthful replies, using forged e-mails as support on several occasions (see Focus no. 5).

Finally, JK used the Front Office computer system to post numerous fictitious or unwarranted entries but we have not detected the utilization of any other agent's ID without his or her knowledge.

- **Therefore, the timetable of events as shown by our investigations (see Focus no. 6) demonstrates that JK's fraudulent activity, launched in 2005, took on massive proportions from March 2007 onwards, to reach a global loss of EUR 4.9 billion:**
  - 2005 and 2006: presence of some fraudulent transactions (up to EUR 15 million on positions between June 2005 and February 2006, up to EUR 135 million from February 2006 onwards, primarily on equities (3));
  - 2007: progressive constitution from late January onwards of a short position on index futures reaching EUR 28 billion on June 30, 2007, unwound in August, then building up a new short position in September reaching EUR 30 billion on October 31, 2007, unwound in November; at the same time, directional positions taken on equities (4) reached up to EUR 370 million, depending on the month; total profits of EUR 1.5 billion realized;
  - 2008: constitution between January 2 and January 18 of a EUR 49 billion long position on index futures, discovered on January 20 then unwound between January 21 and January 23, leading to losses of EUR 6.4 billion (which, taking into account the EUR 1.5 billion profit at December 31, 2007, gives a global loss of EUR 4.9 billion).

  Our reconciliation investigations have confirmed the sizes of the incriminated positions and the losses generated by their unwinding as calculated by the SG CIB teams between January 19 and January 23. It has only proven not possible to reconcile the equity positions, because of the transversal reconciliation tasks underway within OPER (see Focus no. 7).

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[3] Equities concerned by positions above EUR 5 million are: ALLIANZ, SOLARWORLD, Q-CELLS.
[4] Equities concerned by positions above EUR 5 million are: ALLIANZ, NOKIA, CONTINENTAL, DEUTSCHE BANK, FORTUM, CONERGY, BUSINESS OBJECT, HRX.

2. MOTIVES AND POTENTIAL COLLUSION

On the basis of the investigations which we have been able to complete and which are within the scope of our competence (5), we have not identified any indication of embezzlement of funds by JK (6).

It nevertheless appears that JK was able to take advantage of his fraudulent activities in order to significantly increase his "official" earnings and therefore to increase indirectly the amount of bonus that he could hope to receive.

> *We have established that part of JK's "official" earnings came from his concealed positions (see Focus no. 8).*

Furthermore, we have discovered indications of internal collusion involving a trading assistant, a Middle Office operational agent (7) dedicated to JK's activity.

> *Due to the current on-going criminal investigation, we have been unable to question this agent on this subject. The possibility of such internal collusion must therefore be confirmed by the courts.*

Firstly, a large number of JK's fraudulent transactions were entered by this trading assistant:

- he registered several abnormally high intra-monthly provision flows, without having obtained any valid explanations as to their validity, which allowed JK to conceal the earnings generated by his fraudulent positions;

  Whereas provision flows are in general limited to several hundred thousand euros (exceptionally over EUR 1 million), JK's trading assistant made 7 such provisions of over EUR 50 million in 2007 and 2008 (See Focus no. 9). In particular, a flow of EUR 1.5 billion was registered on January 10, 2008 which allowed JK to conceal earnings generated in 2007 on fraudulent trades.

- he himself entered several fictitious trades used by JK in order to disguise his fraudulent directional positions: we have thus identified 13 fictitious transactions for the sale and purchase of equities that allowed JK to conceal his earnings and 102 trades with "null", "pending" or CLICKOPTIONS as counterparties, registered notably with the aim of reducing apparent market risks.

  In total, almost 15% of the fictitious trades registered by JK were registered by his trading assistant.

In addition, we discovered an electronic message which appears to establish that he was aware of the earnings generated by JK on his fraudulent trades. Indeed, on December 31, 2007, he sent an email to JK with the subject "Valo JK + EUR 1,464,129,513"; *i.e.* an amount very close to earnings as reconstituted by us at that date (EUR 1,487 million).

> *Knowledge of the existence of the fictitious trades was necessary in order to obtain this amount.*

Moreover, questioned by the Middle Office in July 2007 on a "passerelle" discrepancy (8) and having turned to JK to obtain explanations, this trading assistant, at JK's request, merely repeated in turn the explanation given by the trader, which he communicated unchanged to his questioner.

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[5] On the one hand, we have not carried out an exhaustive analysis of cash pending, treatment of which is not broken down by operational center; on the other hand, it is within the competence of the current criminal investigation and outside our competence to lead investigations into bank accounts potentially held in other banks by JK or by those close to him.

[6] SG bank accounts have been examined, together with off-market price trades and OTC trades with counterparties outside of the SG Group which would have allowed JK to embezzle funds with the potential collusion of a third party.

[7] The role of a Middle Office operational agent is to assist traders with day-to-day administrative tasks (recording of trades) and to carry out any first-line controls concerning the level of earnings, size of positions, etc.

[8] Discrepancies between Front Office and accounting are handled by a process called "passerelle" which consists of explanations on a monthly basis of discrepancies based either on differences between the respective analytical structures of the Front Office and accounting (perimeter discrepancies), or on differences in the methods used (method discrepancies), or on other one-off reasons (residual discrepancies).

The complicity of this trading assistant, if confirmed, would have appreciably facilitated the fraudulent activities of JK:

- attached hierarchically not to the trader but to a division independent from the Front Office, the operations division (OPER – Middle and Back Offices), it was the role of this agent to provide an initial level of control over the trader's activities;
- Middle Office operational agents are the primary points of contact for other support functions with respect to questions concerning the traders' activities; the complicity of this agent would therefore have allowed JK (i) to avoid exposing himself during all of the alerts uncovered (see below) and (ii) to give credibility to his untruthful responses, as these were at times put forward by an entity independent from the Front Office;
- this agent could have assisted JK in the management of the multiple fictitious trades and unwarranted orders necessary for the concealment of the fraudulent positions; this task probably constituted a major workload for JK, in addition to that linked to his legitimate activity.

Our investigations have on the other hand allowed us to establish that neither JK's hierarchical superiors nor his colleagues were aware of the fraudulent mechanisms used or of the size of his positions. Only transfers of JK's earnings to other traders (at a level of EUR 2.6 million) have been uncovered, without having any direct link to the fraud.

Beyond this, we have examined the close relationships maintained by JK with his FIMAT and SGSP (SG Securities Paris) brokers and his extensive internal network of personal relationships, without being able to identify any collusion.

3. MALFUNCTIONING AND RESPONSABILITY

- **Concerning Front Office (GEDS/DAI/TRD), supervision of JK proves to have been weak, above all since 2007, despite several alerts generating grounds for vigilance or for investigation.**

From September 2004 to January 2007, **desk management did not identify either the initial fraudulent trades or their concealment** and tolerated, under its supervision, the taking by JK of intraday directional positions (9) unrelated to his assignment.

- JK's hierarchical superior tolerated the fact that JK regularly took intraday ("spiel") directional positions on index futures and on certain equities (for amounts not of the same proportion as those of the fraudulent positions undertaken from 2007 onwards), which was unjustified given JK's assignment and his level of seniority as trader;

  From November 2004 onwards, JK and his manager exchanged e-mails on these intraday spiel strategies, unrelated to his turbo activities.

- certainly, during this period, unauthorized activities which remained limited in value (10), led to regular feedback from JK to his manager and were sometimes the subject of refocusing;

  We have been unable to question JK's former manager in order to confirm our judgment on the quality of his supervision because he is no longer an SG employee.

[9] "Intraday" positions are those taken during the course of the day (zero risk after close), as opposed to positions carried "overnight", which are carried over at least two days.

[10] We have found no formal record of the limits set by the trader's manager on his intraday activities, which would in any case be different from the market risk limits set formally by RISQ.

- his supervision was not however sufficient to allow the detection of JK's initial fraudulent trades (*i.e.* the taking of overnight positions concealed by fictitious opposite trades), which were, it is true, relatively rare in 2005 and 2006 (under EUR 100 million, essentially concerning equities).

  However, in July 2005, JK's former manager had identified a non-covered overnight position of around EUR 10 million on ALLIANZ shares, which led to a non-formalized reprimand from him, but this manager failed to detect the fictitious trades used by JK in order to conceal the position.

From January 12, 2007 to April 1, 2007, whilst starting to build up his massive fraudulent and concealed positions on index futures, **JK was not subject to supervision at the first level**:

- in January 2007, the DLP desk lost its manager (L+1 above JK), who had resigned; GEDS/DAI/TRD did not find any immediate replacement; during this period, the DELTA ONE manager (L+2 above JK) did not implement any interim structure for the monitoring of the desk's first level of activity;
- throughout this two-and-a-half month period, most of the monthly earnings by operational center were formally validated by the desk's most senior trader without there being any effective control over the desk and JK himself validated the earnings of his principal operational center in March;

  No use was therefore made of either the position monitoring tool (BACARDI) or of the cash flow statements within the perimeter of the DLP desk during this period.
- under these conditions, JK was able to launch the build-up of his massive fraudulent position (see Focus no. 10) and, to a lesser extent, to continue his intraday "spiel" activity.

  By late March 2007, JK had already built up a position on futures, essentially on the DAX index, of EUR 5.5 billion.

From April 2007, **the day-to-day supervision of JK by his new direct manager was weak, whilst the hierarchy did not react in an appropriate manner to several alert signals.**

On the one hand, **concerning the supervision of risks and the monitoring of day-to-day activities, the direct supervision of the DLP desk proves to have been deficient**. Indeed, his new manager did not carry out any detailed analysis of the earnings generated by his traders or of their positions, thereby failing to fulfill one of the main tasks expected from a trading manager.

> *While there is no* ad hoc *standard applicable to trading desk managers, three prescriptive documents govern such a responsibility (see Focus no. 11). In practice, the two principal tasks of a trading desk manager in relation to control measures consist of (i) checking that the desk's net position does not exceed the allocated risk limit (in this case, EUR 125 million), which JK's manager carried out satisfactorily; however, this did not enable him to detect the fraud as the positions were concealed behind fictitious trades; (ii) consulting on a regular basis the tool explaining profits or losses made (BACARDI) and the database where all trades made during the day are registered (ELIOT) in order to monitor the activity of his traders, which was not done by the DLP manager (this would have allowed him to detect the fraud).*

Under these conditions, the desk manager was neither in a position to control the activity of his traders nor *a fortiori* to detect the massive concealed positions taken by JK in 2007 and 2008 or even the enormous increase in volume of his intraday directional activity (higher values and new activities such as pair trading (11)).

> *The DLP manager confirmed that he trusted his traders to provide answers to his questions or to those of the support functions.*

[11] Pair trading is a trading strategy consisting of the arbitrage of two equities in one single economic sector.

Furthermore, JK's direct supervisor was not given sufficient support and was not assisted by the DELTA ONE manager – insufficiently clear definition of priorities (no written instructions prior to November 2007), no verification of his supervisory practices – despite the fact that the DELTA ONE manager was aware of both his lack of experience in this type of position as new desk manager (coming from a background of structured transactions and with no specific knowledge of trading activities) and of deficiencies in the monitoring of risks taken by the desk in general (12).

> *During the second half of 2007, the DELTA ONE manager and JK's direct manager were handling other priorities: monitoring of projects aimed at ensuring the structure's durability in the context of the division's exponential growth (13) and high turnover in the Middle and Front Office teams, close supervision of activities concerning the guaranteed lending/borrowing of equities impacted by the subprime mortgage crisis. Moreover, JK's activity, turbos, appeared* a priori *to them to present the lowest level of operational risks (as opposed to certificates, for example).*

On the other hand, **JK's hierarchy, which never had any knowledge of either the size of the incriminated positions or the mechanisms used to conceal them, lacked responsiveness in the face of several signals**:

- **level of earnings (from L+1 to L+4)**: despite the high value amount and very strong growth of JK's declared earnings in 2007 (EUR 43 million, of which EUR 25 million was proprietary, *i.e.* 59% of the earnings of the DLP desk and 27% of the earnings of DELTA ONE in 2007 (14)), no detailed examination of his activity was carried out or required by his hierarchy;

  Our analyses in this respect show that his own proprietary trading activities, launched in July and which consisted of the arbitrage of competitors' "turbo" warrants, generated earnings of approximately EUR 3 million, i.e. *considerably less than the EUR 25 million declared (see Focus no. 12)*

- **EUREX questioning (L+1)**: correspondence from the exchange to SG in November 2007 did not attract a sufficient degree of attention from the DLP manager, the only person within JK's hierarchy aware of the existence of such correspondence (see below);

- **cash flow (L+1 and L+2)**: unusually high levels of cash flow (an excess of EUR 1.3 billion between December 28, 2007 and January 1, 2008 for JK's principal operational center) were not detected due to the lack of any detailed analysis by the DLP manager; and also, in July 2007, the DELTA ONE manager was informed of two cash borrowings of EUR 500 million (again for JK's principal operational center), an abnormally high amount, without reacting to this alert;

  Details of our report on (i) the impacts of JK's fraud on the level of initial margin requirements, margin calls and cash flow, and (ii) the possibility of their detection, are provided in Focus no. 13.

- **accounting (L+2 and L+3)**: on two occasions (in April 2007 and May 2007), the DELTA ONE manager and his hierarchical superior were informed by Middle Office of anomalies uncovered in relation to JK during "passerelle" reviews (see above), in relation to which the explanations provided by JK were not coherent, without any reaction from these managers;

- **brokerage expenses (from L+1 to L+3)**: the DLP manager and, to a lesser extent, his two hierarchical superiors failed to carry out an in-depth analysis of the high amounts of brokerage commissions at year end (paid principally to FIMAT) generated by JK's fraudulent activity (EUR 6.2 million for JK's principal operational center, *i.e.* 28% of the associated annual earnings (15));

- **breach of a limit (L+1 and L+2)**: the DLP manager failed to investigate the cause of a EUR 10 million breach of the desk's market risk limit (EUR 125 million) which was caused by an overnight directional position taken by JK on three equities;

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[12] In the DLP manager's annual evaluation in Nov. 2007, the DELTA ONE manager drew his attention to the need to strengthen his risk monitoring.

[13] Average volume of transactions doubled in 2007, ETF range raised from 12 to 80 in two years, outstanding amounts on turbos doubled in 2007, etc.

[14] These figures all result from trading earnings, *i.e.* excluding sales credits (commercial margins).

[15] These are the annual earnings before taking into account any brokerage commissions or refinancing costs.

JK himself replied to the e-mail sent on October 24, 2007 by RISQ/RDM to DLP (with copy to JK's L+1 and L+2), confirming the breach. The e-mail from RISQ/RDM included a file explaining the breach due to uncovered overnight positions of EUR 16 million on DEUTSCHE BANK, of EUR 6 million on FORTUM stock, and of EUR 3 million on CAP GEMINI.

- to a lesser extent, **vacation (L+1 and L+2)**: JK's reluctance to take any vacation, raised formally by the DELTA ONE manager on four occasions (in February 2007, November 2007, and during his 2006 and 2007 annual appraisals), without concrete effect, did not alert his hierarchical superiors.

  The DELTA ONE manager accepted the explanations given by JK (repeated references to his father's death).

In total, **we believe that five reasons can be put forward to explain why the Front Office hierarchy did not detect JK's fraudulent activities:**

- the weakness of the supervision by JK's direct manager, without which the fraud would probably have been detected more rapidly;
- the lack of assistance and supervision by the DELTA ONE manager of this new, inexperienced trading manager;
- the tolerance of the taking of intraday directional positions within the DLP desk, which created a context in which JK operated more freely;
- a lack of attention and reactivity when faced with numerous alerts, which denotes a lack of sensitivity to the risk of fraud at the Front Office level;

  Our numerous interviews also reveal that the trading hierarchy lost sight of the scale of the orders and lacked knowledge of the details of the activities carried out by the traders.
- an operational context rendered difficult by strong, rapid growth in the division, with numerous signals revealing a deterioration in the operational situation, in particular in the Middle Office (doubling of volumes in twelve months, Front Office employee numbers growing from 4 to 23 in two years, multiplication of the number of products, Middle Office chronically under-staffed in 2007 following numerous departures).

  We have uncovered several exchanges between the managers of DELTA ONE sub-divisions and their hierarchical superiors concerning the division's operational difficulties.

- **Concerning the support and control functions (OPER, ACFI, RISQ, GEDS/GSD ([16])), the controls in place were as a whole implemented and carried out in accordance with procedures but did not allow the fraud to be identified before January 18, 2008. On the other hand, controls which would have allowed the fraud to be identified were missing.**

Our investigations have allowed us to acknowledge that **the specified controls were indeed implemented** without however triggering an alert that was sufficiently loud or persistent to allow the fraud to be identified before January 18, 2008. Following an analysis of the controls carried out by ACFI, OPER or RISQ during 2007 and 2008 (discrepancies, pending, excess amounts, etc.) and the anomalies detected, it appears that **cases of failure by operators in relation to procedures in force for the performance of control methods liable to reveal fraud are rare** (see Focus no. 14 - one case in OPER on the control of discrepancies between Front and Back Office, two others within GEDS/GSD on the monitoring of counterparty risk). ACFI controls on regulatory capital requirements in relation to counterparty risk finally allowed the fraud to be brought to light.

[16] OPER: operations division covering SGCIB's Back and Middle Offices; ACFI: SGCIB accounting and financial affairs division; RISQ: Group risk management division; GEDS/GSD: Front Office support team within GEDS, in charge of investigating any breaches of limits on counterparty risk in market transactions.

After the completion of our investigations, the absence of any identification of the fraud by operators up until January 18, 2008 can be explained by:

- **the efficacy of the concealment techniques used by JK**: lies, production of forged documents (we have inventoried seven forged e-mails, see above), cancellation or modification of anomalous transactions, providing the operators with an immediate solution;
- **the diversity of the types of fictitious transaction recorded by JK**, which allowed him to reduce the number of cases in which he had to deal with the same interlocutors, thereby exploiting **a certain lack of a transversal approach in the organization of control functions**;

  The control procedures do not always describe the tasks of all the parties involved: for example, during an OPER control, the role of RISQ/RDM, in the event of its consultation, is not formally laid out.
- the fact that **the operators did not systematically check in further detail**, above and beyond the procedures in force (see Focus no. 14);

  Operators also did not have the reflex to inform their hierarchical superiors or Front Office superiors of the appearance of anomalies, even for high amounts, if this was not specifically stated as part of the relevant procedures.
- **the absence of certain control measures** for which no provision was made and which would have been liable to identify the fraud, essentially within OPER.

  At that time, no controls existed in this area over cancelled or modified trades, over trades with a deferred start date, over trades with technical counterparties, over positions with a high nominal value, or over non-trading flows during any given month, all analyses which would probably have allowed the identification of the fraud.

▪ **Moreover, <u>external alert signals</u> did not allow the fraud to be revealed:**

- in November 2007, EUREX sent two letters of inquiry concerning JK's activity: on the one hand, JK's direct hierarchical superior failed to react to the surprising facts contained in these exchanges (even if EUREX's questions did not relate to transaction volumes, one of the questions concerning strategy mentioned purchase trades covering 6,000 DAX futures contracts in two hours, *i.e.* the equivalent of nearly EUR 1.2 billion); on the other hand, SEGL/DEO limited itself to communicating the trader's explanations (notably in contradiction with EUREX's assertions, which were however inaccurate, on the direction of the positions and not responding exactly to all of the questions) to his direct hierarchical superior, by way of verification;

  In the second letter in reply dated December 10, 2007, in order to ensure that EUREX's queries had been answered, SEGL/DEO suggested organizing a conference call, a proposal to which EUREX did not respond.
- in the light of the strong growth in net banking income of a FIMAT desk used by JK, FIMAT launched an internal investigation in November 2007 on the regulatory conformity of these transactions. This investigation recommended including other factors in its analysis and suggested that SG should be contacted in order to "examine together the increase in execution volumes entrusted by SG CIB", which was considered to be premature by the subsidiary's management as the investigations underway had not been completed. This investigation had not been finalized at the moment of the discovery of the fraud by SG.

4. ADDITIONAL VERIFICATIONS WITHIN SG CIB

We have carried out investigations aimed at ensuring that the mechanisms used by JK have not been used by any other agents involved in trading activities within SG CIB. These investigations covered all of the GEDS and FICC (17) business lines, regardless of the geographical region concerned (Europe, the Americas or Asia).

We have exclusively concentrated our research upon the techniques used by JK (entry and subsequent cancellation of trades with deferred start dates made against technical or internal SG Group counterparties in order to conceal his positions, booking of intra-monthly provisions, purchase/sale of equities at different prices with the aim of concealing earnings) and upon factors that could have constituted alerts in the case of the fraud perpetrated by JK (taking of vacation, correspondence from stock exchanges, P&L growth, large nominal amounts, etc.).

Our investigations and analyses have not led to the identification of any other fraud using similar mechanisms.

These investigations as a whole, together with their results, are described in Focus no. 15.

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[17] SG CIB is made up of the departments GEDS (*Global Equity and Derivatives Solutions*), FICC (*Fixed Income, Currency and Commodities*) and CAFI (*Capital Raising and Financing*), the latter having been immediately excluded due to the absence of any trading activities.

<u>Focus no. 1</u>: JK's activities.

- **Turbo warrants.**

  - Principle: SG sells warrants with knock-out options ("*à barrière désactivante*") to its clients (principally as call options, *i.e.* purchase/call options offered to the client) and hedges by buying the underlying asset in question.
  - Strategy: "long turbos" are "calls down and out", *i.e.* purchase options that can be deactivated if the spot price falls (allows the client to place money on a rise in the price of the underlying asset), whereas "short turbos" are "puts in and out", *i.e.* options to sell that can be deactivated if the spot price rises (allows the client to speculate on a fall).
    The purchase of the underlying assets is carried out by SG, which allows the client to benefit from a leverage effect (as the client does not purchase the asset). In fact, the client only pays the difference between the spot and the strike price, SG financing the rest.

