

***Case No COMP/M.5317 -
IBM / ILOG***

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 6(1)(b) NON-OPPOSITION
Date: 10/11/2008

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 10.11.2008

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In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying party:

Dear Sir/Madam,

**Subject: Case No COMP/M.5317 - IBM / ILOG
Notification of 6 October 2008 pursuant to Article 4 of Council Regulation
No 139/2004¹**

1. On 6 October 2008, the Commission received a notification of a proposed concentration pursuant to Article 4 and following a referral pursuant to Article 4(5) of Council Regulation (EC) No 139/2004 ("the Merger Regulation") by which the undertaking International Business Machines Corporation ("IBM", USA) acquires within the meaning of Article 3(1)(b) of the Merger Regulation control of the whole of the undertaking ILOG S.A. ("ILOG", France) by way of public bid announced on 28 July 2008.

I. THE PARTIES

2. The IBM group is active worldwide in the development, production and marketing of a variety of information technology ("IT") solutions - comprising software, computer systems, storage devices, microelectronics - and services, including consulting and IT infrastructure services.
3. ILOG, the target, is a French public company also active in the development of software and technologies and has three principal business lines: business rules management systems, optimisation software and visualisation software. Furthermore ILOG offers supply chain management applications.

¹ OJ L 24, 29.1.2004, p. 1.

II. THE PROPOSED OPERATION AND THE CONCENTRATION

4. On 28 July 2008 IBM announced a public cash tender offer for all issued and outstanding shares in ILOG. IBM's offer will be conditional upon, *inter alia*, the acquisition of at least two thirds of ILOG's issued share capital. Post-transaction IBM will therefore have sole control of ILOG.
5. Thus, the transaction constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

III. COMMUNITY DIMENSION

6. The notified concentration does not have a Community dimension within the meaning of Article 1 of the Merger Regulation². However, on 21 August 2008, the notifying party informed the Commission in a reasoned submission pursuant to Article 4(5) of the Merger Regulation that the concentration was capable of being reviewed under the national competition laws of at least three Member States, namely Austria, Germany, Greece and Italy, as well as possibly Portugal and Spain, and requested the Commission to examine it. None of the Member States competent to examine the concentration indicated its disagreement with the request for referral within the deadline provided by the Merger Regulation.
7. Therefore the concentration is deemed to have a Community dimension pursuant to Article 4(5) of the Merger Regulation.