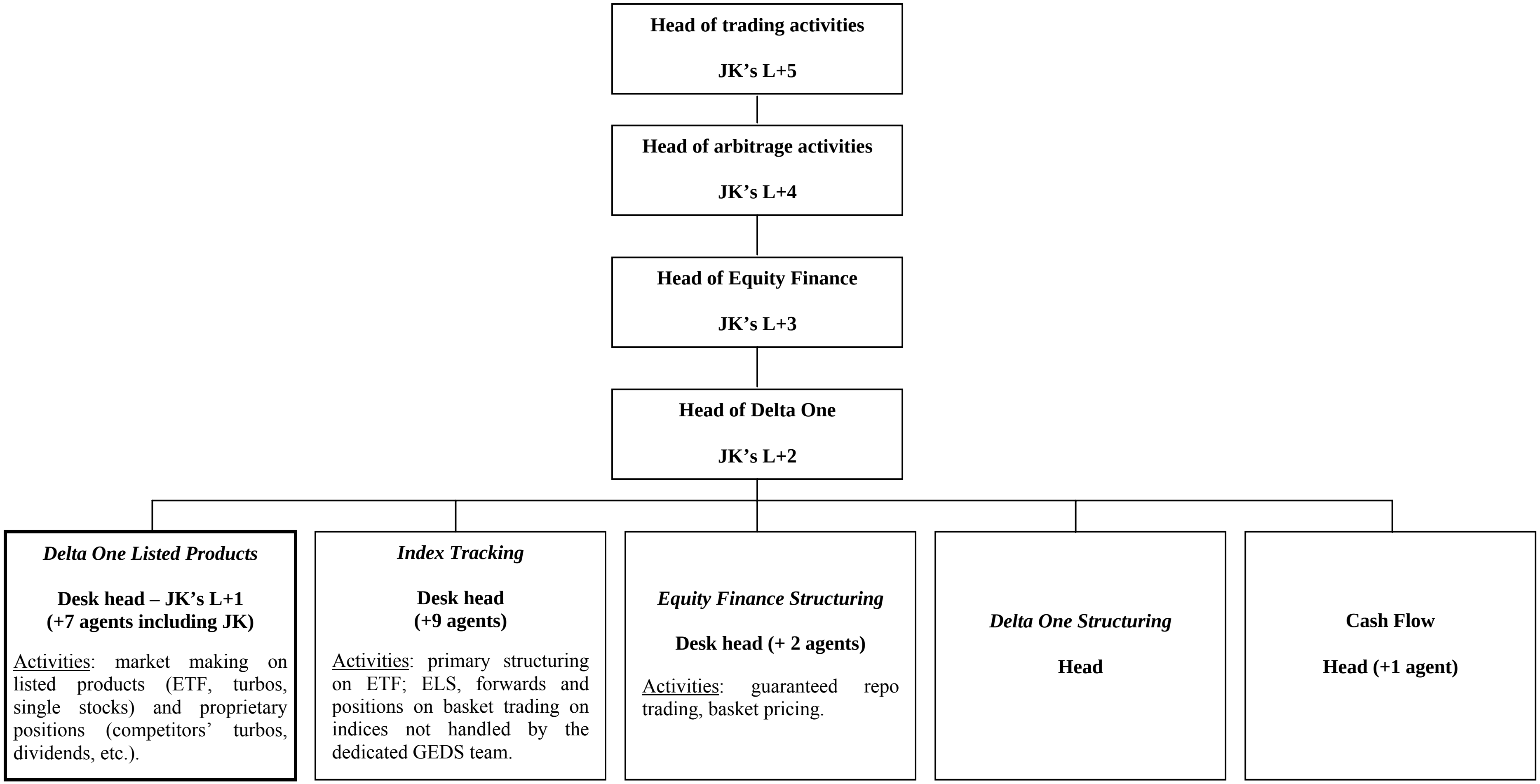
  - Underlying assets used: shares (single stock), baskets of shares (more unusual), ETFs (sector and/or geographical exposure), indices, *bund* (German state bonds), currency.
  - Maturity: no maturity date ("open end turbo"), maturity fixed at the date of issuance of the warrant ("closed end turbo"), 1 day maturity (offered by CLICKOPTIONS).
  - Price: (i) Closed End Turbo: Price = spot – strike + financing margin ((interest + SG margin) x Nominal) – a percentage of the dividend; (ii) Open End Turbo: Price = spot – strike (but the strike level is adjusted in accordance with the financing margin over the lifetime for the product and every 15 days, the barrier is also readjusted by approximately 5% in order to preserve a relatively constant safety zone); (iii) Day Turbo: Price = spot – strike + premium (the premium or gap of 8/10 bps [basis points] compensates for the absence of any safety zone between the barrier and the strike). In actuality, the Strike is equal to the barrier for these Turbos.
  - Exchange rate taken into account and acknowledgment period in the event of knock-out: in the event of knock-out, SG resells the hedge and gives the client the difference between the strike and the corresponding level.

- **Arbitrage on competitors' turbo warrants**

  In the context of the market's growing volatility, the DLP desk in fact identified competitors' turbo products, whose price was no longer adapted to market conditions. Arbitration consists of the purchase on D of competitors' call turbos and their hedging by the sale of futures contracts. If the market opens at D+1 by showing a fall which deactivates the product, SG registers a profit (the trader can in fact re-purchase his hedge with a profit).

<u>Focus no. 2</u>: Presentation of SG's organizational structure.

<u>The chain of management over JK within GEDS/DAI.</u>



<u>Note</u>: the chart shown above shows the structure in place until December 18, 2007. After that date, the head of trading activities became head of GEDS and was replaced by the former head of arbitrage activities, who for his part retained his previous office.

Organization of GEDS.

- **Description of GEDS.**

As of the end of December 2007, GEDS had 1,365 employees in 4 main areas:

- flow and structured product sales (388 employees);
- engineering (232 employees);
- arbitrage or volatility trading (385 employees), involving both proprietary trading and client related trading (market making and management of positions generated by client flow);
- cash equity sales and research (360 employees).

Up until December 18, 2007, GEDS was organized around 2 co-heads, a trading manager (who was one of the two co-heads), two sales managers (one for flow products and another for structured products), one engineering manager and one cash equities manager. From December 18, 2007 until January 24, 2008, the trading manager co-head was solely in charge of GEDS.

In terms of business activities:

- those dedicated to commercial activities represent around 2/3 of net banking income (1), organized around three divisions (structured products, listed flow products and cash equities);
- those dedicated to proprietary trading representing around 1/3 of net banking income, organized around volatility trading (also responsible for generating price options for clients), on the one hand, and around arbitrage activities, on the other hand.

- **Overview of the GEDS organization**

- Structured Products: the teams of traders, financial engineers and salespersons develop and offer a complete range of structured products based on varying underlying assets (equities, indices, mutual funds, alternative management…). Clients are mainly retailers and institutional investors.
- Flow and Listed products: warrants, certificates, reverse convertibles and trackers for private and professional clients, dedicated sales and trading activities (notably market making). Large market share (15.8% of the global warrants market, 25.2% of the European ETF market).
- Secondary equities activities (Cash and Research): financial analysis and performance of equities transactions (brokerage, matching of client interests).
- Proprietary trading activities are broken down into two sub-divisions:
    - Volatility trading: flow trading (inter-bank counterparty and provision of liquidity on the OTC and listed options markets), quantitative trading (position taking on quantitative analysis criteria), “special” trading (corporate/semi-exotic) (pricing of derivatives for corporate clients, plus flow management on structured products of intermediate complexity), arbitrage trading of credit/equities (arbitrage between the value of one company’s debt and that of its listed assets on the basis of volatility analysis).
    - Arbitrage: index arbitrage (sale/purchase of a basket of equities on one index, perfectly replicating the sale/purchase of a futures contract on the same index), borrowing/lending equities (finding equities to hedge optional positions but also to supply certain clients with equities via lending/borrowing), arbitrage of relative values (risk arbitrage, fund arbitrage, hedge funds…).

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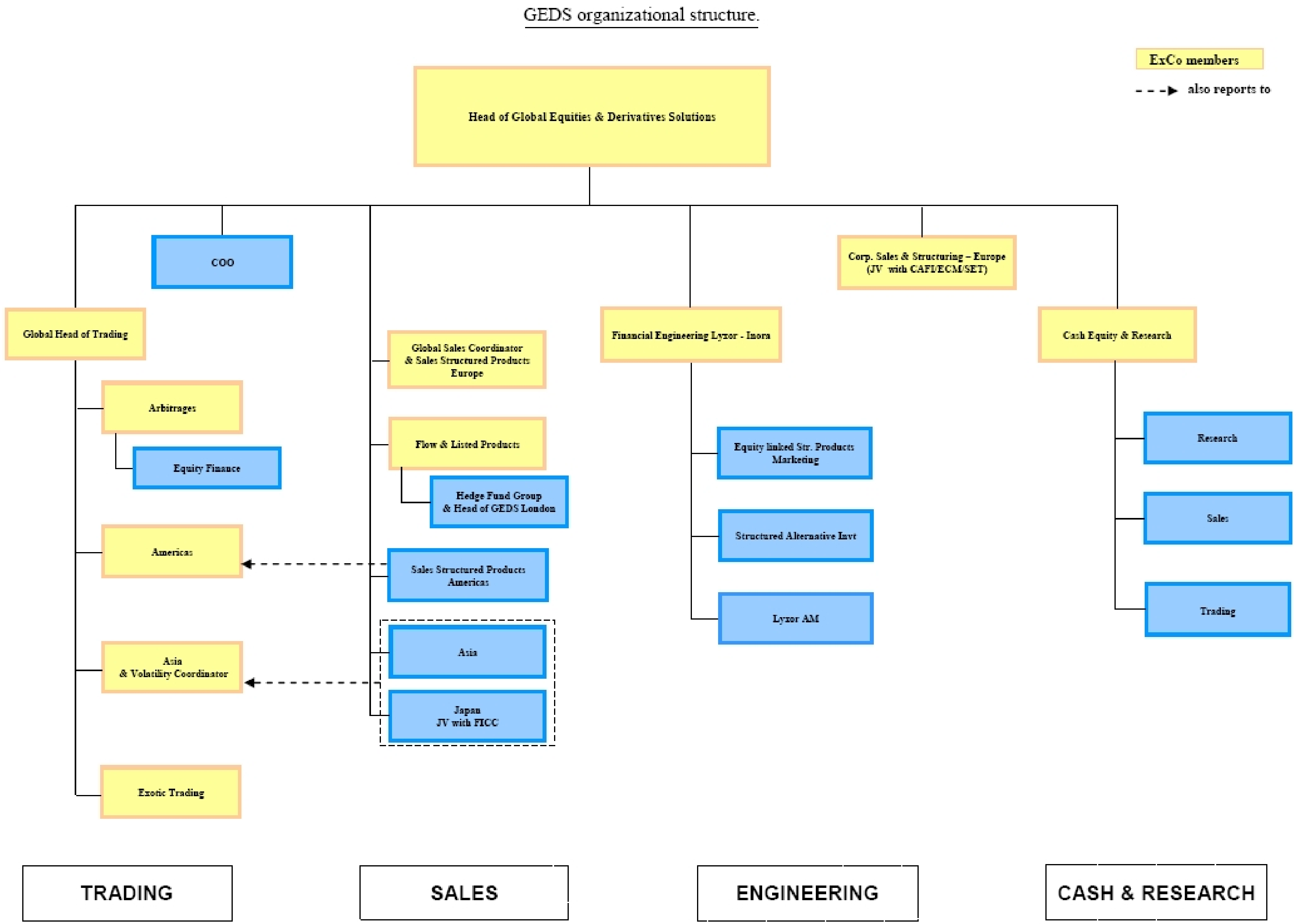
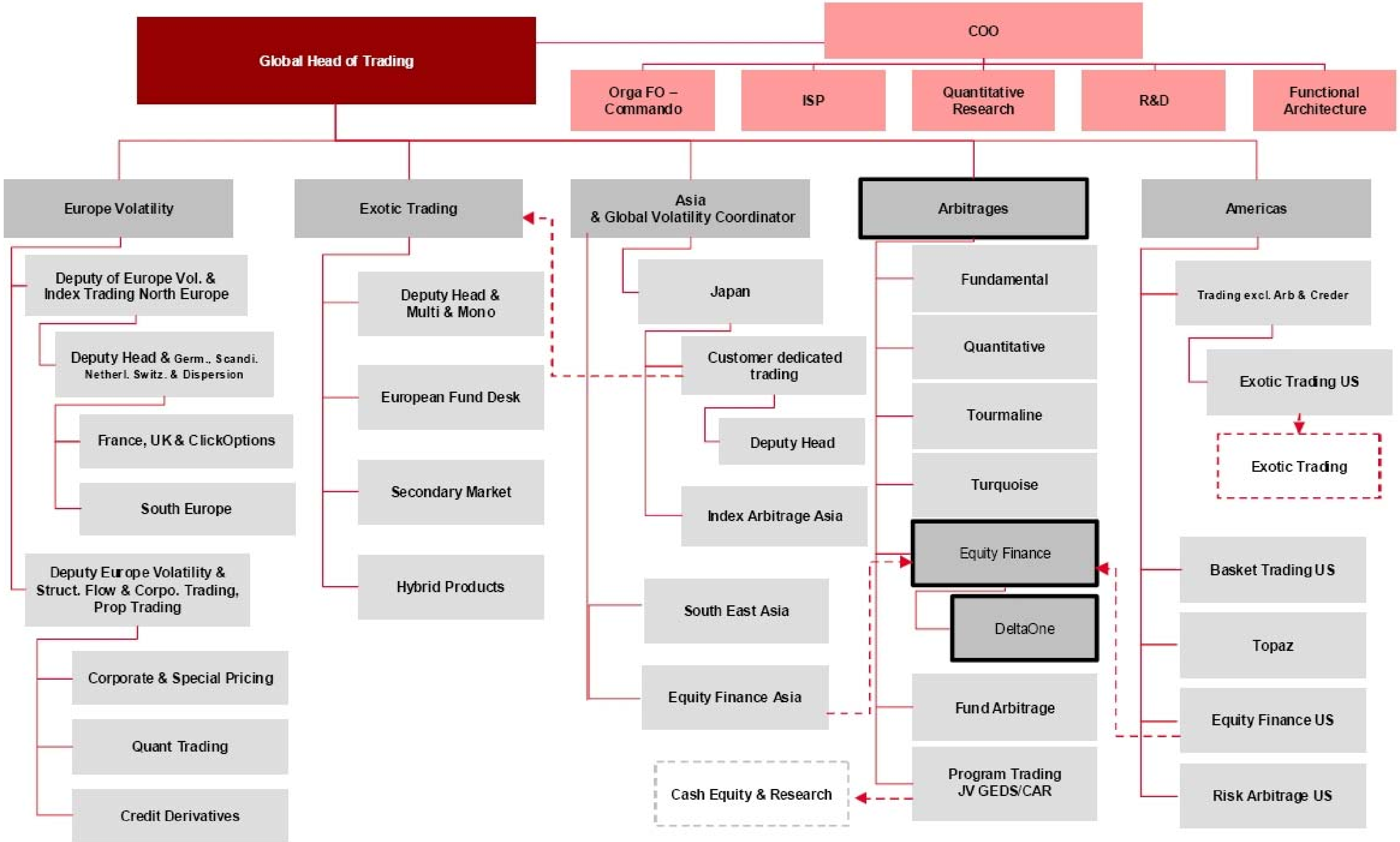
[1] Net Banking Income or *Produit Net Bancaire*, banking equivalent of turnover.

■ Organizational chart



GEDS/DAI/TRD organizational structure.



<u>Other parties involved in trading activities</u>.

Source: Group directives (1)

- **Operations division (SGIB/OPER)**

Within SGIB, the assignments of OPER worldwide are:

- to implement all measures necessary in order to ensure the administrative and financial handling of market transactions and credit initiated by product line;
- to carry out controls on a first level in accordance with regulatory requirements and to implement all measures necessary for the security of transaction handling;
- to participate in the drawing up of the financial and accounting results of transactions;
- to manage operation risks and to implement the continuity plan for SGIB's business activity.

- **SG CIB financial and accounting division (SGIB/ACFI)**

Within SGIB, the assignments of the Financial and Accounting Division worldwide are:

- to ensure, on behalf of the Division Management and under the functional authority of the Group's Financial Division (DEVL), the financial management, the balance sheet management, the management controls and the management of accounting of SGIB. To this end, ACFI is responsible for the accounting and financial reporting of the entities supervised by the Division;
- to make sure that financial and accounting standards (Group and local) are applied, as well as to define the methods for the application of such standards;
- to guarantee the quality of data and compliance with accounting, risk avoidance, fiscal and management rules (Group and local) as well as compliance with regulatory provisions (local level and Group level) for the Division as a whole; to ensure the financial supervision of all entities attached to the Division;
- to produce and to provide accounting, financial, regulatory and fiscal statements and the risk ratios for SGIB entities to SGIB Divisions, to DEVL, and to the local regulators;
- to produce management accounting data for SGIB and its entities as well as indicators of business activity for the Division;
- to provide all elements necessary for the Group's financial disclosures in relation to the Division;
- to disseminate within the Group, to SGIB/DIR and to SGIB Divisions, all statistical information and all analyses requested by them in the context of their management and concerning ACFI (accounting, management accounts, financial management, balance sheet management, taxation);
- to contribute to the definition and monitoring of SGIB's strategy;
- to advise on and accompany the development of business activities, notably through participation in new product committees and in investment dossiers;
- to manage relationships with statutory auditors and with local supervisory authorities for the relevant ACFI aspects.

- **Risk Management Division**

The principal assignment of the Risk Management Division (RISQ) is to contribute to the development of business activities and to the profitability of the SG Group (the Group) via the implementation of a risk management plan. In carrying out its functions, RISQ reconciles independence with respect to operational divisions with close collaboration with the Divisions which are responsible, in the first resort, for the operations undertaken by them.

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[1] The directives (i) define the principal assignments and the organization of each entity within the Group as well as their relationships with other Group entities, as applicable, (ii) describe the rules of action and behavior applying either to the whole Group (*e.g.,* directive on the group audit charter), or to several Divisions. The entities concerned are the Divisions, Management, Project-Groups, group subsidiaries. The directives are signed by the President.

In this context, RISQ:

- carries out an overview of all of the risks of the Group;
- contributes to the definition of any commercial strategies with a significant level of risk;
- defines or validates the methods and procedures for the analysis, measuring, approbation and monitoring of risks;
- is responsible for ensuring the adequacy of the risk information systems;
- contributes to the assessment of risks by taking a position on the transactions proposed by the commercial managers;
- is in charge of piloting risk portfolios and of monitoring transversal risks, as well as of the forward-looking management of the Group's risk-related costs;
- ensures the hierarchical or functional supervision of the Group's Risk Subsidiaries.

Banks and Market Counterparties (RISQ/CMC)

RISQ/CMC is responsible for the global management of risks within the following areas:

- credit risks involving financial institutions;
- counterparty risks on market products and activities for all counterparties as a whole;
- risks linked to banking service activities (SBAN).

RISQ/CMC:

- organizes the integration of processes for approving and monitoring risks involving financial institutions for the Group as a whole (including the preparation of files in relation to banks), in order to optimize the efficiency of the control procedures in this area;
- contributes to the analysis and supervision of the risk portfolio for banks and financial institutions, in accordance with various criteria: ratings, RAROC, EVA, etc…;
- validates credit risks (client ratings, trades, individual credit files and global limits) and country risks for the less complex cases, once the relevant commercial managers have given their opinions;
- develops calculation models for homogeneous exposure in "equivalent lending" over market products and activities, by taking into account the impact of compensation and collateralization, in collaboration with the relevant product lines;
- ensures the global management of risks (all counterparties together) generated by the activities of the banking services (SBAN), as well as the operational management of SGIB's counterparty risks and of PAEN on market products and activities, booked by the Group's principal trading floors;
- carries out monitoring and reporting tasks for major risks, for counterparties under supervision, and for provisions;
- operates and/or organizes information systems relating to the calculation and monitoring of risks involving financial institutions and market counterparties.

Market Risks (RISQ/RDM)

RISQ/RDM:

- is responsible for the global management of the Group's market risks;
- ensures the permanent and independent monitoring by Front Offices of all positions and risks generated by all of the Group's market activities, by comparing them to the limits in place;
- responds to requests for limits for all of SG's operational centers in the context of the global authorizations granted by General Management;

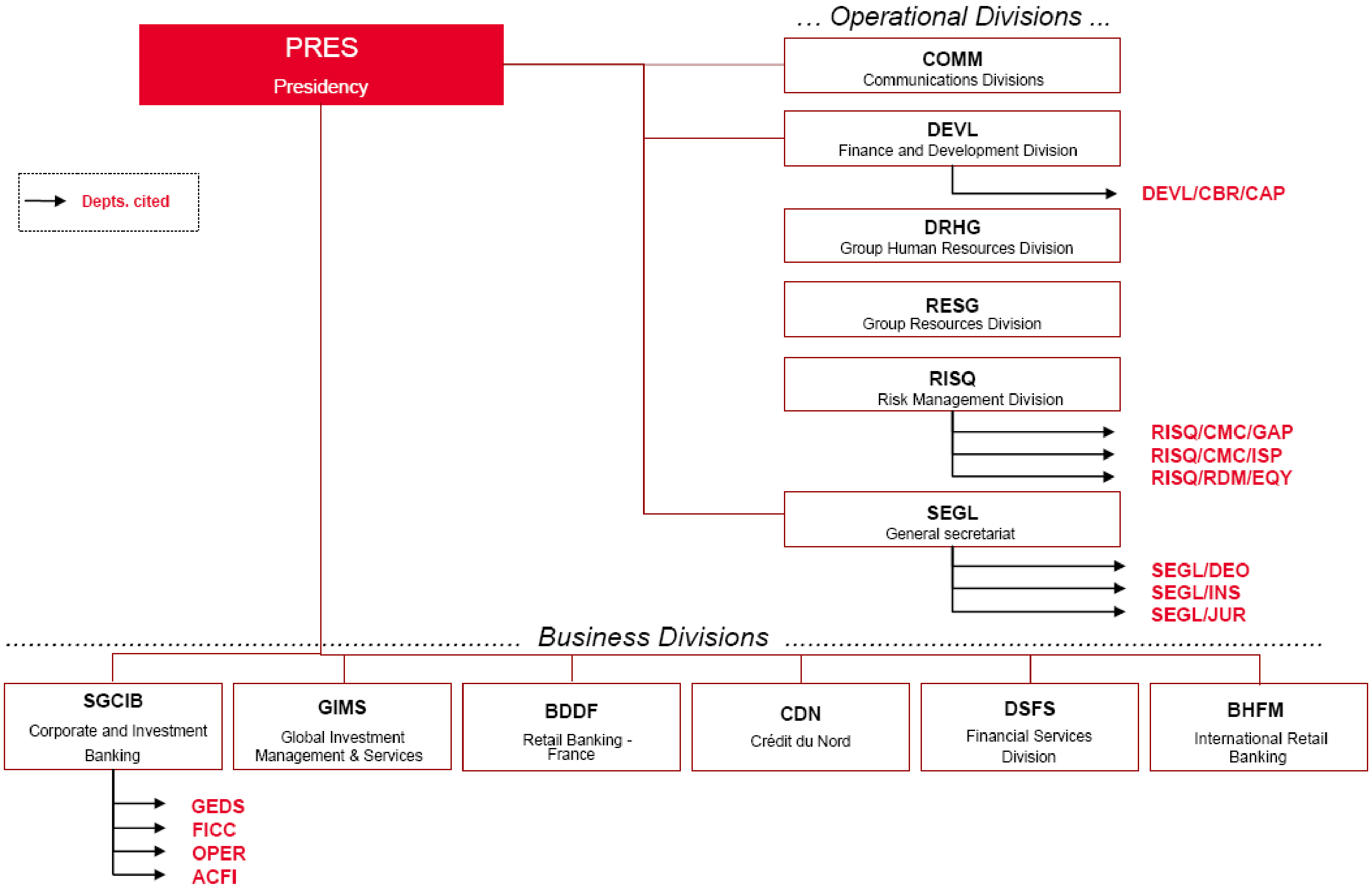
- defines the methodology for taking measurements (Var, sensitivity, stress test, etc.), validates the assessment methods, develops procedures for the monitoring of such risks and determines the corresponding reserves;
- ensures the development of the databases and systems used to measure market risk;
- produces the regulatory consolidated reporting on equity capital requirements linked to market and counterparty risk, ensuring the reliability of such reporting on a permanent on-going basis.

- **Professional ethics (SEGL/DEO)**

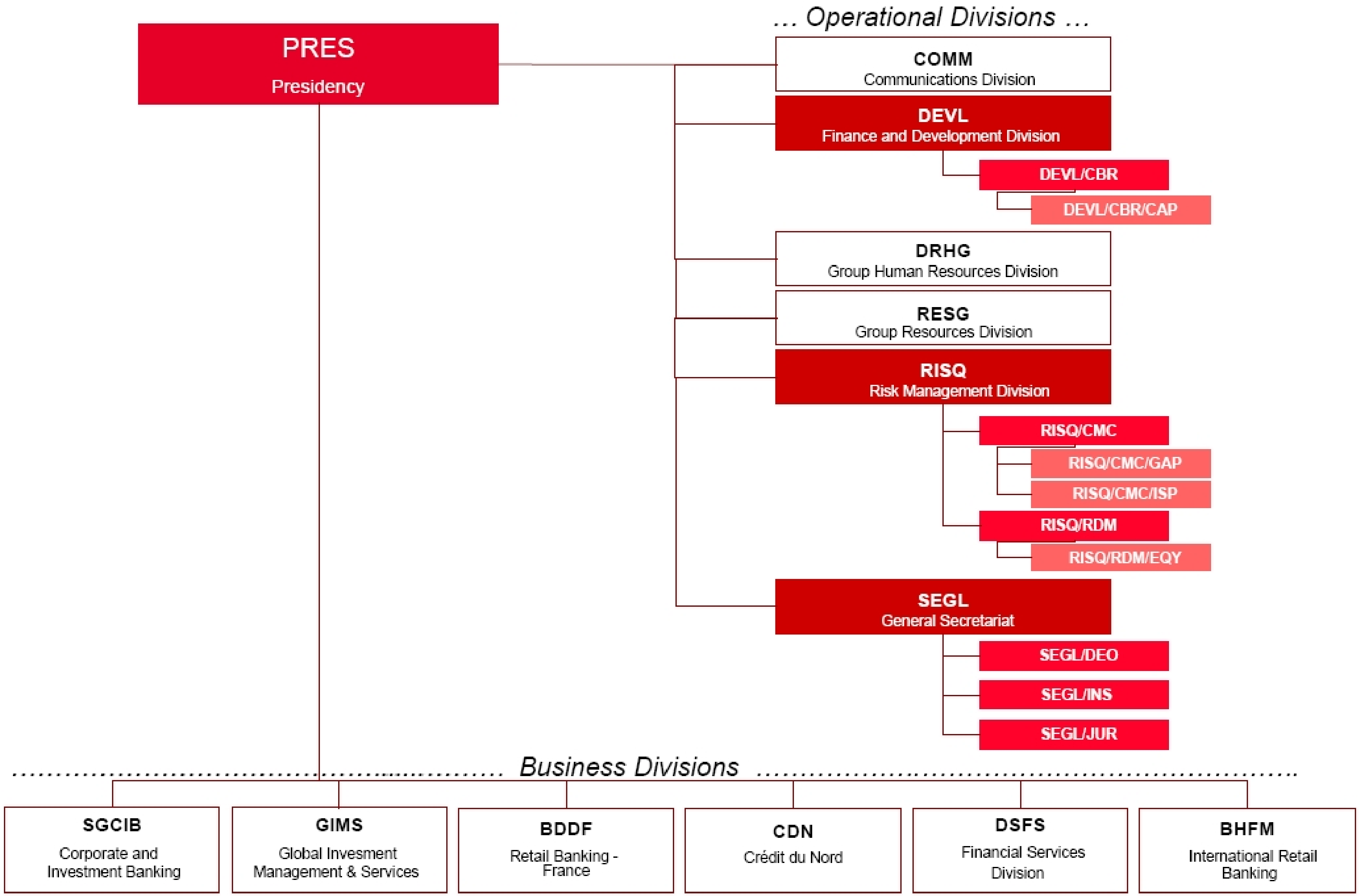
In the context of the organization of compliance, SEGL/DEO's assignment consists of ensuring that the various entities within the Group operate in accordance with the laws and regulations applicable to the banking and financial activities carried out by them, and in accordance with the Group's standards and principles concerning professional conduct, in order to protect the Group's business activities, the employees carrying out such activities, and the image of Société Générale.

Positioning at the time of the fraud of the various parties cited in this report

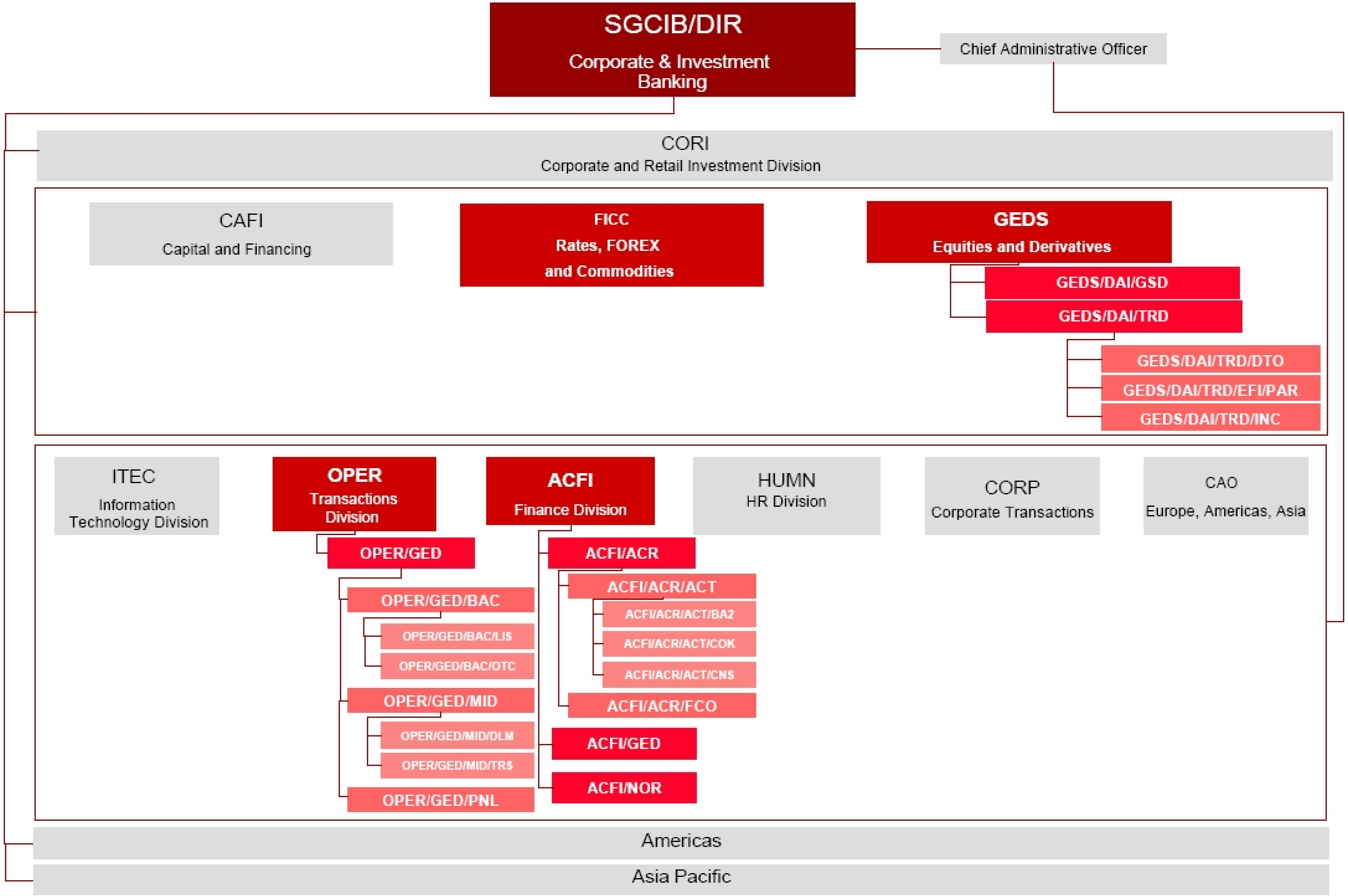
■ **General localization of the divisions cited in the report within the SG Group's organizational structure**



■ **Specific localization of the divisions cited in the report within the SG Group's organizational structure excluding SGCIB**



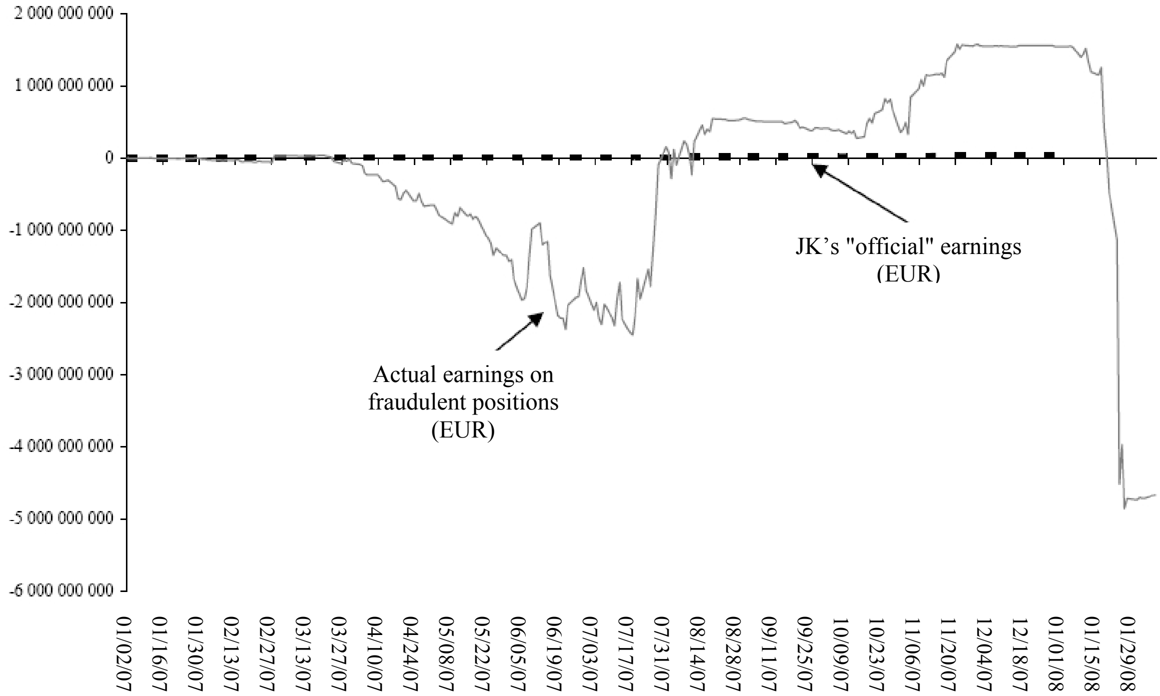
■ **Localization of the divisions cited in the report within SGCIB's organizational structure**



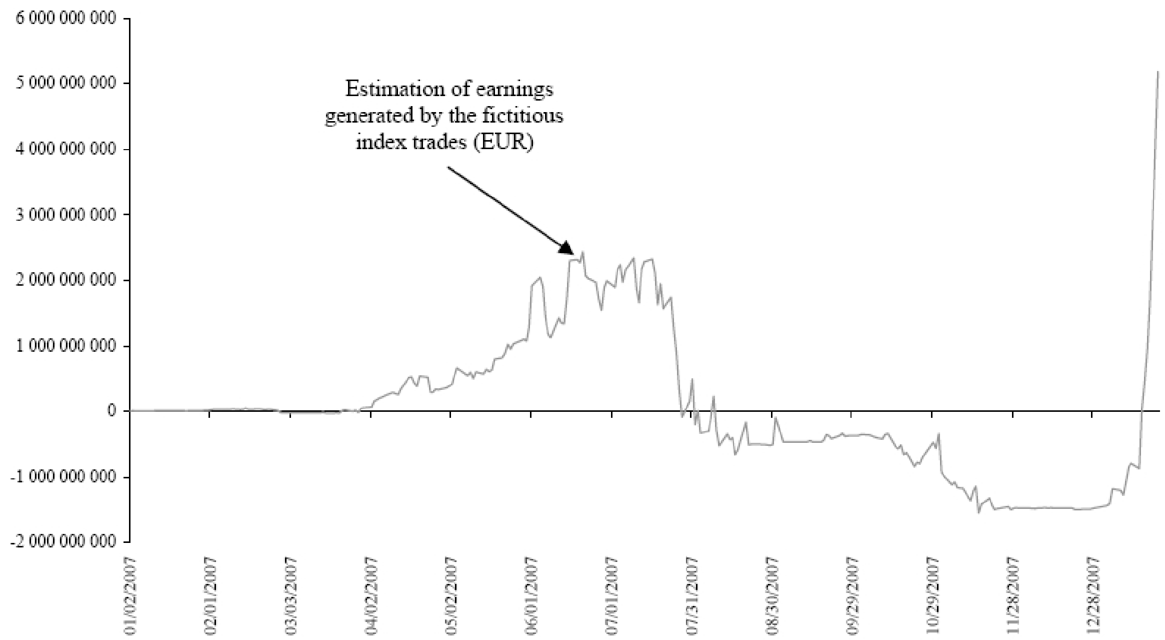
▪ Definition of the acronyms used in the Inspection's report

Acronym	Division or Sub-division	Role of the relevant Division or Sub-Division
SEGL/INS	SEGL/INS	SG Group General Secretariat/General Inspection Department
SGCIB	SGCIB	SG Group Corporate and Investment Banking Division
OPER	OPER	SGCIB Operations Division
ACFI	ACFI	SGCIB Accounting and Finance Division
RISQ	RISQ	SG Group Risk Management Division
GEDS/GSD	GEDS/DAI	GEDS Sub-Division, in charge of trading, sales and financial engineering
GEDS/DAI/TRD	GEDS/DAI	GEDS Sub-Division, in charge of trading, sales and financial engineering
SEGL/DEO	SEGL/DEO	SG Group General Secretariat/Professional Ethics Division
GEDS	GEDS	Equity Derivatives Division, Corporate and Investment Banking
FICC	FICC	Rates, FOREX and Commodities, Corporate and Investment Banking
RISQ/CMC	RISQ/CMC	SG Group Risk Management Division/Bank and Market Counterparty Risk
OPER/GED/PNL/REC	OPER/GED	SGCIB Transactions Division, dedicated to GEDS
OPER/GED/MID/DLM	OPER/GED	SGCIB Transactions Division, dedicated to GEDS
RISQ/CMC/GAP	RISQ/CMC	SG Group Risk Management/Bank and Market Counterparty Risk
GEDS/DAI/GSD	GEDS/DAI	GEDS Sub-Division, in charge of trading, sales and financial engineering
RISQ/CMC/ISP	RISQ/CMC	SG Group Risk Management/Bank and Market Counterparty Risk
ACFI/ACR/ACT	ACFI/ACR	SGCIB Finance Division, Accounting and Regulatory Reporting Sub-Division
ACFI/ACR/FCO	ACFI/ACR	SGCIB Finance Division, Accounting and Regulatory Reporting Sub-Division
ACFI/ACR/ACT/BA2	ACFI/ACR	SGCIB Finance Division, Accounting and Regulatory Reporting Sub-Division
DEVL/CBR/CAP	DEVL/CBR	SG Group Finance Division, Sub-Division in charge of (i) piloting of structural risks re rates, liquidity and FOREX, (ii) Group's long-term refinancing, and (iii) piloting the Group's capital requirements and equity capital structure
FCO	ACFI/ACR	SGCIB Finance Division, Accounting and Regulatory Reporting Sub-Division
ACFI/NOR	ACFI/NOR	SGCIB Finance Division, Sub-Division for Management of Accounting standards
ACFI/ACR/ACT/COK	ACFI/ACR	SGCIB Finance Division, Accounting and Regulatory Reporting Sub-Division
SEGL/JUR	SEGL/JUR	SG Group General Secretariat/Legal Department
GEDS/DAI/TRD/INC	GEDS/DAI	GEDS Sub-Division, in charge of trading, sales and financial engineering
ACFI/GED	ACFI/GED	SGCIB Finance Division, dedicated to GEDS
GEDS/DAI/TRD/EFI/FRA	GEDS/DAI	GEDS Sub-Division, in charge of trading, sales and financial engineering
GEDS/DAI/TRD/DTO	GEDS/DAI	GEDS Sub-Division, in charge of trading, sales and financial engineering
OPER/GED/PNL	OPER/GED	SGCIB Transactions Division, dedicated to GEDS
OPER/GED/BAC/LIS	OPER/GED	SGCIB Transactions Division, dedicated to GEDS
OPER/GED/BAC/OTC	OPER/GED	SGCIB Transactions Division, dedicated to GEDS
OPER/GED/MID/TRS	OPER/GED	SGCIB Transactions Division, dedicated to GEDS
ACFI/ACR/ACT/CNS	ACFI/ACR	SGCIB Finance Division, Accounting and Regulatory Reporting Sub-Division
SGPM	SGPM	Legal entity: Société Générale ("*Personne Morale*")
RISQ/RDM/EQY	RISQ/RDM	SG Group Risk Management/Market Risks
RISQ/RDM	RISQ/RDM	SG Group Risk Management/Market Risks

<u>Focus n°3</u> : The trader manages to hide his actual earnings, showing "official" earnings which are very low in comparison.



The estimated earnings profile generated by the fictitious index trades compensates that of the fraudulent earnings:



NB 1: The chart of the actual earnings of the fraudulent positions shows only the P&L generated by positions on traded futures and options, which certainly form a large majority of such positions. The estimation of fictitious P&L, for its part, takes into account positions on indices handled via futures or OTC products (forwards and options). All equity positions (real or fictitious fraudulent positions) are therefore excluded.

NB 2: These two charts are aimed at illustrating JK's aptitude for making the profile of his fictitious trades coincide with that of his fraudulent positions. They are not the result of certified accountants' investigations comparable to work that could, for example, be carried out by the Statutory Auditors. On the one hand, if our investigations have allowed the discovery of almost all of the fictitious transactions, we are unable to affirm that the list drawn up is totally exhaustive (see Focus no. 4). On the other hand, the assessment of the fictitious positions identified in order to estimate the earnings generated has necessitated the adoption of various hypotheses (discounting of futures flows ignored in the variation of the prices of underlying assets, conversion of options into equivalent underlying assets with a delta of one).

<u>Focus no. 4</u>: Methods of concealment used by JK.

- **Techniques used by JK in order to conceal his fraudulent directional positions.**

1) 1st type of technique: recording fictitious trades canceling positions and latent earnings generated by fraudulent positions.