IV. COMPETITIVE ASSESSMENT

A. Relevant Markets

Market overview

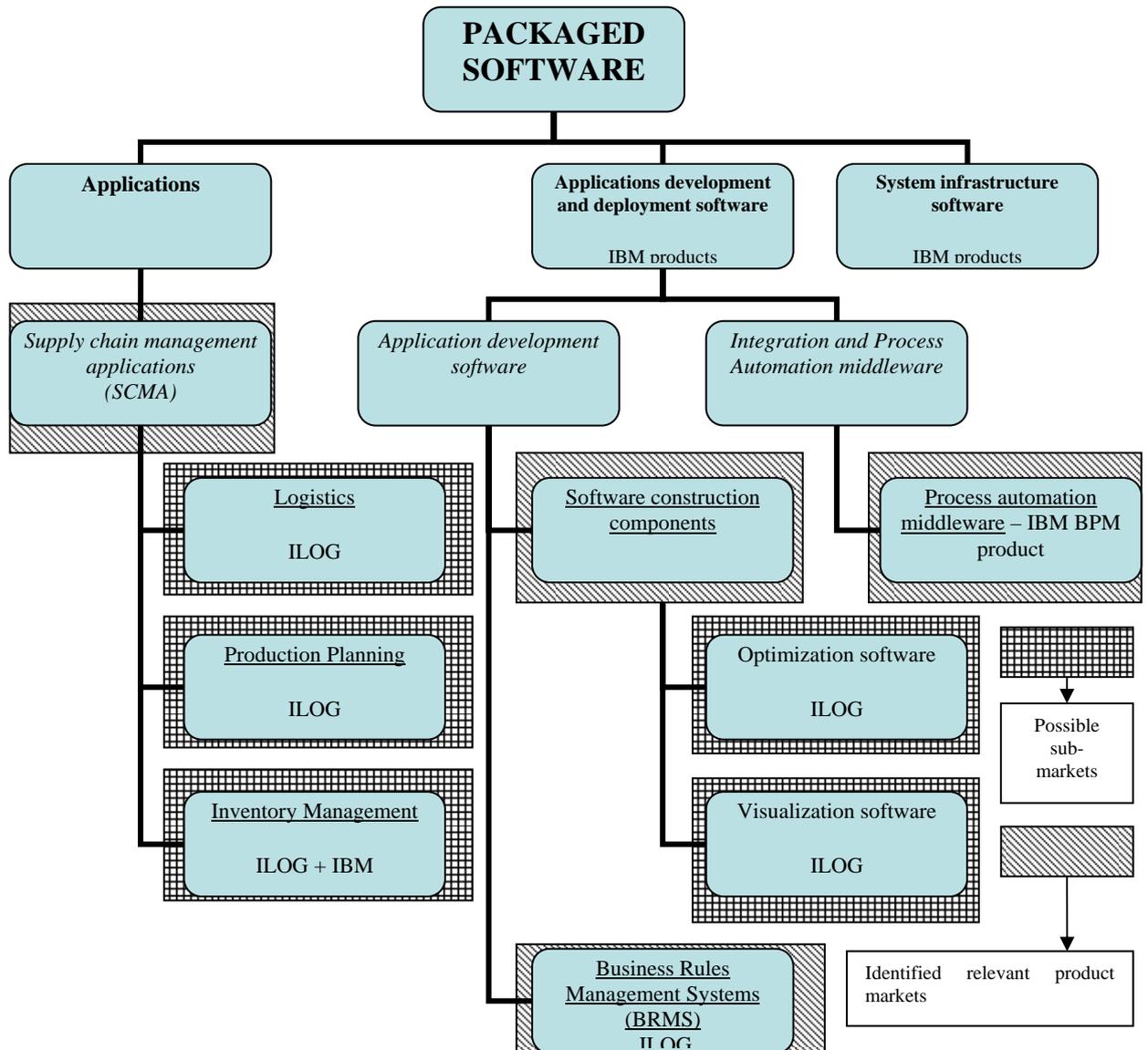
8. The transaction concerns the IT sector and, in particular, the development, production and marketing of packaged software. Consistent with the Commission's practice in previous transactions involving software products³, without recognising that these necessarily constitute relevant product markets, the notifying party has assessed the proposed transaction principally along the software segmentations tracked by the research firm IDC⁴.

² ILOG's Community-wide turnover is €[...] million.

³ See for instance Cases COMP/M.5080 – Oracle/BEA; COMP/M.4350 – Hewlett Packard/Mercury Interactive; COMP/M.3316 – Celestial/MSL; COMP/M.3042 – Sony/Philips/Intertrust.

⁴ The notifying party submitted that, although Gartner's software segmentations have been considered, they appear less meaningful for the present case. IDC and Gartner are independent industry analyst companies covering the IT industry. They collect market data and produce reports in which the overall software market is subdivided into various segments. According to the parties, Gartner software segmentations are less relevant for the present case. Gartner only covers ILOG's business rules management systems ("BRMS") and supply chain management software revenues, while it includes ILOG's revenues from optimisation and visualisation software in a residual "other software" segment, for which no more precise

9. IDC identifies three main categories of packaged software: "applications", "application development and deployment" and "system infrastructure software", which are in turn subdivided in several segments and sub-segments.



10. ILOG is active in business rules management systems ("BRMS"), optimisation software, visualisation software and supply chain management applications ("SCMA").
11. BRMS are software applications that allow business analysts and policy managers to write business rules in a familiar business language and manage them in a central repository. Business applications can then draw on the central business rules repository without it being necessary to rewrite the application's software code each time the

data are available. Moreover, in the parties' view Gartner's classification of ILOG's BRMS revenues in "other AIM software" is not meaningful.

business rules are changed. ILOG's main BRMS customers are banking and insurance institutions, telecommunications companies, auction houses and casinos.