JK entered one or several false transactions into the systems so that they would be taken into account in risk and valuation calculations. JK defined the parameters of these transactions such that they covered the fraudulent positions actually taken elsewhere.

We have counted 947 transactions of this type: see Table no. 1 below.

2) 2nd type of technique: recording pairs of fictitious transactions matching each other in the inverse.

JK entered pairs of fictitious reverse transactions (purchase/sale) concerning equal quantities of the same underlying asset for different "off-market" prices in order to conceal the realized earnings without creating a directional position (the balance being zero).

> *For example: on March 1, 2007, purchase of 2,266,500 SOLARWORLD shares at EUR 63 and sale of 2,266,500 of the same shares at EUR 53, which leads to fictitious negative earnings of EUR -22.7 million without creating a position.*

We have counted 115 transactions of this type: see Table no. 2 below.

3) 3rd type of technique: recording provision flow ("*flux pro*").

JK used the option, in principal reserved for trading assistants (but without any technological protection preventing access by traders) to correct modeling bias, to enter positive or negative provisions modifying the value calculated by the Front Office system. JK entered such flows to conceal the amount of earnings generated by his fraudulent positions.

We have counted 9 fraudulent provision flows: see Table no. 3 below.

- **Techniques used by JK to disguise the fictitious or unwarranted nature of his orders.**

Regarding the first two techniques (fictitious trades or pairs of fictitious trades), JK cancelled fictitious trades before they gave rise to any confirmation, settlement or control. In order to do so, he used features that left him the time to cancel these trades and to replace them with new false trades:

– <u>trades with so-called "technical" counterparties</u>: the term "technical counterparty" applies to generic titles ("pending", "*echu po*", "pre hedge", etc.) entered in ELIOT (the Front Office computer application) in cases where (i) the counterparty for the trade is waiting to be classified (not yet recorded in the client reference database) or (ii) all the parameters have not yet been determined. JK used these titles in order to record his fictitious trades which neutralized the risks resulting from his fraudulent positions. These trades appear in effect in the Front Office system where the data on risk originates (they are taken into account in the calculation of the balance of the position) but they are not discharged in the Back Office applications or, moreover, in accounting. JK cancelled them at the latest by the time he was questioned by the Middle Office in charge of resolving discrepancies between the Front and Back Office systems;

These counterparties have a completely permitted role when used under normal circumstances: the "echu po" *counterparty is used by the OPER teams to represent in ELIOT the maturity dates of shares or warrants and products' restructurations; similarly, the "pre hedge" counterparty is used by teams of exotic traders, structuring teams and volatility traders in the marketing phases; the "pending" counterparty is used in cases where the counterparty's information (client or broker) has not yet been created in the client database (BDR) or in ELIOT.*

- internal trades, meaning trades between two SG Group entities (in this case, JK exclusively used CLICKOPTIONS, a wholly-owned subsidiary), which are not subject to confirmation; SG and CLICKOPTIONS positions are only reconciled monthly in the context of accounting reconciliation of reciprocal transactions; JK created trades with CLICKOPTIONS but cancelled them before or at the time of such controls;

- trades with a deferred start date (*i.e.* with a value date much later than the date of the transaction), which are only confirmed several days before the value date, in accordance with generally-accepted market practice, again leaving JK with more time before canceling them.

Regarding the 3rd technique ("flux pro"), JK knew that they were only monitored at the end of the month and cancelled them before the control took place.

Generally speaking, JK managed to vary his techniques sufficiently in order to reduce the number of cases where he would deal with the same control agents in case of a problem.

<u>Table no. 1</u>: Fictitious transactions canceling market risk and latent earnings.

<table>
<tr><th>Principle</th><th>Control bypassed</th><th>Financial instruments used</th><th>Counterparties used</th><th>Number of Transactions</th></tr>
<tr><td rowspan="11">Transactions combining two characteristics:
- a significant offset (i.e. the difference between the transaction date and the 30-day order value date) and a cancellation before the value date;
- the use of internal counterparties within the SG Group (“CLICKOPTIONS” and “CLICKCLT”) of or small scale external counterparties (“BAADER-PUC”) with cancellation before the value date in all cases.</td><td rowspan="11">- No settlement or delivery due to the cancellation of the transactions.
- No confirmation until 5 days before the value date for transactions with a deferred value date.
- No confirmation for internal transactions as these are reviewed in the context of intra-group transactions.
- No margin calls with small counterparties that do not have any collateralization agreements (only limits or “independent amount”).</td><td rowspan="4">FORWARD (off exchange) on indices (DAX, ST50E, CAC, FTSE)</td><td>CLICKOPTIONS</td><td>55</td></tr>
<tr><td>CLICKCLT</td><td>1</td></tr>
<tr><td>PENDING</td><td>3</td></tr>
<tr><td>DEUTSCHE BANK</td><td>2</td></tr>
<tr><td>OTC options (off exchange) on DAX underlying assets</td><td>CLICKOPTIONS</td><td>18</td></tr>
<tr><td rowspan="4">Shares traded OTC</td><td>CLICKOPTIONS</td><td>126</td></tr>
<tr><td>CLICKCLT</td><td>2</td></tr>
<tr><td>ECHUPO</td><td>54</td></tr>
<tr><td>PENDING</td><td>66</td></tr>
<tr><td rowspan="2">FUTURES on indices: DAX, ST50E, CAC, FTSE</td><td>PENDING</td><td>262</td></tr>
<tr><td>NULL</td><td>358</td></tr>
<tr><td></td><td></td><td></td><td></td><td>Total: 947</td></tr>
</table>

NB 1: Our work has permitted us to inventory the majority of the fictitious transactions of this type. We cannot however affirm that the established list is completely exhaustive. We have compiled this list (i) on the basis of trades cancelled by JK (fictitious trades had to disappear before confirmation or settlement) and (ii) taking into account trades that had characteristics (amounts, underlying assets and counterparty type) assuring an almost certain presumption that these operations were fictitious.

NB 2: "NULL" is a title that is automatically recorded by the application if the counterparty field is not filled out. It is possible therefore that a small part of the trades cited here show actual booking errors (justifying their cancellation). But the abnormally high number (358) of these operations indicates that a large majority of them are certainly fictitious.

<u>Table no. 2</u>: Pairs of fictitious opposite trades, used to conceal fixed earnings.

<table>
<tr><th>Principle</th><th>Control bypassed</th><th>Financial instruments used</th><th>Counterparties used</th><th>Number of Transactions</th></tr>
<tr><td rowspan="6">Buy and sell transactions for the same quantity of shares or derivatives, at different prices, meant to conceal fixed earnings, combining two characteristics:

- a significant offset (i.e. difference between the transaction date and the 30 day value date) and cancellation before the value date;

- use of internal SG group counterparties ("CLICKOPTIONS" or "CLICKCLT") or of small-scale counterparties ("BAADER-PUC") with cancellation before the value date in all cases.</td><td rowspan="6">- No settlement or delivery due to the cancellation of the transactions.
- No confirmation until 5 days before the value date for transactions with a deferred value date.
- No confirmation for internal transactions as these are reviewed in the context of intra-group transactions.
- No margin calls with small counterparties that do not have any collateralization agreements (only limits or "independent amount").</td><td rowspan="4">Shares traded OTC</td><td>ECHUPO</td><td>20</td></tr>
<tr><td>PENDING</td><td>10</td></tr>
<tr><td>CLICKOPTIONS</td><td>69</td></tr>
<tr><td>CLICKCLT</td><td>2</td></tr>
<tr><td>FUTURES</td><td>PENDING</td><td>2</td></tr>
<tr><td>FORWARD</td><td>CLICKOPTIONS
then
BAADER-PUC</td><td>8</td></tr>
<tr><td>Transactions completed with an external counterparty at an off-market price.</td><td>- No control over prices for transactions carried out with external counterparties.</td><td>FORWARD RATE</td><td>PRE-HEDGE</td><td>4</td></tr>
<tr><td></td><td></td><td></td><td></td><td>Total: 115</td></tr>
</table>

<u>Table no. 3</u>: Provision flows recorded to conceal latent or fixed earnings.

Provision flow reference	Date of entry	Date of cancellation	Average amount during the period	Currency	Operational center
22904171	July 23, 2007	July 25, 2007	-63,237,500 *	EUR	2A
23290759	July 27, 2007	July 30, 2007	-221,680,000 *	EUR	2A
23381100	July 31, 2007	August 1, 2007	-74,500,000 *	EUR	2A
23618610	August 13, 2007	August 31, 2007	-72,392,140	EUR	2A
23757431	August 21, 2007	August 31, 2007	-343,500,000	EUR	2A
25244722	November 7, 2007	November 8, 2007	-345,400,000 *	EUR	2A
25263903	November 8, 2007	November 9, 2007	-527,900,000 *	EUR	2A
25419034	November 15, 2007	November 16, 2007	-284,000,000 *	EUR	2A
26629234	January 10, 2008	January 18, 2007	-1,485,700,000	EUR	2A

**: We have not been able to reconcile exactly the provision flow amount with the fraudulent earnings generated that day. But with regard to the amount concerned, it is highly likely that it represents a provision with a fraudulent aim. In fact, (i) the provision flow is usually in the region of tens or even hundreds of thousands of euros (rarely more than one million) and (ii) the official earnings of JK being EUR 50 million, any higher flow would automatically appear very suspicious.*

<u>Focus no. 5</u>: JK used forged emails on seven occasions.

The emails listed below have been identified:

- *verifying that they concerned fictitious trades or that they referred to conditions different than those indicated in other emails about the same trade;*
- *verifying through the ZANTAZ application (email archiving) that JK did not receive any message from the sender indicated on such dates;*
- *identifying possible anomalies in the emails (modified signature as compared with other emails from the same sender).*

Sender	Bank	Date of forged email	Subject of forged email	Forwarded to	Date of forwarded email	Message found via ZANTAZ?	Identification of anomalies in the message?	Message related to a trade now identified as fictitious?
External 1	Counterparty 1	04/12/07	Prix Turbo&Short Certificates Tomorrow before 13h	Agent 29	05/11/07	No	No	Yes
External 2	Counterparty 2	04/30/07	Problems on Settlement on knocked products March and April Italian market	Agent 29	05/16/07	No	No	-
External 3	Counterparty 3	06/15/07	Trade details DAX Future Roll Over	Agent 4	07/19/06	No	Yes	-
External 3	Counterparty 3	06/15/07	Trade details DAX Forward Roll Over	Agent 29	07/06/07	No	Yes	Yes
External 4	Counterparty 4	06/28/07	CDO Trade Details confirmation	Agent 29	07/12/07	No	Yes	-
External 5	Counterparty 5	01/17/08	Trade Details	Agent 23	01/18/08	No	No	Yes
External 3	Counterparty 3	01/18/08	Trade Details	Agent 23	01/18/08	No	Yes	Yes

Focus no. 6: Timetable of events.

1. Key dates in 2005, 2006 and 2007.

- In July 2005, JK built for the first time a significant directional position on ALLIANZ shares, of about ten million euros. This initially long position became a short position on July 21. It is around this date that the first fictitious transactions intended to disguise the positions and the earnings appear.
- In 2006, the size of his fraudulent directional positions on shares increases, reaching a total amount of about EUR 140 million in August 2006. JK begins to take concealed positions on DAX futures contracts.
- At the end of January 2007, JK builds up a very large short position on DAX futures. On January 24, his position's nominal value is around EUR 850 million. It reaches EUR 2.6 billion by the end of February and EUR 5.6 billion by the end of March.
- A first peak exceeding EUR 30 billion is reached on July 19, 2007 on DAX futures, before the position is cut and rebuilt from September onwards.
- At the same time, JK continues his fraudulent activity on shares by holding globally short positions. From mid-September to early November, the total size of his positions extends beyond EUR 100 million and reaches its maximum of over EUR 350 million.
- From November 7 to December 31, 2007, JK unwinds his positions on DAX and EUROSTOXX futures. By December 31, his fraudulent positions on indexes are zero.

2. Detailed timetable of the discovery of the fraud in 2008.

▪ **Monday, December 31, 2007: Presence of 8 forward trades with an internal counterparty.**

- Jérôme Kerviel possesses 8 forward transactions with an internal counterparty (ClickOptions).
- These trades do not appear in the daily reporting because of the internal counterparty (zero counterparty risk).

▪ **Wednesday, January 2, 2008: Launch of change of the internal counterparty for Counterparty 5.**

- Transmission failure of Thetys files (GEDS Back Office) to RISQ/CMC, the daily reporting does not include up-to-date data.
- At 17:43, Jérôme Kerviel sends the ITS numbers of the 8 transactions to agent 1 (OPER/GED/PNL/REC) and asks her: "*we will put the broker in anticipation of the counterparty conf.*"

▪ **Thursday, January 3, 2008: Validation of counterparty change.**

- During the course of this day, the counterparty for the 8 forwards is modified (move from an internal counterparty to Counterparty 5). The transaction numbers and dates remain the same (*i.e.* before 12/31/2007).
- At 10:26, Jérôme Kerviel sends his Term Sheet to agent 2 (Middle Office control OPER/GED/MID/DLM).
- At 11:32, agent 2 sends an email pursuant to the telephone conversation in order to settle the problem of the inversion of direction between the justification and the Eliot entry.
- At 17:53, the Thetys files were indeed received by RISQ/CMC but the counterparty is still ClickOptions.

- **Friday, January 4, 2008: Technical problem at RISQ/CMC.**
  - Transmission failure for daily Thetys files to RISQ/CMC, the daily reporting does not include up-to-date data.
  - At 23:12, receipt by RISQ/CMC of files permitting the Basel II regulatory calculations.
- **Monday, January 7, 2008: First alert at RISQ/CMC dashboard level.**
  - Successful transmission of files generated by Thetys to RISQ/CMC for the daily dashboard. These files do indeed contain the 8 forwards with Counterparty 5 as counterparty.
  - RISQ/CMC calculates the daily dashboard position, a very high level of risk appears (CVar) on Counterparty 5. The size of the amount involved causes an error to be suspected.
- **Tuesday, January 8, 2008: Request for regularization of the situation by GEDS/DAI/GSD.**
  - The alert is transferred by RISQ/CMC/GAP (application managers) to GEDS/DAI/GSD (agent 3 and agent 4). This alert refers to an unquestionably high underlying asset without giving a value. This will not be verified. Agent 3 asks JK for explanations concerning his positions, a reply is obtained "*this materializes the give up of puts made late; I owe money to the counterparty. It will be rebooked asap*". In an interview, Agent 3 admits not having understood the explanation.
  - At 11:47, the Back Office file is sent to ACFI for calculation of the Cooke ratio.
- **Wednesday, January 9, 2008: Cancellation of transactions with Counterparty 5 and filing of a provision flow ("*flux de provision*").**
  - Agent 4 replaces agent 3 and asks Jérôme Kerviel to regularize the situation at 13:47, then at 19:25.
  - At 19:44, Jérôme Kerviel declares that he has cancelled the transactions and that they will no longer appear. Jérôme Kerviel cancels the 8 transactions and ask his trading assistant to post a "*flux pro*" the next morning in order to hide his profits.
- **Thursday, January 10, 2008: GEDS/DAI/GSD and RISQ/CMC acknowledge the end of the problem.**
  - The alert disappears from the RISQ/CMC daily dashboard. Agent 4 confirms to Jérôme Kerviel that the problem has indeed been resolved.
  - At 08:59, RISQ/CMC/ISP (agent 5) receives from GEDS/DAI/GSD (agent 4) confirmation that the problem has been resolved without any exact explanation ("The Counterparty 5 deals corrected yesterday evening").
  - From RISQ/CMC's side, the problem has been definitively closed at this date.
  - Extract from the complete [data] base is loaded in Off-Balance Sheet Cooke at ACFI.
  - At around 18:00, a first calculation is launched but fails.
- **From Friday, January 11 to Monday, January 14, 2008: Period during which the regulatory calculations are carried out.**

- **Tuesday, January 15, 2008: First regulatory calculations show a very high Cooke ratio for Counterparty 5.**
  - The ACFI/ACR/ACT cell (agent 6) responsible for the calculation of regulatory capital in the context of the Cooke ratio carried out an initial calculation on the basis of data received on January 8, 2008. This calculation shows results much higher than anticipated in terms of CWA [Cooke Weighted Assets] and RWA [Risk Weighted Assets]. The analysis of these figures shows the 8 transactions with Counterparty 5 as counterparty. A connection is made with the calculation carried out in 4C with Basel II. The values are even higher still (approximately double the amount, as Counterparty 5 has no IRBA rating).
  - At 15:01, agent 6 contacts agent 3 (GEDS/DAI/GSD) to ask her for explanations on Jérôme Kerviel's 8 forwards, drawing agent 3's attention to the size of the nominal amounts. Agent 3 replies that the transactions have been cancelled and transfers the emails exchanged with Jérôme Kerviel.
  - At 16:55, agent 6 contacts ACI/ACR/FCO (agent 7) to find out if the 8 forwards should be taken into account.
  - At 17:19, agent 7 asks OPER/GED/PNL/REC (agent 1) if the 8 transactions have indeed been cancelled in the accounts and in the Front Office as of December 31, 2007.

- At 17:47, agent 7 asks Jérôme Kerviel if the 8 transactions can be netted. Jérôme Kerviel replies affirmatively at 17:57, with copy to agent 6.
- At 20:17, agent 6 asks how the transactions have been remodeled. Jérôme Kerviel sends an email at 20:42 in which he states that this models an undue earnings payment, but he does not reply to the question as to how the deals have been remodeled. Not understanding the explanation, agent 6 speaks to agent 8, his manager.
- At 20:39, agent 8 (ACFI/ACR/ACT/BA2) contacts DEVL/CBR/CAP (email sent to agent 9 and agent 10) on the question of the 8 transactions with Counterparty 5.
- At 20:42, agent 11 asks agent 12 to verify the assertion of agent 8: "*the trader indicates that FCO had validated the modeling of these deals which poses problems for us re Cooke [ratio] (+EUR3bn on GEDS)*". In fact, contrary to Jérôme Kerviel's assertions, FCO never validated the montage (agent 12 found no trace, either verbal or written, nor has Jérôme Kerviel produced anything).

- **Wednesday, January 16, 2008: Exchanges between ACFI, OPER and DEVL and first questions to the trader.**
  - At 09:27, email sent to ACFI/NOR (agent 13) in order to discuss verbally as, in the context of subsidiarity, ACFI/NOR deals in the first instance with SGCIB risk management questions.
  - At 10:12, ACFI/ACR/ACT/Cooke-Basel 2 (agent 6) forwards to DEBL/CBR/CAP the various exchanges concerning the subject.
  - At 10:26, DEVL/CBR/CAP sends an email to ACFI/ACR/ACT/Cooke-Basel 2 (agent 8) in order to confirm to her that the subject will be dealt with.
  - In the meantime, DEVL/CBR/CAP has called ACFI/ACR/ACT/Cooke-Basel 2 (agent 6) who gave a brief description of the problem.
  - At 10:53, agent 11 (ACFI/ACR/FCO) transfers the emails on Jérôme Kerviel's forwards to agent 12.
  - At 11:37, ACFI/ACR/ACT/Cooke-Basel 2 (agent 8) responds considering that this is a modeling problem and that FCO would have given its agreement (whereas this is a forgery, see above).
  - At 11:41, transfer by DEVL/CBR/CAP of previous exchanges to ACFI/NOR (agent 13) in order to share the same level of information but without making any judgment as DEVL/CBR/CAP is still awaiting the conclusions of examinations at an accounting level.
  - At 12:16, agent 1 (OPER/GED/PNL/REC) transfers to agent 7 (ACI/ACR/FCO) the information in her possession concerning the 8 transactions.
  - At 13:04, agent 7 transfers the emails on the problem to agent 12, his manager at ACFI/ACR/FCO (agent 7 having a heavy workload at that time, he therefore transfers the matter to him).
  - At 13:06, agent 12 writes to OPER/GED/PNL/REC (agent 14 and agent 15) "*we nevertheless have hyper significant values on these deals. Please investigate (knowing that this is making the Cooke [ratio] explode…). We can discuss whenever you like*" (see email 13). At 13:15, agent 14 replies that everything is fine from their point of view and that they will revert to agent 6 as soon as possible (see email 14). Agent 12 received nothing further. He himself describes this email as "*an excess of zealousness*" in so far as OPER/GED/MID/DLM had already completed the task of verification.
  - At 14:14, agent 11 (ACFI/ACR/FCO) sends an email to Jérôme Kerviel to tell him that agent 12 will be calling him in order to understand the justification of the 8 forwards. He will not call him before the meeting held the next day. He considers in fact that this is not strictly speaking a problem concerning the FCO and gives priority to the verification of documentary evidence.
  - At 14:42, agent 12 asks agent 16 (OPER/GED/MID/DLM) to verify the documentation and the controls over the 8 transactions. Agent 16 transfers this request to agent 17 and to agent 18 (OPER/GED/MID/DLM) at 14:59.
  - At 15:38, agent 17 sends a reply to agent 16 who takes up the emails exchanged with Jérôme Kerviel, agent 1 and agent 2, with the (forged) term sheets from Counterparty 5. This indicates "*During the booking of these Forwards transactions, the MO Control received the confirmations, the booking being compliant, validation in Thetys took place*". The conclusion states "*After the Cooke ratio had been exceeded, these transactions were cancelled, a new modeling must be defined, but the FO is awaiting the modeling to be adopted from ACFI/NOR*". At 15:41, agent 16 transfers this information to agent 12.
  - At 17:10, agent 12, seeking to discover the position of ACFI/NOR (that Jérôme Kerviel is awaiting, according to OPER/GED/MID/DLM), contacts agent 19 (ACFI/NOR). Agent 19 is at home and replies via his Blackberry at 18:08.
  - At 18:45, further to email exchanges with agent 12 and agent 20 (ACFI/NOR under the responsibility of agent 19), the decision is made to refer to agent 13 (specialized in questions of risk management

standards, while agent 19 and his team are specialized in accounting standards).

- At 18:52, agent 13 replies that she has had a return from agent 8 on this subject. She contacted Jérôme Kerviel several times during the course of the day (by telephone), without managing to understand his explanations.
- At 19:11, agent 12 decides that a meeting must be organized "*very urgently tomorrow*".

▪ **Thursday, January 17, 2008: Meeting between ACFI and the trader, then between ACFI and DEVL.**

- At 11:26, the meeting is finally set for 16:30 to 17:30 with the participation of: Jérôme Kerviel, agent 12 (ACFI/ACR/FCO), agent 13 (ACFI/NOR), agent 19 (ACFI/NOR), agent 20 (ACFI/NOR), agent 6 (ACFI/ACR/ACT/COK) and agent 8 (ACFI/ACR/ACT/COK) who, in the end, was not present.
- The meeting took place at 16:30. JK having learnt that the problem with Counterparty 5 came from the absence of a collateral agreement, declares that his true counterparty is Counterparty 3, which brings the Cooke ratio down to approximately EUR 390 million. It is decided that ACFI should approach DEVL/CBR. A note exists summarizing the principal points of this meeting.
- At 17:30, during a meeting with ACFI/NOR on another subject, DEVL/CBR/CAP (agent 21) is informed of the problem of the weighting of the 8 forward contracts with Counterparty 5 and questioned on the particular points that ACFI/NOR (agent 19) should raise during the ad hoc meeting scheduled for that evening. DEVL/CBR/CAP (agent 21) asks for verification of certain points.
- At 18:30, agent 13 (ACFI/NOR) and agent 21 (DEVL/CBR/CAP) call Jérôme Kerviel in order to obtain additional information. They ask him to submit to ACFI/NOR legally valid documentary evidence (signed contract) or any other formal document reviewed and validated by SEGL/JUR.
- At 19:31, agent 21 (DEVL/CBR/CAP) sends an email to agent 10 (DEVL/CBR/CAP) in order to debrief on the discussion with agent 13 and Jérôme Kerviel. It is in particular stated that ACFI/NOR (with OPER and SEGL/JUR) must ensure that the legal formalities permitting the netting of cash flows are respected.

▪ **Friday, January 18, 2008: Problem reaches GEDS and in-depth questioning prior to the discovery.**

- In the morning, agent 22 and agent 13 call agent 23 (GEDS/DAI/TRD/INC) and agent 24 (ACFI/GED) to warn them of the Cooke ratio problems on GEDS due to the 8 forwards. This call was not part of a standard procedure but, during the period of account closure, this was usual. Two points surprise agent 23, the high nominal value and the fact that this concerns a broker.
- At 11:40, agent 23 confirms the amounts mentioned during the telephone conversation and states that he will see what he can do.
- He asks agent 3 (GEDS/DAI/GSD) for the information available to him. Agent 3 transfers the email exchanges on the daily reporting alert of the 7th to the 9th and states that the transactions have been cancelled.
- Agent 23, not really understanding what has happened, goes directly to see Jérôme Kerviel. As the explanations are unclear, he insists further and agent 25 (GEDS/DAI/TRD/EFI/FRA) joins them. Jérôme Kerviel declares that his actual counterparty is Counterparty 3.
- At 12:59, Jérôme Kerviel sends the (forged) justification of Counterparty 3, further to the request made by agent 23.
- Agent 23, agent 26 and agent 25 sum up the matter. The subject is judged to be very important and a meeting is organized for the evening.
- At 17:36, agent 23 transfers the replies from SEGL/JUR on the options for carrying out a netting.
- At the end of the day, a meeting takes place with agent 26, agent 25, agent 27 (GEDS/DAI/TRD/DTO), agent 28 (OPER/GED) and agent 23.
- Agent 27 takes charge of the case and suggests calling the contact at Counterparty 3 on Saturday This allows the discovery that the transaction is fictitious to be made.
- During the day, Jérôme Kerviel enters the transactions into Eliot, repeating the same characteristics used for the 8 previous forwards, but with Counterparty 3 as counterparty. Indeed, 6 forwards are redirected to Counterparty 3 and 2 are entered as "Pending". These transactions have numbers which are different from those of the previous forwards.

<u>Focus no. 7</u>: Results of reconciliation investigations.

We were able to reconcile the majority of the amounts from fraudulent positions on key dates, except for those on equities for which the positions could not be reconciled.

Product Type	*Reconciliation Method*	**Results of reconciliation investigations**	
		On Dec. 31, 2007	**On Jan. 18, 2007**
Futures	*Reconciliation for each type of futures contract (paired with underlying asset – maturity) between the net positions of the depositary and the net positions recorded in the Front Office application ELIOT.*	Complete reconciliation	**Identification of 24 fictitious trades (11 on DAX and 13 on EUROSTOXX)**
Listed Options	*Reconciliation, for each type of option (four elements: underlying asset – direction – maturity – strike) between the net positions of the depositary and the net positions recorded in the Front Office application ELIOT.*	Complete reconciliation	Complete reconciliation
Equities and Funds	*Reconciliation at the SGPM level of the net position by shares on ELIOT with the position recognized by the depositaries.*	Reconciliation impossible due to significant inventory discrepancies (work in progress by OPER at SG CIB level)	Reconciliation impossible due to significant inventory discrepancies (work in progress by OPER at SG CIB level)
Warrants	*Reconciliation by warrant type of the net position by GOP on ELIOT with the net position of the depositary.*	Complete reconciliation	Complete reconciliation
Forward	*Because OTC positions cannot be certified within the given timeframe for the totality of GOP, AR delta* method was used in order to identify the portfolios (i.e. operational sub-centers) at risk. For all trades in portfolios at risk, verification of the presence of a confirmation for the transaction (for internal trades, reconciliation is implicit because both sides of the transaction are recorded automatically in such a way that they cannot be separated).*	**Identification of 8 fictitious trades**	**Identification of 11 fictitious trades**
OTC Options		Complete reconciliation	Complete reconciliation
Combination linear products (CLP)		Complete reconciliation	Complete reconciliation
Forex		Complete reconciliation	Complete reconciliation
HDG (zero deposit coupon, interest rate swap)		Complete reconciliation	Complete reconciliation
Non delivery forward (NDF)		Complete reconciliation	Complete reconciliation
Interest rate swap (SWP)		Complete reconciliation	Complete reconciliation

*****: *The Delta AR (risk analysis or* analyse de risque*) method permits the gathering of three-fold information on portfolios/ products/ underlying assets that are most likely to have been the subject of fictitious transactions. In recording fictitious trades, JK hedged his directional positions and therefore exteriorized a weak delta, as calculated by AR at that time. These fictitious trades having usually been cancelled before confirmation or settlement was sent so that they would not be detected, the follow-up by AR on these same portfolios on the historic value date several months later allow the measurement of actual fraudulent positions which were in reality not hedged at the time. The comparison of historic and new AR thus highlights the portfolios/underlying assets/products that could have been the subject of fraud in the past.*

NB 1: Reconciliations were carried out for the 36 operational centers ("GOP") identified as having possibly handled operations carried out by JK or on his behalf. 35 GOPs were found to have handled all of the deals done from JK's machines or from his login ID; 1 GOP was added to this sample because it was included by the SG CIB task force in the JK review but in reality it did not contain any relevant transactions.

NB 2: For JK's eight principal GOPs, our reconciliation investigations were also carried out for the dates December 31, 2005 and December 31, 2006.

NB 3: Our reconciliation investigations could not be completed for equity positions because of continuing transversal reconciliation work underway within OPER. Our investigations also did not cover an exhaustive study of cash pending, the treatment of which is not differentiated by original operating center.

<u>Focus no. 8</u>: A significant part of the earnings declared by JK originates from his fraudulent activity, but we cannot establish the exact amount.

- **The earnings (1) declared by JK in 2007 amount to EUR 43 million, including EUR 25 million in proprietary trading and EUR 18 million in client trading.**

Earnings resulting from proprietary trading – EUR 25 million – are supposed to come from arbitrage on competitors' turbo warrants, an activity commenced in July 2007.

Earnings declared as coming from client trading – EUR 17.6 million – according to JK's assignment, resulted from margins generated by turbo warrants market making (financing, spread between bid and ask) on the one hand, and from taking positions (dividends and especially optimizing management of hedging) on the other hand.

- **Regarding the earnings of EUR 25 million from proprietary trading:**

1) JK's legitimate activities can only explain up to EUR 3 million.

We have reconstituted, trade by trade, the earnings generated by arbitrage on competitors' turbo warrants carried out by JK and another trader from DLP. In total, these earnings are valued at EUR 5.5 million, including approximately EUR 3.1 million attributable to JK and EUR 2.3 million attributable to the other trader (according to the most likely case scenario).

> *Between July 2007 and December 2007, the DLP desk handled 23 competitors' turbos, which represent a nominal amount of EUR 916 million requiring hedging in futures generating an average margin of 60 base points (see Table no. 1).*

Consequently, the remaining EUR 22 million result from unauthorized positions arising from his activity in taking directional intraday ("*spiel*") positions or from fraudulent concealed positions (overnight).

2) Of the remaining EUR 22 million, we have not managed to distinguish perfectly between earnings generated by JK's directional intraday activity and those arising from his fraudulent positions.

We have attempted to reconstruct, trade by trade, the origin of earnings generated by JK in order to determine their exact source. But this exercise was not possible due to the overlapping strategies used by JK and the way in which JK attributed them to his different GOPs:

- because JK carried out two types of activity within the same portfolios (sub-operating centers), it is not truly possible to distinguish one from another;

  Example: on day 1, JK buys 1,000 DAX futures contracts; on the morning of day 2, he buys 500 DAX futures contracts; in the afternoon on day 2, he sells 300 DAX contracts. It is not possibly to connect the 300 contracts sold to the transaction from day 1 or the transaction from the morning of day 2, therefore the transaction cannot be classified as intraday or overnight.

- transfers of earnings between portfolios are also extremely numerous, which "muddles" the investigation (see Table no. 2);
- certain positions on futures were at first taken to hedge a client's position and then became, once the position was unwound, an overnight directional position that JK concealed from that point on with fictitious trades (see below).

[1] Earnings generated, excluding sales credit.

3) We have nevertheless established that part of these earnings did originate from fraudulent positions concealed by JK.

Within the proprietary trading GOP and in particular within the JK_STRAT portfolio, we detected earnings of EUR 3.8 million in 2007 arising from:

- a loss of EUR 36 million on intraday directional positions on equities (amongst others ALLIANZ, DEUTSCHE BANK, SOLARWORLD and CONERGY, the shares of CONERGY alone having generated losses of EUR 40 million);
- gains of EUR 3.6 million from the ZUK_MINIFTS and ZFI_DAX portfolios (see below) where JK dealt in futures on the FTSE and DAX respectively;
- a gain of EUR 39.3 million resulting directly from earnings (EUR 1.5 billion) from the fraudulent position on futures at the end of 2007: this amount of EUR 39.3 million is in fact the difference between a transfer flow of EUR 1.51 billion from the ZFI_DAX portfolio and the earnings from fictitious forwards entered against CLICKOPTIONS in December 2007 for a total of EUR 1.47 billion.

  The breakdown is explained in Table no. 3.

More generally, **it is very unlikely, even impossible, that JK could have generated earnings of EUR 22 million from pure intraday trading** (which would in any case be an unauthorized activity).

- **Regarding the earnings of EUR 18 million in client trading:**

For the same reasons cited above, it is not possible to distinguish between earnings linked to client transactions and those linked to fraudulent activities.

> *JK's main market making portfolio (ZFI_DAX in GOP 2A) was in fact also used by him to record fraudulent positions on futures, and this occurred since the beginning of 2007 (see Table no. 4). The portfolio ZUK_MINIFTS in GOP D3, where FTSE turbos are handled was used in a similar way.*

Given the amounts at stake, **it is highly probable that the declared earnings from client trading also contain earnings from JK's fraudulent positions**, even if the proportion is probably smaller than in the case of earnings from proprietary trading (earnings from clients supposedly superior to earnings from arbitrage on competitors' turbo warrants, actual transfer of part of the fraudulent earnings to proprietary trading GOPs).

<u>Table no. 1:</u> Earnings generated by arbitrage strategy over competitors' turbos are estimated at EUR 5.5 million

ISIN Code	Issuer	Underlying	Futures Equivalent	Strike calls	Nominal amount of the equivalent Futures position (EUR m.)	Trade date	Earnings (EUR m.)
CH0032080902	DBKAG	DAX (1)	80	7700	15.4	07/11/07	2.0 (*1*)
Ch0032162429	ZKB	DAX (1)	80	7500	15.0	07/26/07	
DE000BN0F382	BNP-EMIS	DAX (1)	280	7470	52.3	08/02/07	
DE000BN0F341	BNP-EMIS	DAX (1)	20	7400	3.7	08/03/07	
DE000BN0F358	BNP-EMIS	DAX (1)	120	7410	22.2	08/03/07	
DE000BN0GRA2	BNP-PBAS	DAX (1)	300	7400	55.5	08/09/07	
DE000BN4Z317	BNP-PBAS	DAX (1)	100	7300	18.1	08/09/07	
DE000BN7WVK5	BNP-PBAS	DAX (1)	200	7290	36.5	08/10/07	
DE000BN7WVK5	BNP-PBAS	DAX (1)	200	7290	36.5	08/16/2007	
DE000DR4WBU7	DRESDBK	DAX (1)	60	7200	10.8	08/16/2007	
DE000VFP4NG1	VONTOBEL	DAX (1)	40	7150	7.2	08/17/2007	
DE000BN0J6V9	BNP-PBAS	DAX (1)	40	7300	7.3	08/21/2007	
DE000BN0J6Y3	BNP-PBAS	DAX (1)	80	7340	14.7	08/21/2007	
DE000CG21477	CITI-AG	DAX (1)	152	7175	27.3	08/21/2007	
DE000BN0J4U6	BNP-PBAS	DAX (1)	140	7200	25.2	08/22/2007	
DE000BN0J6V9	BNP-PBAS	DAX (1)	110	7300	20.1	08/22/2007	
DE000BN0LCG1	BNP-PBAS	DAX (1)	200	7410	37.1	08/28/2007	
DE000BN0J6Y3	BNP-PBAS	DAX (1)	40	7340	7.3	09/03/2007	
DE000BN0MSK7	BNP-FFT	DAX (1)	40	7400	7.4	09/07/2007	
DE000BN0J6Y3	BNP-PBAS	DAX (1)	30	7340	5.5	09/26/2007	
DE000DB7S333	DBKAG	DAX (2)	400	7900	79.0	10/08/2007	3.5 (*2*)
DE000BN0WTD9	BNP-EMIS	DAX (2)	320	7800	62.4	10/24/2007	
DE000DB5W628	DBKAG	DAX (2)	500	7850	98.1	11/01/2007	
DE000BN0SSA5	BNP-EMIS	DAX (2)	120	7700	23.1	11/07/2007	
DE000DB8Q236	DBKAG	DAX (2)	80	7700	15.4	11/07/2007	
DE000DB67Z47	DBKAG	DAX (2)	520	7750	100.8	11/12/2007	
DE000BN026T8	BNP-EMIS	DAX (2)	600	7500	112.5	11/23/2007	
TOTAL			**4,852**		**916.3**		**5.5**

(1): hedging with Futures maturing September 2007
(2): hedging with Futures maturing December 2007 **PnL/Nominal:** **<u>60 bps</u>**

<u>Methodology</u>:
Calls have been valued based on premiums and quantities generated by the ELIOT tool. The valuation of futures hedging as been assessed in accordance with several scenarios:

- *worst case scenario: selling low and buying high for Futures handled irrespective of volumes (very low probability)*
- *best case scenario: selling high and buying low for Futures handled irrespective of volumes (low probability)*
- *medium case scenario: identification of blocks of Futures that may correspond to the unwinding of the position and to the assessment on the basis of the average prices recorded in ELIOT. In the opposite case, assessment by using the weighted average of Futures handled for sales on short positions and for purchases on long positions (average probability)*
- ***medium case scenario retained**: average of best and medium case scenario assessments. This scenario has the highest probability.*

<u>Table no. 2:</u> The numerous transfers between portfolios and between GOPs made by JK made the analysis of his earnings extremely arduous

Breakdown of JK's proprietary trading earnings as at December 31, 2007

P&L (in EUR K)		**Financial explanation of earnings**	**Presence of P&L generated by fraudulent positions**		
25,059	3,071	Arbitrage of competitors' turbos	No	**1771**	*P&L transferred via Fwd of 2A/ZDE DECADE*
				1 300	*P&L transferred via Fwd of 2A/ZFI_DAX*
	21,988	Market making on turbos in context of assignment, spiel intraday and fraudulent positions on DAX futures (see Table no. 4)	Partial	**13 794**	*P&L transferred via Fwd of 2A/ZFI_DAX*
		Earnings generated mainly from the fraudulent positions on futures (see Table no. 3)	Yes	**3 873**	*P&L transferred via Fwd of 2A/JK_STRAT*
		Unauthorized strategy of pair trading on equities	No	**91**	*P&L transferred via Fwd of 2A / JK_LS*
		Retrocession of P&L from GOP OI (1) corresponding to P&L generated by GOP D3 ZUK_MINIFTS portfolio (see *below*)	Partial	**2 900**	*P&L transferred via Fwd of OI /D1_PROP*
		Market making on turbos in context of assignment, spiel intraday and fraudulent positions on FTSE futures	Partial	**700**	*P&L transferred via Fwd of D3 / ZUK_MINIFTS*
				630	*Cash flow generated by D3 / ZUK_MINIFTS*

JK's portfolios within IG and XE proprietary trading centers

JK_CHICHE *TURBO_PROP*

(1): Indexation desk operational center on which the earnings generated by JK's GOP D3 (SGOE) were housed whilst awaiting the creation of a dedicated proprietary trading center for DLP activity planned for 2008.

<u>Table no. 3:</u> The earnings generated by the fraudulent positions enabled JK to conceal losses of EUR 36 million on fraudulent equities positions and to declare proprietary trading earnings of EUR 3.9 million.

Breakdown of earnings for the 2A center JK_STRAT portfolio

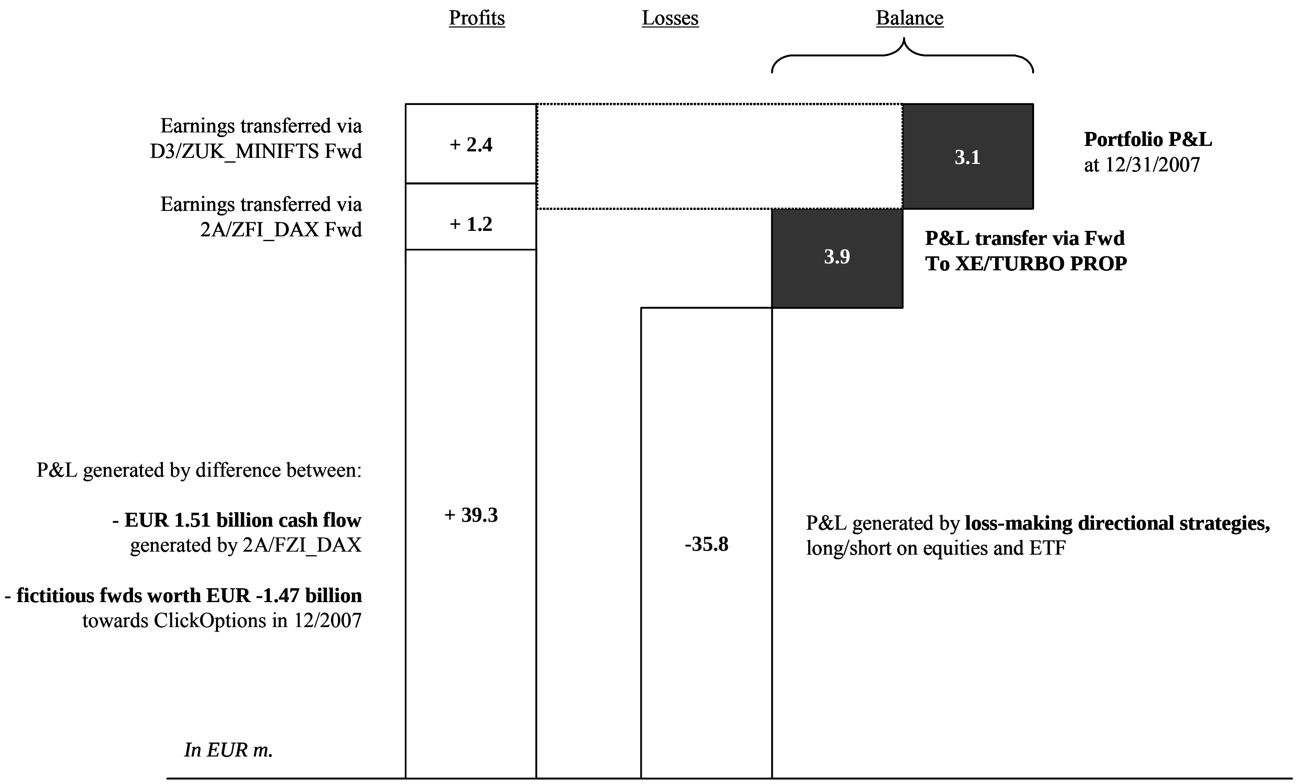


Table no. 4: Earnings generated by client trading activities are also potentially composed of fraudulent positions taken by JK.