12. Optimization software is mathematical software used to determine how to allocate resources most effectively.
13. Visualization software provides visually rich graphical user interfaces that allow customers to visualize their data.
14. Within the Application Development Software ("ADS") segment, which belongs to the Application Development and Deployment category, IDC assigns ILOG's BRMS products to the "BRMS" sub-segment and both ILOG's optimisation and visualisation products to the Software Construction Components ("SCC") sub-segment. Within the Supply Chain Management Application ("SCMA") segment, which belongs to the Applications category, IDC attributes ILOG's revenues to the three sub-segments of Inventory Management, Logistics and Production Planning.
15. IBM's activities in Business Process Management software ("BPM") can be considered complementary or vertically related to ILOG's activities in BRMS, as BRMS can also be embedded in BPM software solutions (and not only sold as stand-alone products). BPM products allow companies to model, automate, monitor and redesign business processes such as opening a bank account, documenting a medical record or customizing an insurance policy. The stated rationale of the proposed transaction is for IBM to be able to offer customers an enhanced and better integrated BPM/BRMS offering as IBM today does not have sophisticated business rules capabilities or a stand-alone BRMS offering.
16. Another potential vertical relationship exists between ILOG's activities in visualization software and optimization software which can be embedded in products such as IBM's offerings in System Infrastructure Software and Application Development and Deployment Software.

Product market

17. The notifying party submits that the relevant product markets for the purpose of the present case should be defined alongside IDC's classification. According to the notifying party, the following relevant product markets should be identified: (i) process automation middleware; (ii) business rule management systems (BRMS); (iii) software construction components (SCC) (including the three segments (a) optimization, (b) visualization and (c) other); and (iv) supply chain management applications (SCMA) (including (a) inventory management, (b) logistics, and (c) production planning) (see diagonally-shaded boxes in the graph in paragraph 9 above).
18. The market investigation aimed at verifying whether the categories identified could constitute separate markets, and whether the segments in markets (iii) and (iv) should be considered as separate markets.
19. The majority of the respondents considered that the four markets identified above (i) to (iv) can be considered as separate relevant products markets. As regards the further sub-division within the SCC category, the replies from both competitors and customers indicated that optimization and visualization software tend to have separate intended uses and are purchased for different purposes. Furthermore, larger producers can

provide both optimization and visualization software, whereas some smaller "niche" players normally only offer one or the other product. In relation to the SCMA category, a number of respondents stressed that the three sub-segments could be considered as belonging to the same market.

20. It follows from the above that the four markets for (i) process automation middleware; (ii) business rule management system; (iii) software construction components and (iv) supply chain management applications can be identified. It can be left open for the purpose of the present decision whether the SCC and SCMA markets should be further segmented as the proposed concentration would not raise any competition concerns under any alternative market definition.

Geographic market

21. The notifying party submits that the geographic scope of the relevant markets is worldwide. In particular it mentions that all leading software suppliers compete and distribute their products globally, that customer requirements are globally similar, that transport costs are negligible, that no significant barriers to trade exist and that maintenance and support can be provided from any geographic location.
22. The Commission in previous decisions has also taken the view that, as regards software markets, the geographic scope is global.⁵ The market investigation conducted in the present proceeding confirmed that both competitors and customers – except one competitor - of the parties consider all the relevant markets as global in scope.
23. For the purpose of the present decision, the transaction will be assessed under a worldwide geographic scope for each relevant product market.

IV. COMPETITIVE ASSESSMENT

A. Horizontal issues

24. The vast majority of ILOG's revenues (EUR [...] million or [70-80]% of total sales in the last financial year) are contained in IDC's ADS segment. More precisely they are derived from BRMS (EUR [...] million or [30-40]%) and SCC (optimisation software (EUR [...] million or [20-30]%) and visualisation software (EUR [...] million or [10-20]%).
25. There is no horizontal overlap between IBM's and ILOG's respective software offerings (except according to IDC data, a small overlap in SCMA). Below IDC's segments "Application Development and Deployment software" and "Applications software" are assessed in turn.