Earnings for the ZFI_DAZ (GOP 2A) portfolio for the 1st quarter 2007

EUR	01/02/07 to 01/31/07	02/01/07 to 02/28/07	03/01/07 to 03/30/07
Index Futures *DAX*	**-15,321,720**	**42,448,382**	**-29,929,107**
Forward *DAX*	**16,514,028**	**-21,719,136**	**6,094,721**
Equities *Solarworld*	**0**	**-22,604,012**	**22,606,969**
Warrant Options *DAX turbo warrants*	**110,389**	**639,629**	**872,697**
Cash Flow	**-670,000** (1)	**2,364,685** (2)	**1,845,210** (3)
Other	**-28,653**	**-158,514**	**-49,848**
Financing	*-10,757*	*-112,049*	*35,562*
Fees	*-19,881*	*-46,463*	*-85,409*
B/S on expired products	*-913*	*1,174*	*548*
FOREX	*2,898*	*-1,176*	*-549*
TOTAL	**604,042**	**971,035**	**1,440,641**
Earnings generated by fictitious transactions	**16,307,196**	**-44,003,763**	**29,254,096**
Forwards	*16,307,196*	*-21,399,751*	*6,647,127*
Equities		*-22,604,012*	*22,606,969*
Real earnings minus fictitious	**-15,703,154**	**44,974,798**	**-27,813,454**

These earnings cannot be logically explained by client flows

(1): cash transfer flow (TSF)
(2): cash transfer flow (TSF)
(3): PRO flow

Source: BACARDI. Earnings are presented on the basis of BACARDI summary statements of "trading valuation". We have moreover taken certain information generated by the detailed breakdown for additional clarity (underlying assets, non-transactional flow type).

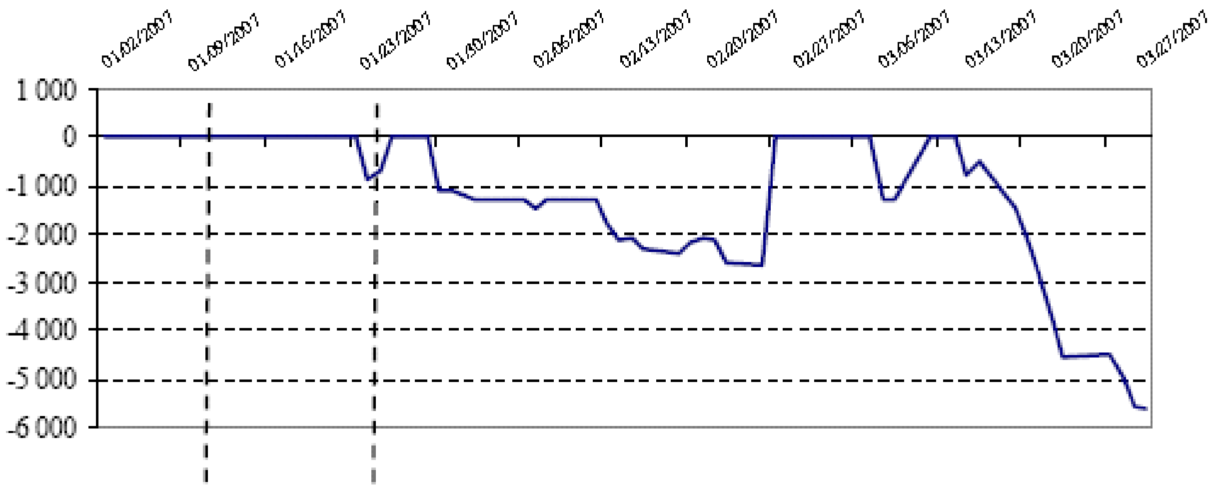
<u>Focus no. 9</u>: List of flow for provisions greater than EUR 50 million recorded in 2007 and in January 2008 under the identification number of the operational Middle Office agent dedicated to JK's activities.

ELIOT identifier	Month	Number of modified transactions entered under his ID	Maximum amount entered under his ID
22904171	July 2007	63	EUR 76.0 million
23290759	July 2007	9	EUR 221.7 million
23618610	August 2007	39	EUR 88.0 million
25244722	November 2007	1	EUR 345.4 million
25263903	November 2007	4	EUR 528.0 million
25419034	November 2007	2	EUR 284.0 million
26629234	January 2008	9	EUR 1,485.9 million

The provision flows reproduced above all cover operational center 2A.

Focus no. 10: The departure of JK's former manager coincided with his starting to take massive fraudulent positions.

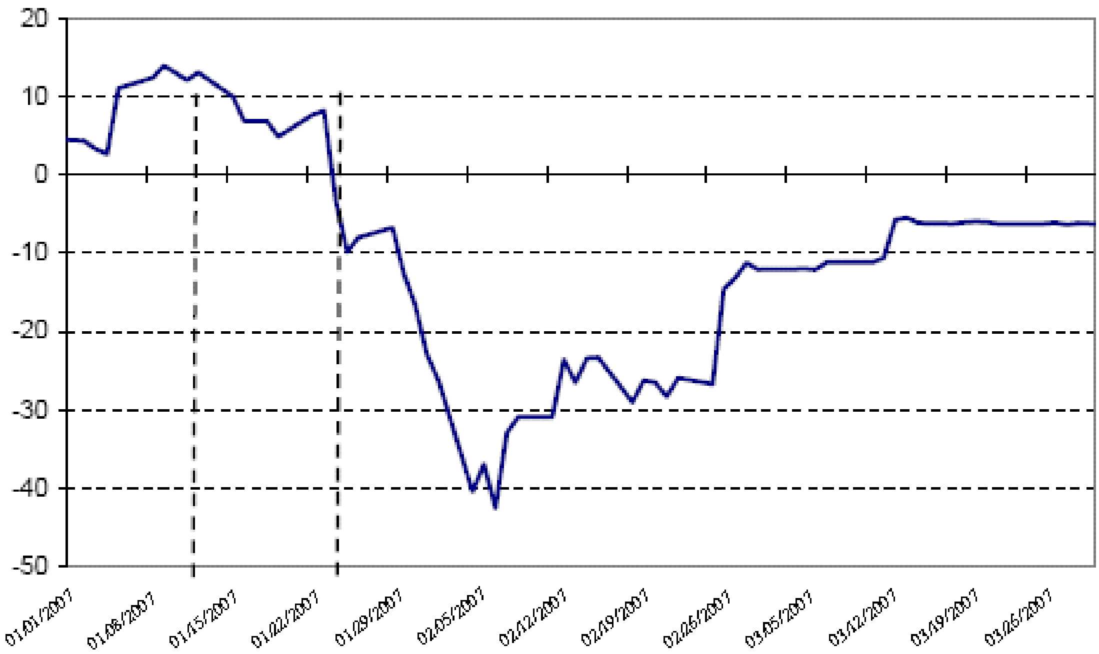
Fraudulent positions on DAX futures during Q1 2007 in EUR millions



01/11/2007: resignation of JK's manager

01/26/2007: effective departure date of JK's manager

Fraudulent positions on equities during Q1 2007 in EUR millions



01/11/2007: resignation of JK's manager

01/26/2007: effective departure date of JK's manager

<u>Focus no. 11</u>: Three prescriptive regulations rule the responsibility of a trading manager.

<u>Directive no. 28 of June 2, 2000 "Market activity risk management"</u>

"Management of market risks is primarily ensured by Front Offices as part of the day-to-day management of their division and continuous monitoring of their positions."

"The Front Office Manager is responsible for:

- *(…) operational management of Front Offices (operational supervision of market operators, ongoing management of the division and continuous monitoring of their positions) (…)"*

"The Front Office Manager is responsible for:

- *(…) ensuring compliance with limits authorized for the entity (…)"*

"A daily analysis of the coherence of risks, earnings and positions must be developed in order to strengthen the security and reliability of the monitoring of the division."

<u>"GEDS/DAI trading procedures handbook"</u>

2005 version, as circulated and in force at the time of the fraud:

"Each trader must be aware of the market risk limitations allocated to him by his risk manager and must be capable of presenting a document reiterating the risk limitations for the division to which he belongs. Any breach of the limit must be remedied immediately."

January 2008 update, <u>not circulated</u> but pre-dating the fraud:

"It is each Risk Manager's and each desk manager's responsibility to ensure that a daily control of net and gross positions is carried out for all of the products handled and all of the various underlying assets."

<u>Permanent Supervision Procedures (internal control, MORSE tool)</u>

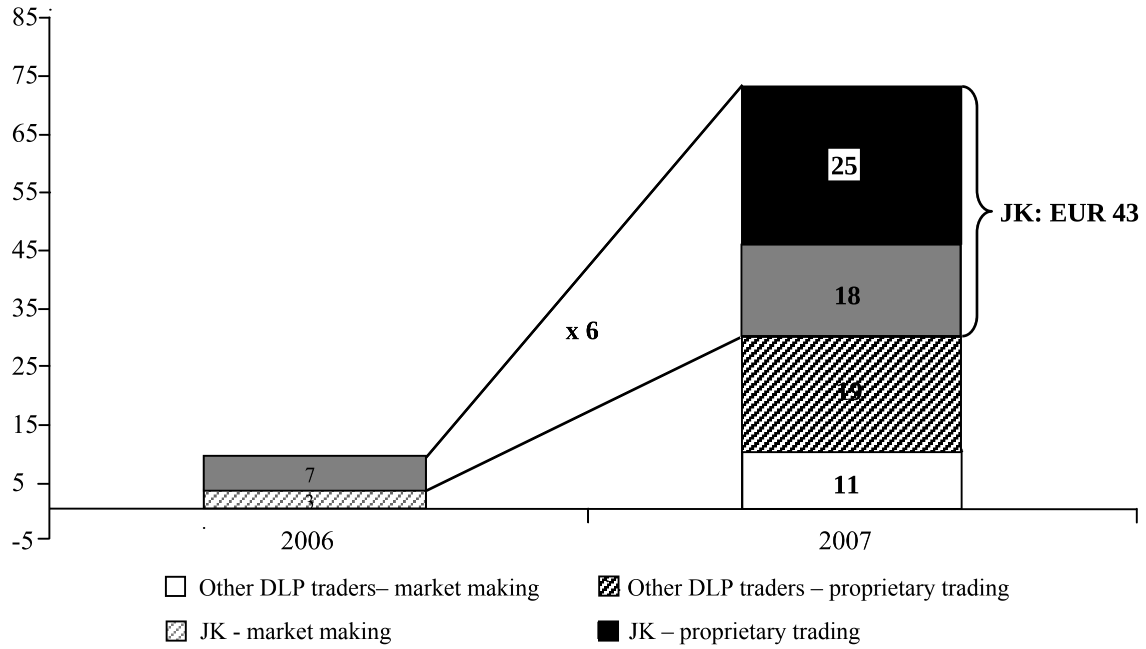
"At the D+2 due date, the FO must approve the valuation of the earnings for the day D at the level of sub-division 2 and comment on any P&L amounts exceeding EUR 500,000. This approval is carried out by the division manager or delegated to the relevant trader directly for his or her transaction."

"The Risk Managers approve the totality of CPM at D+6, before entry in CRAFT at D+7, which allows the production of a "Craft before adjustments."
(…) a CRM version is then sent to the risk managers for final approval at D+9."

<u>Focus no. 12</u>: The size of JK's earnings should have alerted his hierarchical superiors.

- **Between 2006 and 2007, JK's earnings were multiplied by 6, growing to represent 59% of the earnings of DELTA ONE desk Listed Products.**

Earnings in EUR million



Source: CRAFT P&L for JK and DLP GOPs, BACARDI P&L for Jerôme KERVIEL's portfolios for GOPs shared between the latter and other traders.

- **JK's weighting within the DELTA ONE global earnings was considerable and growing strongly.**

Earnings from proprietary trading

EUR millions	**2006**	**2007**
JK's earnings	0	25
DELTA ONE earnings	24	114
JK's weighting	**0%**	**22%**

Earnings from client trading

EUR millions	**2006**	**2007**
JK's earnings	7	18
DELTA ONE earnings	20	45
JK's weighting	**35%**	**40%**

Total earnings from trading (*i.e.* minus sales credits)

EUR millions	**2006**	**2007**
JK's earnings	7	43
DELTA ONE earnings	44	159
JK's weighting	**16%**	**27%**

- **JK's earnings ranked him amongst the best traders within the GED arbitrage division.**

For proprietary trading, the distribution of the 143 traders of the GEDS/DAI/TRD arbitrage division is as follows:

NBI in EUR m.	**< 0**	**0-5**	**5-10**	**10-15**	**15-20**	**20-25**	**25-30**	**30-35**	**>35**
No. of traders	10	76	14	12	9	8	4	4	6

Concerning proprietary trading, JK, with earnings of EUR 25 million generated by proprietary trading, was therefore the 15th best trader within the division, out a total of 143.

- **This level of earnings was *a priori* difficult to explain given his activity.**

Our analyses show in this respect that his sole activity of proprietary trading, launched in July, and which consisted of the arbitrage of competitors' "turbo" warrants, generated approximately EUR 3 million's worth of earnings, *i.e.* a great deal less than the EUR 25 million declared (see Focus no. 7).

<u>Focus no. 13</u>: An in-depth analysis of the information available in relation to cash flow might have allowed the fraud to be detected.

- **Three indicators were liable to issue alert signals.**

1) Deposits / Initial Margin Requirements

For each purchase of a futures contract, FIMAT requires a down-payment as guarantee called an Initial Margin Requirement ("IMR") or deposit. Very few equities being available to GEDS, these deposits are in their vast majority paid in bond securities through the intermediary of FICC and the margin is paid in cash when there is an outstanding balance to be covered.

2) Margin calls

On listed markets such as futures markets, a cash margin call is made by the clearing house when the market closing price is different from the sale or purchase price. The difference between the purchase price and the price at close therefore corresponds to earnings realized once the positions have been closed and to latent earnings when the positions are still open.

3) Front Office projected cash flow

At the Front Office level, GEDS cash flow is managed by the SAFE application (1) which records, at the level of each GOP, all certain cash flows coming from ELIOT (notably the margin calls and any realized P&L). These cash flow statements are used (i) by traders to verify their valuation calculations, to check the booking of their transactions and to anticipate any cash requirements or excesses; (ii) by the trading floor treasurer, responsible for ensuring compliance with the cash flow management rules defined by GEDS/DIR and for optimizing all GED assets.

- **Did these allow the fraud to be detected?**

1) Deposits: neither JK's manager, nor the DELTA ONE manager had access to the re-invoicing amounts for collateral costs, particularly high for JK's operational center.

The Middle Office in charge of securities treasury failed to identity JK's sizeable positions as it does not carry out any controls over aggregate deposits per account. We can certainly, *a posteriori*¸ see that JK's trading on GOP 2A represented on average one quarter of the net deposit requirements since April 2007 paid by GEDS to FIMAT Frankfurt (2) and up to 60% of this amount in early November 2007, but it was not within the remit of the Securities treasury Middle Office (OPER/GED/MID/ARB) to analyze aggregate amounts per account, its assignment consisting instead of covering in securities the global requirement for such deposits.

> *The figures were certainly available in the daily statement of IMR requirements received from FIMAT (3) but the Securities treasury Middle Office never analyzed these figures: moreover, it was not even aware that the FIMAT account no. SF 581 was exclusively dedicated to GOP 2A used by JK and that it therefore allowed the size of his positions to be identified.*

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[1] The SAFE tool, implemented in 2001, provides Front cash flow statements via the ELIOT feed and accounting cash flow balances via a feed from the accounting systems. SAFE is used by Front Office to manage its cash position and by Middle Office to carry out reconciliations between Front Office cash flow and accounting cash flow.

[2] FIMAT Frankfurt carries out clearing for Société Générale's transactions on EUREX.

[3] This statement sent by FIMAT shows requirements to be covered on a daily basis. It includes (i) the total daily IMR requirement (with account breakdown), (ii) the value of any existing deposits (without details), (iii) the balance to be covered (without details), *i.e.* the difference between (i) and (ii). One FIMAT account represents one group of traders or one single trader.

Furthermore, the Futures Back Office did not identify the significant frequency of cash complements paid in order to meet deposit requirements as such supervision is not within its mandate. Between January 1 and 18, 2008, in the absence of a sufficient quantity of bonds to cover an IMR requirement undergoing strong growth due to JK's activities, the Futures Back Office paid a cash complement of over EUR 500 million on five occasions in order to meet deposit requirements, as opposed to one such payment made during 2007 (on March 13, 2007 for a total of EUR 699 million). In the absence of any supervision and of any alert threshold for cash amounts paid as deposits in the procedures in place at that time, Back Office failed to detect the substantial increase in cash payments made under IMR from January 2008 onward. Back Office in fact makes a global cash payment, including by currency and by clearer, other than the deposit paid in cash, margin calls, commissions and interest payments. The controls concern solely any discrepancies between the amounts claimed by the clearer and those calculated by the SG accounting system (GMI/clearer reconciliation). But it is not Back Office's role to carry out checks on the consistency of the amounts concerned.

Finally, the detailed breakdown of the collateral re-invoicing by *GOP*, which should have allowed the abnormally high amounts to be identified, was not sent to JK's direct hierarchical superiors. GOP 2A represented 10% on average of the re-invoicing of the securities deposit financing paid by GEDS to FIMAT Frankfurt since April 2007 (see Table no. 1). This re-invoicing is carried out on a monthly basis by the Securities treasury Middle Office on a pro rata basis in relation to the contribution made by each GOP to the net total paid. Such re-invoicing is sent each month in the form of an Excel spreadsheet to the GEDS/TRD manager only (who became GEDS manager on December 18, 2007), *i.e.* to JK's L+5, a level which is too high for such data to be analyzed in detail. The DLP and DELTA ONE desk managers (JK's L+1 and L+2 respectively), who could have identified this significant level of GOP 2A deposit expenditure, directly visible on such re-invoicing statement, were not recipients of this spreadsheet.

> *The DELTA ONE manager had access to this spreadsheet from February 2008 onwards only, at his request.*

2) Margin calls: the globalized treatment of margin calls did not allow the detection of the significant disturbance linked to accounting amounts paid and received pursuant to JK's earnings.

A dedicated Back Office (the Futures Back Office) is responsible for making a global payment on a daily basis for all margin calls owed by Société Générale to each clearing house. The amounts paid to cover margin calls on JK's futures positions were therefore diluted in the global total paid each day to FIMAT Frankfurt without generating any significant degree of disturbance. Indeed, the GREEN Inspection has not been able to establish any direct correlation between the cash payments made to FIMAT Frankfurt for all SG CIB market-related activities and the cash paid for JK's futures positions.

> *Tables no. 2 and no. 3 clearly show this lack of any direct correlation up until mid-January 2008, whether in relation to daily margin calls or in relation to aggregate margin calls.*

By virtue of the procedures in force, the assignment of the Futures and listed options Back Office was to announce each day the aggregate cash flow by clearer and by currency and to check the discrepancies between the GMI application and the information provided by the clearer (GMI/clearer reconciliation). On the other hand, this Back Office was not charged with supervising the daily variations in aggregate cash payments, with analyzing the cash payable breakdown per account (4) provided on a daily basis by FIMAT (5), nor, *a fortiori*, with following its aggregate per account over the year.

[4] Every day, FIMAT provides the Back Office with: (i) the global total to be paid by each center covering margin calls, option premiums, interest and commissions, and (ii) an aggregate IMR total to be settled in cash for all GEDS.

[5] Margin calls constitute the majority of cash flow between the Back Office and FIMAT Frankfurt.

3) Front Office projected cash flow: via a detailed analysis of the cash flow of JK's principal operational center, his manager could have been able to detect unusual levels.

At a global level, the cash flow of GOP 2A (JK's principal operational center) had no significant impact upon the DELTA ONE balance or upon that of Equity Finance (DELTA ONE's department).

At the level of the operational center, **even if the cash flow level within GOP 2A was not in itself abnormal, it did not correspond to the activity for which JK had authorization**. As shown in Table no. 4, the trading activities of the other DELTA ONE GOPs, in particular of GOPs ZG, 4C and XF, have, since early 2007, naturally generated extremely high positive or negative cash flow balances (these GOPs have on several dates shown cash flow balances in excess of EUR 1.3 billion). However, the significant cash flow balances for GOP 2A since March 2007 have no relation with the trading assignments given to JK (market making (6) and arbitrage (7) on Turbo products in France, Finland, Sweden and the United Kingdom). By way of a comparison, it can be seen that the GOP WU, used for a similar type of activity (trading on Turbo products in Germany), showed a negative balance of EUR 110 million on average for 2007 as a whole, as shown in Table no. 5.

On the one hand, the cash flow balance for GOP 2A was on average between EUR -400 million and EUR +500 million.

On the other hand, some cash flow highs appear to be excessive: (i) from December 28, 2007 to January 1, 2008, GOP 2A showed an excess of EUR 1.3 billion; (ii) between early June and late July 2007, the cash flow requirements were EUR 1 billion on average.

This information was available to JK's direct hierarchical manager however he failed to identify JK's fraudulent activities in this manner. Each morning, the traders and their manager receive their Front Office cash flow balance for each GOP. This file was notably sent to JK's manager, to the Equity Finance manager, and to JK himself.

Furthermore, **information that in itself constituted an alert was available** to the DELTA ONE manager. The GEDS treasurer had indeed communicated information concerning **two loans of EUR 500 million for GOP 2A** (e-mail dated July 31, 2007). **These amounts however failed to alert him**: the DELTA ONE manager only questioned JK via e-mail on his need to renew such loans, to which JK replied that the requirement no longer existed following the reimbursement of a product by a client.

It is true that the Front Office cash flow management is not an easy indicator to interpret and that the information available necessitated a good knowledge of its mechanisms in order to detect the fraud. Indeed:

- this is projected and not accounting cash flow, in so far as the trades carried out by the traders can be amended or cancelled;

  The primary objective of this cash flow is to allow Front Office to have an immediate knowledge of the impact of their trades on the cash flow balance and to anticipate cash requirements or excesses without waiting for processing in accounts.