Application development and deployment software: ILOG's activities in BRMS and SCC / IBM's activities in process automation middleware (BPM)

⁵ See Commission decisions in Case COMP/M.4747 - IBM/Telelogic and in Case COMP/M.5080 – Oracle/BEA.

26. The merging parties' activities only overlap horizontally when considering the market consisting in IDC's segment "application development and deployment software". However, the parties have a combined market share at the worldwide level in 2007 of around 20%, with ILOG's increment limited to about 2%⁶.
27. At a narrower level, the parties' offerings do not appear substitutable with each other, but rather complementary. When considering the sub-segments within IDC's ADS segment, the transaction does not lead to any horizontal overlaps, as IBM's BPM product fall under the "process automation middleware" sub-segment, whereas ILOG's products fall under the BRMS sub-segment and the SCC sub-segment (visualisation software and optimisation software).
28. Hence, while ILOG has higher market shares in the case of an assessment at the narrower level of ADS sub-segments (BRMS: 25% worldwide; SCC: 20% worldwide), such assessment also results in the absence of horizontal overlaps as IBM is not active in these sub-segments. With regard to ILOG's position in SCC, the parties are unable to provide market shares broken down for each of optimisation software and visualisation software. However, the notifying party argues that ILOG's position is overstated by IDC and that it should not be more important in those respective segments than in SCC overall. This allegation is based on the fact that IDC's SCC category does not take into account suppliers that ILOG sees as its most important competitors; it does not take into account constraints exercised by open source software; it does not control or appropriately allocate revenues derived from bundled software packages, and does not take into account that ILOG is the only supplier offering two different types of software in the sub-segment SCC with all competitors only supplying one kind of software. Consequently, the notifying party submits that ILOG's market share should be significantly smaller than the 20% globally as indicated by IDC. In any event, given the absence of a horizontal overlap with IBM's activities, the operation does not raise any competition concerns from a horizontal perspective in either of these segments.
29. Conversely, IBM is active in other areas within the Application Development and Deployment Software category (in particular IBM's BPM products), where ILOG is not active.

Applications: SCMA

30. Within IDC's Applications segment, according to IDC data, the parties overlap only in SCMA, more particularly at the level of the sub-segment of Inventory Management. While IBM is active in other areas within IDC's Applications sector, ILOG is not.
31. Within SCMA, ILOG's activities cover all three sub-segments: Logistics, Production Planning, and Inventory Management⁷ According to IDC, IBM is only active in the

⁶ Source: IDC.

⁷ Logistics, defined as application software automating "activities relating to moving inventory or materials of any type. Examples include software that automates distribution resource planning, warehouse management and transportation planning business processes that are not specific to an industry".

Production planning, defined as application software automating "activities related to the collaborative forecast and continuous optimization of manufacturing processes. PP applications span supply planning,

Inventory Management sub-segment. According to IDC data, an overlap would therefore occur in relation to SCMA's sub-segment Inventory Management. However, the notifying party submits that IBM is not aware of having any software offering that could fairly be characterised as falling within IDC's SCMA segment. If the assessment were based on Gartner data no horizontal overlaps would occur.

32. In any event, regardless of whether IBM has overlapping activities in inventory management or not, the parties' 2007 combined worldwide market share at any level of SCMA would remain negligible (0.2% both at SCMA's sub-segment of Inventory Management and at the level of SCMA).

Conclusion on horizontal issues

33. The market investigation did not identify any possible concerns in relation to the markets where the small horizontal overlaps could be identified.
34. In conclusion, the proposed transaction does not raise any serious doubts as to its compatibility with the common market in relation to horizontal effects.

B. Vertical or conglomerate issues

35. The transaction gives rise to potential vertical or conglomerate links, as IBM is active in software products that are downstream or neighbouring to ILOG's software offerings.
36. More precisely, there are vertical or conglomerate relationships between ILOG's BRMS offering and IBM's BPM offerings. In addition, ILOG's optimisation software can be embedded in supply chain management applications, where IBM is active. Finally, ILOG's visualisation software can also be embedded in various software offerings such as operating and events processing software. By contrast, as ILOG's SCMA offer is sold as stand-alone applications exclusively to end-users, there is no possible vertical link with any of IBM's activities in the packaged software area.