- this is an implicit cash flow, equivalent to an overdraft facility: over certain limits set by GEDS/DIR for each GEDS business activity and for GEDS as a whole, there must be explicit cash lending or borrowing which can take place either between desks within GEDS or from Société Générale Treasury (8). This type of transaction is taken into account in the calculation of the financial and accounting earnings of the desks.

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[6] Providing a bid / ask price on a given product on a permanent basis.

[7] Arbitrage activity consists of buying an under-valued product and selling an over-valued product on the market.

[8] The FICC/TRE department acts as treasurer for Société Générale as a whole.

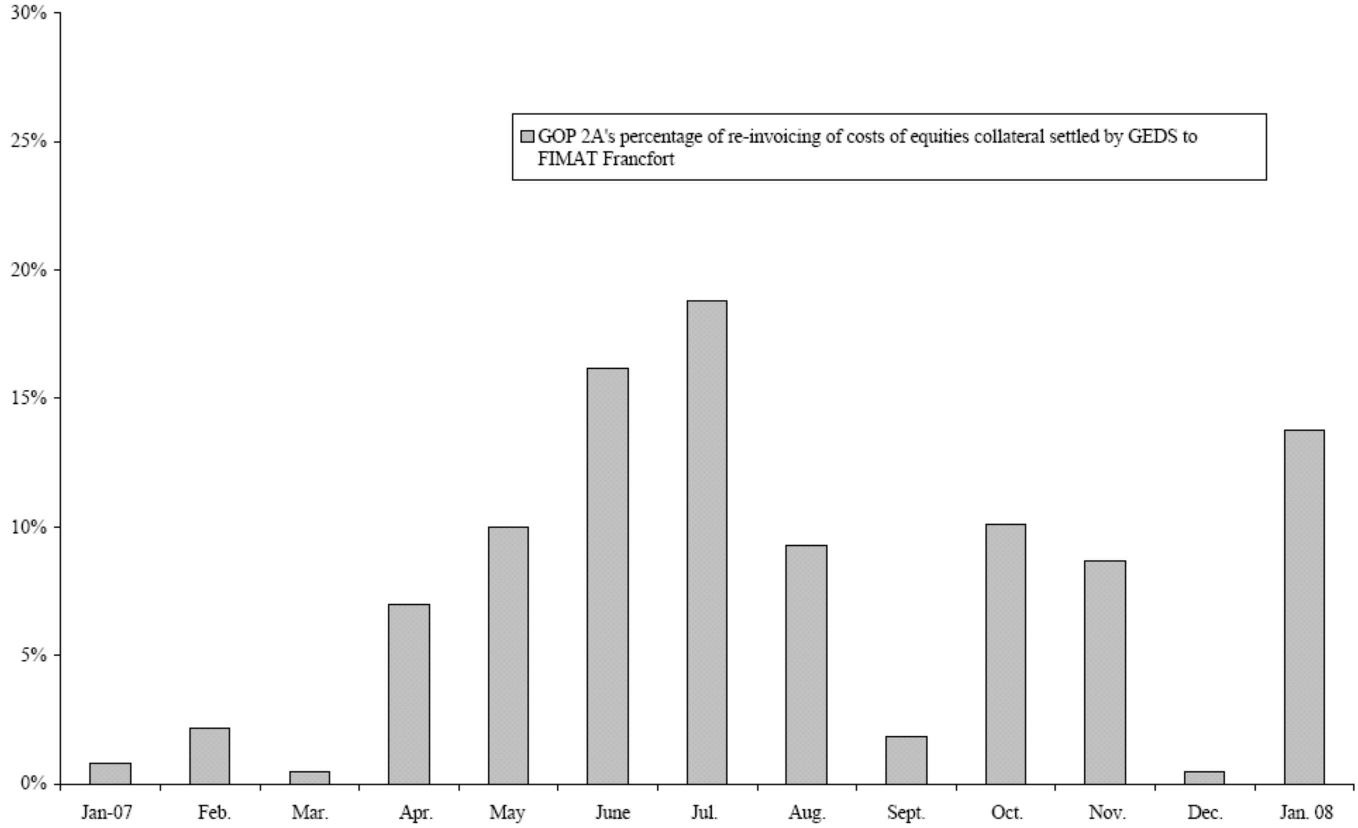
Explicit cash lending/borrowing between desks within a business line and even within GEDS is very frequent as these transactions are cheaper and more profitable than explicit lending/borrowing involving the Société Générale Treasury, the rates being increased by one basis point upon sale and upon purchase. Therefore, a cash loan which would generate 4.15% via Société Générale Treasury would generate 4.16% if made via a GEDS desk.

- this cash flow incorporates a very large number of flows of varying types (amounts spent for the purchase of equities, amounts credited following explicit cash borrowing, amounts linked to trading earnings, etc.). It reflects all of the cash movements generated by the traders' activities and not just their trading earnings. It is not possible, by looking at a cash flow balance, to determine the nature of the flows which directly make up such balance.

  If a trader borrowers EUR 500 million in cash on D, his cash flow balance on D+1 will increase by EUR 500 million without any impact upon his earnings. Similarly, if a trader buys equities worth EUR 200 million, his cash flow balance will be reduced by EUR 200 million without any impact upon his earnings.

At the level of the Middle Office in charge of analyzing discrepancies in cash flow balances and refinancing costs between the Front Office and the accounting systems, the procedure in place did not include an analysis by operational center or by activity type, without which the fraud was undetectable.

<u>Table no. 1</u> : Middle Office re-invoiced to GOP 2A up to 20 % of the costs of coverage of securities collateral paid by GEDS to FIMAT Frankfurt



<u>Table no. 2 :</u> There is no correlation between the daily margin calls paid by SG to FIMAT Frankfurt and those paid on behalf of JK up until mid-January 2008

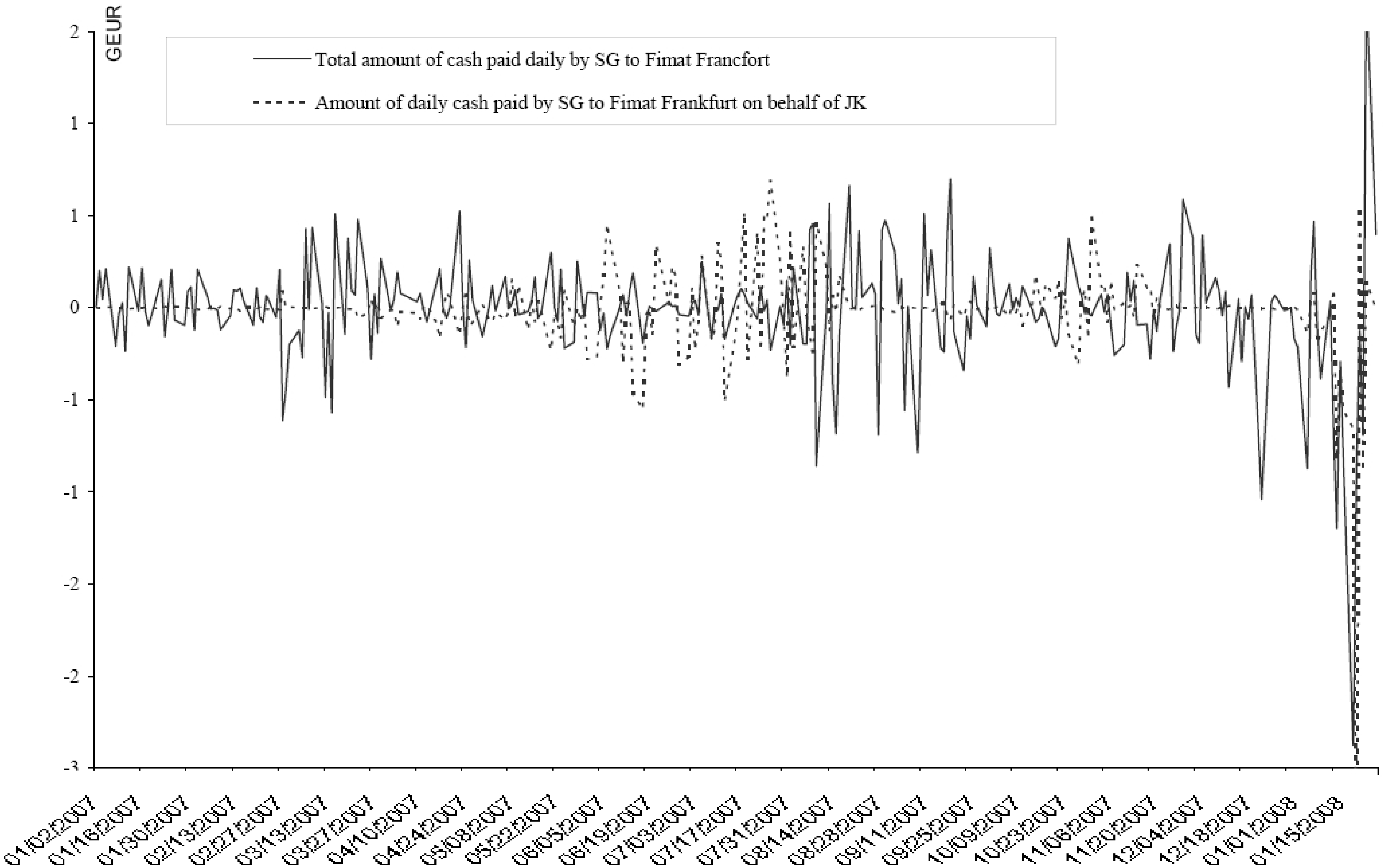


Table no. 3: **There is no correlation between the aggregate margin calls paid by SG to FIMAT Frankfurt and those paid on behalf of JK up until mid-January 2008**

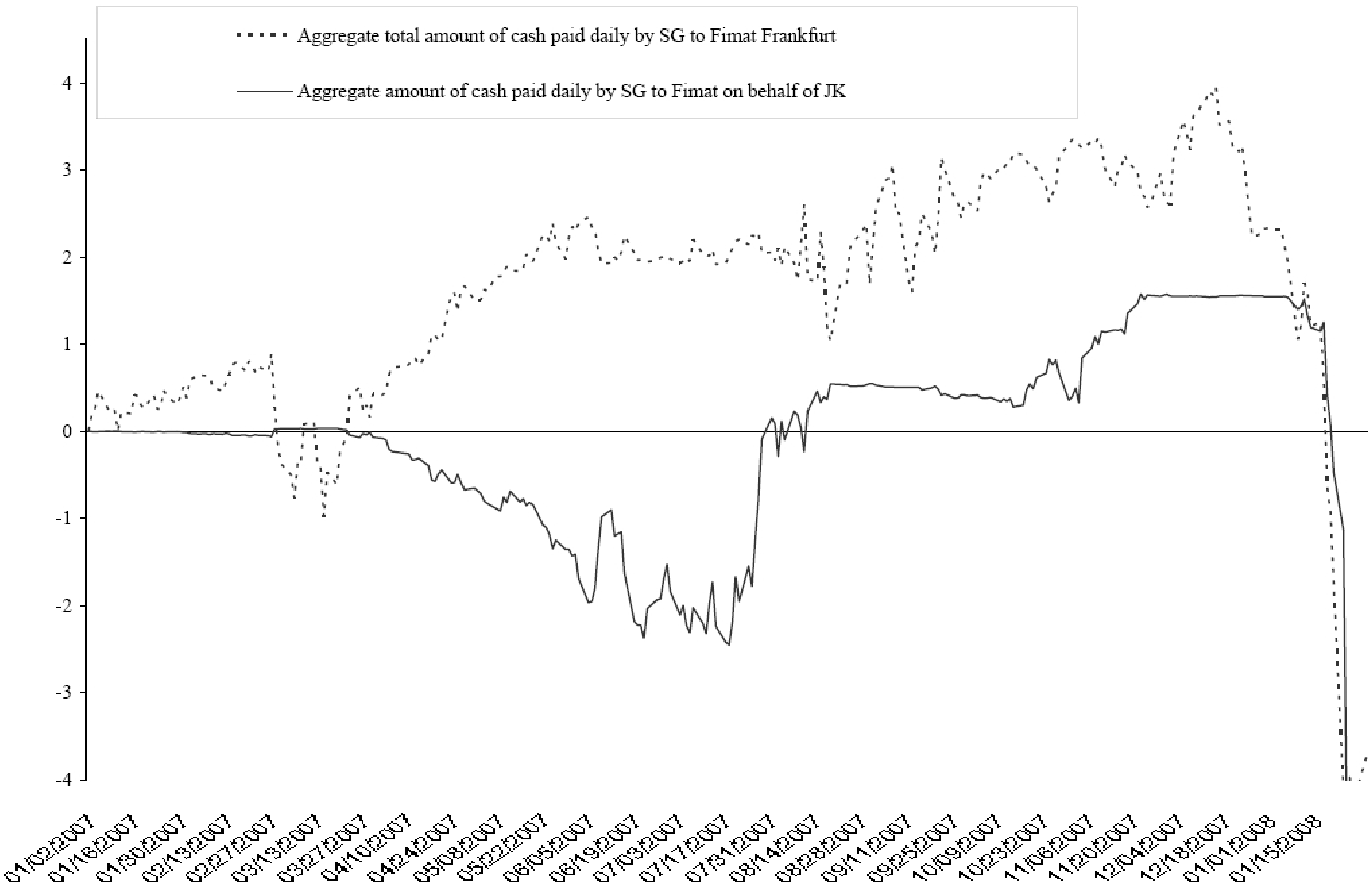
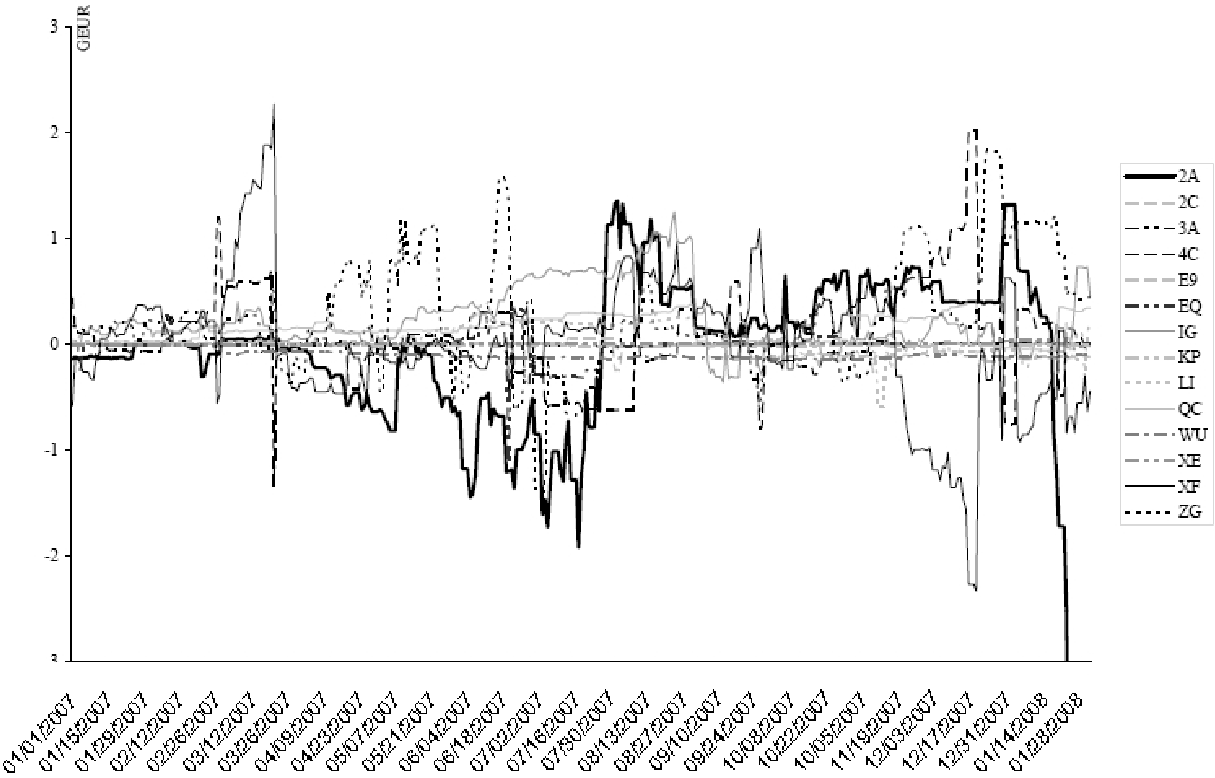
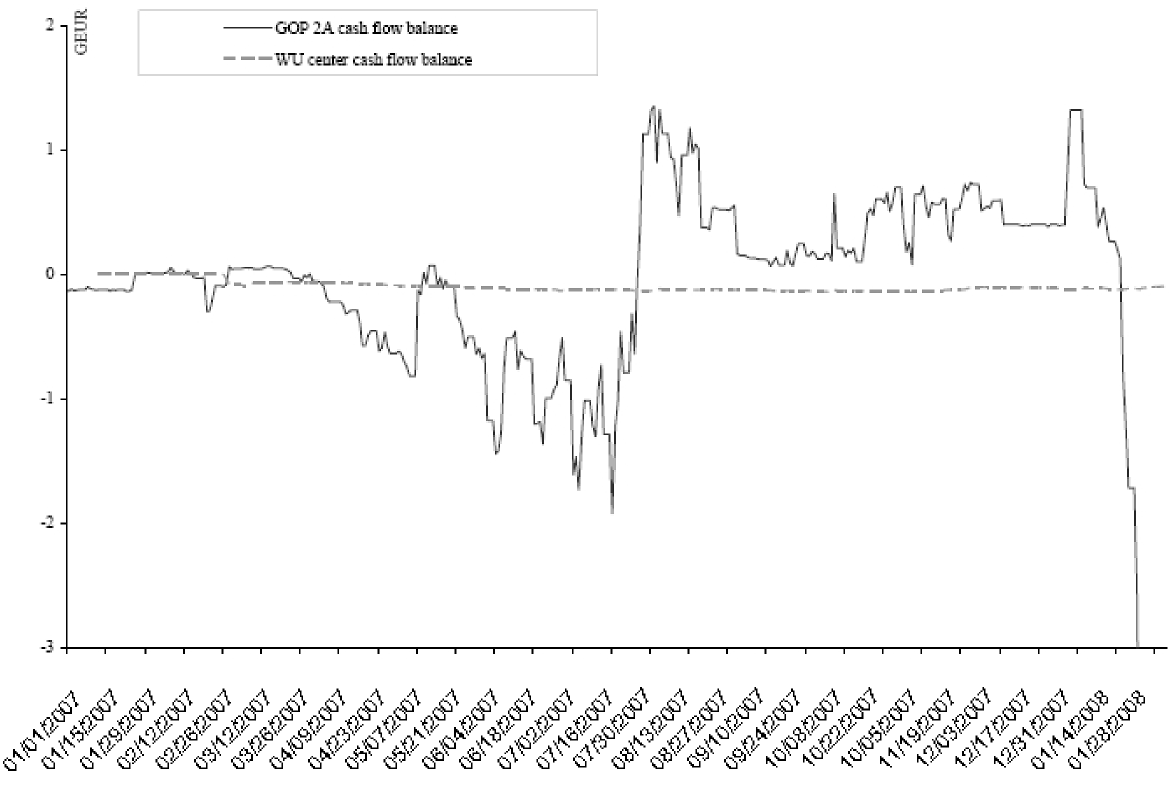


Table no. 4: The GOP 2A cash flow is not abnormal in comparison with that of other GOPs on the DELTA ONE desk.



NB: these graphs were created a posteriori by Mission GREEN, once the fraud had been discovered.

Table no. 5: Comparison of the cash flow balances of centers 2A and WU.



<u>Focus No. 14</u>: Cases of operator error with respect to procedures in force are rare; however, operators did not systematically extend their controls beyond what was called for by procedures.

We have considered as an "alert" any e-mail exchange about JK's transactions having involved control functions and revealing an anomaly. The alerts listed below are considered to be having (i) <u>a direct link</u> to the fraud when a direct link with the fraudulent position has been established, (ii) <u>an indirect link</u> to the fraud when the anomalies revealed by support functions result from numerous transactions which include a few fraudulent trades that contributed in part to the issuance of the alert, or (iii) <u>no established link</u> to the fraud when they are related to JK's activities but it has not been possible to show any link with the trader's fraudulent activities.

We have finally discovered 39 alerts with a direct link to the fraud, further investigation of which could have been liable to identify the fraud, 25 alerts having an indirect link with the fraud, and 10 alerts having no established link to the fraud.

Control	Department	No. of alerts re JK identified (1)	Description of the detected alert (2)	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Front-back / buffer base discrepan-cies	OPER/GED/MID/ DLM	10 alerts between 01/2007 and 10/2007	*January 07/Agent 33*: trades presenting a pending counterparty on JK's portfolios.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	Procedures were followed by Middle Office but no initiative was taken to verify the truth of JK's assertions or to transmit the information to immediate superiors (actions not explicitly called for by procedures).
			January 07/Agent 33: six pending transactions detected in ELIOT on JK's portfolios.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	
			February 07/Agent 33: six pending transactions detected in ELIOT on JK's portfolios.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	
			February 07/Agent 33: four pending transactions detected in ELIOT on JK's portfolios.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	
			April 07/Agent 33: ten pending transactions detected in ELIOT on JK's portfolios.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	

[1] The number shown in the table corresponds to alerts identified by the General Inspection department.
[2] The date indicated in the table corresponds to the date of the first e-mail sent on the subject.

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Front-back / buffer base discrepan-cies	OPER/GED/MID/ DLM	10 alerts between 01/2007 and 10/2007	*May 07/Agent 33*: four transactions rejected by the buffer bank on JK's portfolios.	No established link *The relevant operational center is not within the scope of JK's fraud.*	Procedures were followed by Middle Office but no initiative was taken to verify the truth of JK's assertions or to transmit the information to immediate superiors (actions not explicitly called for by procedures).
			June 07/Agent 34: broker's name not given for GOP 2A trades (JK's main operational center).	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	
			July 07/Agent 34: broker's name not given for trades recorded on JK's portfolios.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	
			October 07/Agent 33: five futures transactions recorded on JK's portfolio appear in the buffer bank with a pending counterparty.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	
			October 07/Agent 34: broker's name not given for four trades booked in one of JK's operational centers.	Direct link *The relevant trades are fictitious and exist only to conceal market risk.*	

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Passerelles	OPER/GED/ PNL/REC/ ACFI/ACR/FCO	13 alerts between 03/2007 and 10/2007	*March 07/Agent 29*: THETYS Back Office application produced a high level of GOP 2A account flow due to four high nominal value transactions (GBP 1,072 m.).	No established link *The relevant trades concern one of JK's operational centers but are not related to the trader's fraudulent position.*	Procedures were followed but no initiative was taken to verify the truth of JK's assertions and of the corrections suggested by him, even when these lacked probability. The superiors failed to react when notified.
			April 07/Agent 35: a residual Front-accounting spread of EUR 95 m. caused by 3 DAX futures with a pending counterparty for EUR 88 m. and by a forward recorded against CLICKOPTIONS for EUR 6 m.	Direct link *Transactions identified as fictitious are the source of the residual spread.*	
			April 07/Agent 7: following the alert listed above by OPER/GED/PNL, numerous e-mail exchanges and a request for proof to the Front Office. An alert was also issued at the accounts committee meeting on the use of fictitious futures and forwards justified by knocked warrants.	Direct link *Transactions identified as fictitious are the source of the residual spread.*	
			May 07/Agent 29 and Agent 35: a price discrepancy appears for warrants knocked at the end of April.	Direct link *Transactions identified as fictitious are the source of the residual spread.*	
			May 07/Agent 29: the method discrepancy at the closing date of April 07 is for – EUR 8 m on a single future.	Direct link *The method discrepancy is linked to JK's fraudulent position.*	
			May 07/Agent 29: OPER reiterates problems encountered with warrants knocked in March and April, mentioning in particular a method discrepancy over 74,000 DAX futures contracts.	Direct link *Transactions identified as fictitious are at the origin of the problems encountered.*	
			May 07/Agent 7: pertinent questions to Middle Office on anomaly caused by knocked warrants.	Direct link *Transactions identified as fictitious are at the origin of the problems encountered.*	

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Passerelles (cont.)	OPER/GED/ PNL/REC/ ACFI/ACR/FCO	13 alerts between 03/2007 and 10/2007	*June 07/Agent 35*: ACFI identifies a sharp rise in method discrepancies on 2A for the May closing of indexed futures.	Direct link *Transactions identified as fictitious are at the origin of the problems encountered.*	
			June 07/Agent 12: alert in the "passerelle" update and e-mail request for explanation to the trader on the above-mentioned discrepancy (3).	Direct link *Transactions identified as fictitious are at the origin of the problems encountered.*	
			July 07/Agent 29: a transaction with a nominal value of EUR 7 bn is booked with a fictitious counterparty (PRE HEDGE) and a EUR 4 bn negative provision flow is identified by OPER.	Direct link *The alerted trade concerns one of JK's portfolios and has been identified as allowing the trader to conceal P&L.*	
			July 07/Agent 29: identification of booking in one of JK's portfolios of a transaction before portfolio historization then cancellation after historization and before release into Back Office applications, creating an earnings discrepancy of EUR 250 m.	Direct link *The technique presented in the alert corresponds to a potential fraud technique but no link with JK's fraudulent position has been established.*	
			August 07/Agent 1: request for details relating to transactions registered against CLICKOPTIONS in ELIOT and modified immediately after data historization (4).	Direct link *The method presented in the alert corresponds to a fraud technique used by JK.*	
			October 07/Agent 1: freeze on flows over EUR 1 bn in SAFE on 2A.	Direct link *The equity sale/purchase transactions at the origin of these flows are fictitious and have been used by JK to conceal P&L.*	

3 The alert concerning the 74,000 DAX futures contracts associated with agent 12 in the interim report dated February 20, 2008 was in fact sent by agent 29 in an e-mail related to "passerelles", also included in the table.
4 Initially made over the telephone, the alert has been listed in this table because JK replied to the agent by e-mail.

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Control of input (deals, flows)	OPER/GED/MID/ DLM	6 alerts between 01/2007 and 01/2008	*May 07/Agent 30*: OPER detected a transaction with a maturity date set for a Saturday in a portfolio belonging to JK.	Direct link *The relevant trade was identified as fictitious.*	Procedures were followed but no initiative was taken to verify the truth of JK's assertions or to transmit the information to immediate superiors (actions not explicitly called for by procedures).
			July 07/Agent 31: no term sheet (*i.e.* trade characteristics) was received for a trade recorded by JK.	Direct link *The relevant transaction was identified as fictitious.*	
			October 07/Agent 31: variations were detected in basket cash amount (basket of equities or indexes including a cash flow component as underlying assets for EMTN) on Delta One.	No established link *No link was identified with JK's fraudulent position.*	
			October 07/Agent 31: other variations were detected in the basket cash amount of Delta One.	No established link *No link was identified with JK's fraudulent position.*	
			January 08/Agent 32: OPER identified a counterparty error between the portfolios and GOP input.	No established link *No link was identified between the alert and JK's fraudulent position.*	
			January 08/Agent 2: characteristics input in ELIOT for two of JK's transactions are not consistent with pre-confirmation sent.	Direct link *The relevant trades were identified as fictitious.*	

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
GMI/clearer recon-ciliation	OPER/GED/ BAC/LIS	1 alert in 02/2007	*February 07/Agent 36*: a GMI/clearer discrepancy was revealed on a GOP 2A trade with Fimat Frankfurt.	Direct link *The trade registered in one of JK's portfolios has been proven to be fictitious.*	Focused on its task of resolving discrepancies, Back Office was satisfied with an email from operational Middle Office indicating that the trade would be cancelled.
Settlement/ delivery	OPER/GED/ BAC/OTC	2 alerts between 06/2007 and 08/2007 (5)	*June 07/Agent 37*: a discrepancy of EUR 1.4 m. is observed on several OTC options during reconciliation with ClickOptions.	Direct link *JK has used fictitious transactions with ClickOptions on numerous occasions to conceal his position; this transaction, registered in one of JK's portfolios, has been identified as fictitious.*	Focused on its task of balancing discrepancies, Back Office contented itself with regularization of discrepancies by operational Middle Office without proof or did not cast a critical eye on the isolated explanations that it was given.
			July 07/Agent 37: a discrepancy of EUR 36 m. is observed on one OTC option during reconciliation with ClickOptions.	Direct link *This transaction, registered in one of JK's portfolios, has been identified as fictitious.*	
	OPER/GED/ BAC/LIS	1 alert in 06/2006	*June 06 Agent 38*: seven trades for the sale/purchase of equities with ClickOptions are abnormally lowered in Eole and are thus rejected by Back Office which asks Middle Office operations to handle these anomalies.	Direct link *The alert relates to fictitious trades registered on JK's portfolios.*	

[5] We have excluded an alert mentioned in the interim report dated February 20, 2008.

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Monitoring of commissions paid to brokers	GEDS/DAI/ TRD/DTO	1 alert in 12/2007	*December 07/J. Kerviel*: the trader asks OPER/GED/MID/TRS for explanations on the high amount of commissions (EUR 1.2 m.) that appears in his CPM.	Direct link *The transactions leading to the creation of JK's fraudulent positions in May-October 2007 were executed via the FIMAT brokerage. So, the increase in brokerage fees observed during this period is at least in part linked to the trader's fraudulent activity, without it being possible to establish the exact amount.*	OPER is surprised at the level of fees indicated in view of the trend of the beginning of the year but focuses on the task given to it by procedures (to verify that sums cited in the CPM actually correspond to invoices) and does not take the initiative to transmit information to immediate superiors.
Inter-group reconciliation	ACFI/ACR/ ACT/CNS	5 alerts between 12/2006 and 06/2007	*January 2007/Agent 39*: a EUR 7 m. earnings discrepancy is created by two options on GOP 2A between SGPM and CLICKOPTIONS.	Direct link *The trades mentioned in the alert are close to concealment techniques used by JK.*	ACFI/ACR/ACT correctly turned to OPER, as procedures dictated, to obtain an explanation of these discrepancies, which were justified to them by an error in counterparty. However, ACFI/ACR/ACT did not take the initiative to transmit information to immediate superiors, even when the amounts were high.
			April 2007/Agent 40: a EUR 7 m. earnings discrepancy is created by forwards on GOP 2A between SGPM and CLICKOPTIONS.	Direct link *The trade indicated in the alert is fictitious.*	
			May 2007/Agent 40: a EUR 242 m. earnings discrepancy is created by forwards on GOP 2A between SGPM and CLICKOPTIONS.	Direct link *The trades mentioned in the alert are close to concealment techniques used by JK.*	
			June 2007/Agent 40: two earnings discrepancies of EUR 1.1 bn and EUR 0.5 bn are created by forwards and options, respectively, on GOP 2A between SGPM and CLICKOPTIONS.	Direct link *The trades mentioned in the alert are close to concealment techniques used by JK.*	
			July 2007/Agent 40: five transactions registered on GOP 2A with CLICKOPTIONS are at the origin of a EUR 0.8 bn earnings discrepancy.	Direct link *The trades mentioned in the alert are close to concealment techniques used by JK.*	

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Analytical accounting review	ACFI/ACR/ACT	7 alerts between 01/2007 and 11/2007	*February 2007/Agent 41*: a substantial variation in a balance sheet account (EUR 1.2 bn) and in an off-balance sheet account (EUR 17 bn) was observed on GOP 2A.	Indirect link *The alert concerns JK's main operational center, which he used to book these fraudulent positions.*	The analytical accounting review consists simply of verification by OPER/GED/PNL that the accounting balances are properly explained by management data.
Analytical accounting review	ACFI/ACR/ACT	7 alerts between 01/2007 and 11/2007	*April 2007/Agent 41*: substantial variations on six balance sheet accounts (nearly EUR 13 bn each) and on two off-balance sheet statements (EUR 52 bn and EUR 54 bn respectively) were observed on GOP 2A.	Indirect link *The alert concerns JK's main operational center, which he used to book these fraudulent positions.*	The analytical accounting review consists simply of verification by OPER/GED/PNL that the accounting balances are properly explained by management data.
Analytical accounting review	ACFI/ACR/ACT	7 alerts between 01/2007 and 11/2007	*May 2007/Agent 41*: a significant variation in balances on two balance sheet accounts (EUR 25 bn and EUR 26 bn) was observed on GOP 2A.	Indirect link *The alert concerns JK's main operational center, which he used to book these fraudulent positions.*	The analytical accounting review consists simply of verification by OPER/GED/PNL that the accounting balances are properly explained by management data.
Analytical accounting review	ACFI/ACR/ACT	7 alerts between 01/2007 and 11/2007	*July 2007/Agent 41*: substantial variations in two balance sheet accounts (EUR 6 bn each) and significant positions on three off-balance sheet accounts (EUR 25, 15 and 15 bn respectively) were reported on GOP 2A.	Indirect link *The alert concerns JK's main operational center, which he used to book these fraudulent positions.*	The analytical accounting review consists simply of verification by OPER/GED/PNL that the accounting balances are properly explained by management data.
Analytical accounting review	ACFI/ACR/ACT	7 alerts between 01/2007 and 11/2007	*October 2007/Agent 41*: substantial variations were observed in the balances in two balance sheet account (EUR 8 bn each) and on two off-balance sheet accounts (EUR 32 bn each) on GOP 2A.	Indirect link *The alert concerns JK's main operational center, which he used to book these fraudulent positions.*	The analytical accounting review consists simply of verification by OPER/GED/PNL that the accounting balances are properly explained by management data.
Analytical accounting review	ACFI/ACR/ACT	7 alerts between 01/2007 and 11/2007	*November 2007/Agent 41*: a substantial variation in two balance sheet accounts (EUR 8 bn and EUR 7 bn respectively) and on two off-balance sheet accounts (EUR 53 bn each) were reported on GOP 2A.	Indirect link *The alert concerns JK's main operational center, which he used to book these fraudulent positions.*	The analytical accounting review consists simply of verification by OPER/GED/PNL that the accounting balances are properly explained by management data.
Analytical accounting review	ACFI/ACR/ACT	7 alerts between 01/2007 and 11/2007	*December 2007/Agent 42*: a significant variation on a balance sheet account (EUR 5 bn) was observed on GOP 2A.	Indirect link *The alert concerns JK's main operational center, which he used to book these fraudulent positions.*	The analytical accounting review consists simply of verification by OPER/GED/PNL that the accounting balances are properly explained by management data.

Control	**Department**	**No. of alerts re JK identified**	**Description of the detected alert**	**Link to the fraud?** ***Comments***	**Why did the control not allow the fraud to be detected?**
Monitoring of counterparty risk	RISQ/CMC/ GEDS/DAI/GSD	2 alerts: 1 in 07/2007, 1 in 01/2008	*July 07/Agent 3, Agent 4 and Agent 5*: a breach of CVAR limits is identified on Counterparty 3 (JK's transaction uses USD 760 m. of the USD 1,230 m. limit for this counterparty).	Direct link *Fictitious transactions recorded on JK's portfolios were at the origin of this breach of the CVAR limit.*	RISQ/CMC fulfilled its duty to the letter by transmitting the alert. GEDS/GSD did not seek to understand the explanation given by JK.
			January 08/Agent 3, Agent 4 and Agent 5: a very high counterparty risk (CVAR of EUR 2.3 bn) is identified for Counterparty 5 as counterparty.	Direct link *Fictitious transactions recorded on JK's portfolios were at the origin of this breach of the CVAR limit.*	
Monitoring of Cooke weighted average (CWA)	ACFI/ACR/ ACT/COK	1 alert in 01/2008	*January 2007/Agent 6*: alert and investigation following 8 transactions on forwards with Counterparty 5 as counterparty, creating a CWA of EUR 3 bn – exchange of e-mails and meeting with the trader.	Direct link *Fictitious transactions recorded on JK's portfolios were at the origin of this breach of the CVAR limit.*	**The alert allowed the detection of the fraud.**

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Monitoring of market risks	RISQ/RDM/EQY	25 alerts between 07/2006 and 09/2007	*July 06/Agent 43*: notification of a delta margin ("*repli*") limit exceeded by EUR 4 m.	Indirect link *One of the relevant portfolios belongs to JK and is within the scope of the fraud.*	RISQ/RDM/EQY attribute the cause of the anomalies to recurring problems in recording transactions in computer systems. They just notify JK and his immediate superiors of the exceeding of the limit and make sure it returns to normal.
			December 06/Agent 44: a delta of EUR -11 m. appears on the ZFL_SPX portfolio.	No established link *One of the relevant portfolios belongs to JK but it has not been possible to link it to the existence of fraudulent positions.*	
			December 06/Agent 44: RISQ/RDM sends a list of portfolios for which delta must be validated.	No established link *It has not been possible to link the breach of limits to the existence of fraudulent positions.*	
			January 07/Agent 46: the margin limit is exceeded by EUR 32 m.	Indirect link *Some relevant portfolios belong to JK and are within the scope of the fraud.*	
			January 07/Agent 44: RISQ/RDM sends a list of portfolios for which delta must be validated.	No established link *No link has been established between the excess related to JK's portfolios and the trader's fraudulent position.*	
			April 07/Agent 44: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *One of JK's portfolios covered by to the alert is within the scope of the fraud.*	
			June 07/Agent 45: a EUR 23 m. breach of the limit is noted.	No established link *No link has been established between the excess related to JK's portfolios and the trader's fraudulent position.*	

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Monitoring of market risks (cont.)	RISQ/RDM/EQY	25 alerts between 07/2006 and 09/2007	*June 07/Agent 45*: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *JK's portfolios concerned by the alert are within the scope of the fraud.*	Idem
			July 07/Agent 44: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *The largest delta concerns one of JK's portfolios, used to record his fraudulent position.*	
			July 07/Agent 44: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *The largest delta concerns one of JK's portfolios, used to record his fraudulent position.*	
			August 07/Agent 47: a EUR -8m sudden increase in stress test risk is identified on the ZFL_ DAX portfolio.	Indirect link *The relevant portfolio belongs to JK and was used to record the fraudulent position.*	
			August 07/Agent 45: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *The three relevant portfolios belong to JK, and the largest delta concerns one of the portfolios used by the trader to record his fraudulent position.*	
			August 07/Agent 45: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *All the portfolios concerned belong to JK and the largest delta concerns one of the portfolios used by the trader to register his fraudulent position.*	

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Monitoring of market risks (cont.)	RISQ/RDM/EQY	25 alerts between 07/2006 and 10/2007	*August 07/Agent 47*: a EUR 0.5 bn sudden increase in stress test risk is identified on the ZFL_ DAX portfolio.	Indirect link *The relevant portfolio belongs to JK and was used to record the fraudulent position.*	Idem
			August 07/Agent 45: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *Four of the portfolios cited in the alert belong to JK, and largest delta concerns one of the portfolios used by the trader to record his fraudulent position.*	
			August 07/Agent 47: the department identifies sudden increase in stress test risk of EUR -35 m. on ZFL_DAX and of EUR 7.7 m. on ZFI_DECADE.	Indirect link *Both portfolios belong to JK and one corresponds to a portfolio used by JK to record his fraudulent position.*	
			August 07/Agent 45: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *Three of JK's portfolios are concerned by the alert and the largest delta concerns one of the portfolios used by the trader to record his fraudulent position.*	
			August 07/Agent 44: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *The three relevant portfolios belong to JK and the largest delta concerns one of the portfolios used by the trader to record his fraudulent position.*	
			August 07/Agent 47: a EUR -34 m. sudden increase in stress test risk is identified on ZFL_ DAX.	Indirect link *The relevant portfolio belongs to JK and was used by JK to record his fraudulent position.*	
			August 07/Agent 44: a EUR 4.6 m. breach of the limit is noted.	Indirect link *Following this alert, JK requests the relaunch of the limit calculations in replication on one of his portfolios.*	

Control	Department	No. of alerts re JK identified	Description of the detected alert	Link to the fraud? *Comments*	Why did the control not allow the fraud to be detected?
Monitoring of market risks (end)	RISQ/RDM/EQY	25 alerts between 07/2006 and 10/2007	*September 07/Agent 48*: the global stress test consumption is EUR -46 m. on Delta One, of which EUR -28 m. is on DELTA-ONE SA2.	Indirect link *The calculated stress test amount is partially linked to the 2A operational center position belonging to JK .*	Idem
			September 07/Agent 48: RISQ/RDM observes a EUR +5.2 m. reduction in risk on the ZDE_DECADE portfolio.	No established link *The risk variation is linked to the purchase by JK of DAX futures contracts that it has not been possible to link to the fraudulent activity.*	
			September 07/Agent 44: RISQ/RDM sends a list of portfolios for which delta must be validated.	Indirect link *The largest delta concerns the ZFI_DAX portfolio in which JK recorded one part of his fraudulent positions.*	
			September 07/Agent 48: the Delta One desk exceeds its stress test limit, essentially due to variations observed on two portfolios (JK_STRAT and ZFL_MINISX5E).	Direct link *The breach is linked to a change in position on Deutsche Bank shares in one of JK's portfolios.*	
			October 07/Agent 49: RISQ/RDM identifies a EUR 10 m. breach in replication, mainly due to Deutsche Bank shares on the JK_STRAT portfolio.	Direct link *The breach is linked to the existence of an overnight position on Deutsche Bank shares in one of JK's portfolios.*	

<u>Focus no.°15</u>: Results of the investigations of the Green 2 Mission.

■ Investigations carried out

Our research and analyses have concentrated exclusively upon:

1) the techniques used by JK: entry and subsequent cancellation of transactions with deferred start dates (1) made against technical or internal SG Group counterparties (CLICKOPTIONS) in order to conceal his positions, booking of intra-monthly provisions, purchase/sale of equities at off-market prices with the aim of concealing the results generated by his directional positions;

2) factors that could have constituted alerts in the case of the fraud perpetrated by JK: correspondence from stock exchanges, low level of absences and/or of vacation, promotion to Front Office of agents with a good knowledge of control measures, unshared trading portfolios, abnormal growth in results or cash flow, position sizes inconsistent with trading strategy.

Investigations covered all of the trading activities of GEDS (including facilitation at the cash equity level) and FICC (including the GASELYS and ORBEO joint ventures), for all locations (Europe, the Americas and Asia).

Activities for which the fraud risks are of a very different kind from those related to trading activities, and whose fraud mechanisms are therefore unrelated to those used by JK, have been excluded: (i) GEDS/CAR brokerage, (ii) GEDS fund management and (iii) FICC financing (lending, securitization, issuance of equities).

The approach adopted consisted of identifying cases to be investigated on the basis of an analysis of all transactions corresponding to the risk criteria defined at 1) above and of the study of the concentration by agent of the alerts defined at 2).

■ Results

Within the perimeters of GEDS and FICC as a whole, our verifications involved 315 agents whose profile required examination further to the various investigations carried out by us: 179 agents were identified within GEDS and 136 agents within FICC (80 in Europe, 42 in Asia and 14 in the Americas).

Through interviews with the relevant Front Office agents, their hierarchical superiors and support staff members, and after verification of the trades and orders concerned, **we have been able to conclude that the fraud mechanisms used by JK have not been used by any other agents involved in the trading activities of FICC and GEDS**.

[1] Transactions for which the first financial exchange or the delivery of securities takes place several days after the negotiation date.