Potential link between ILOG's BRMS offerings and IBM's Process automation middleware (BPM) offerings

37. As indicated above, the notifying party submits that ILOG's BRMS software is mostly sold to end users such as banking and insurance institutions that employ it to write and manage their internal business rules, but can also be embedded in BPM offerings of software vendors such as IBM.

demand planning, and production planning within organizations. These applications identify demand signals, aggregate historical data that informs short- and long-term demand expectations, and provide supplier capabilities across multiple manufacturing sites. Production planning application software is key to any supply chain management initiative because supply and demand planning dictates the rest of the supply chain activities".

Inventory management, defined as application software automating "activities relating to managing physical inventory, whether direct or indirect; raw, in process, or finished; as a result of or flowing into a product supply chain-specific business process; or in support of performing a service. This includes inventory control materials management business processes in any industry, not just in manufacturing".

38. Contrary to other software markets, the notifying party states that in the BRMS sub-segment sale proposals are usually made on the basis of list prices combined with discount policies. According to the notifying party, only some larger customers, integrators, and public authorities from time to time engage in bid processes, especially for higher-value BRMS projects. Therefore the notifying party argues that the software markets relevant for the proposed transaction do not show the patterns of bidding markets. Furthermore, the notifying party states that the majority of ILOG's revenues is derived from ongoing royalties rather than new licenses (existing customers currently account for [70-80]% of BRMS license revenues). Market shares can therefore reasonably be considered as meaningful indicators of the competitive situation in the relevant markets.
39. ILOG's market share in 2007 for BRMS is around 25% while IBM's position in the Process automation middleware sub-segment (which includes BPM) is around 13% on the basis of IDC data.
40. According to the notifying party, IBM will not have the ability or incentive to leverage ILOG's position in BRMS to impede effective competition in any of IBM's software activities and conversely.
41. As far as the risk of input foreclosure for competing BPM software suppliers is concerned, ILOG has no significant market power in the BRMS market. It faces competition from several companies, including Fair Isaac (market share of approximately 20%), Computer Associates (approximately 13%) and a number of smaller companies which have market shares between 2% and 5%. The market investigation revealed that the clear majority of customers consider Fair Isaac as the first competitor of ILOG for BRMS, while a number of other companies are considered as an alternative (Pegasystems, Corticon, Computer Associates, Haley, the "Drools" product).
42. In addition, the notifying party states that post-merger IBM would have the incentive to continue to offer ILOG's products on a standalone basis, as IBM has a reputation for open standards and would have no incentive to restrict upstream sales of ILOG's products. As the market investigation has shown, ILOG has a number of competitors, and entry in this segment is not considered to be difficult. IBM would therefore merely force competing software vendors to switch to alternative providers of BRMS and no additional revenues in IBM's other software activities would be likely to offset the foregone sales of ILOG products.
43. When considering a risk of customer foreclosure for competing BRMS suppliers, IBM's share of demand for BRMS is limited on the respective BPM downstream market. In the Process Automation Middleware sub-segment IBM holds a market share of approximately 13% according to IDC. Given the low demand for BRMS represented by IBM, it is unlikely that, post-merger, if IBM sourced exclusively from ILOG, ILOG's competitors could be excluded from an important customer for their products. None of ILOG's competitors raised any concerns in relation to customer foreclosure in this segment during the market investigation

Potential links between ILOG's optimisation software and IBM's SCMA offerings, and between ILOG's visualization software and IBM's offerings in Application development and deployment software and System infrastructure software

44. The notifying party states that optimisation and visualisation software are sold both to end-users developing their own internal applications and to software vendors (possibly competitors of IBM) who use ILOG's components to develop applications for sale to third parties.
45. The notifying party states that also in the SCC sub-segments sale proposals are usually made on the basis of list prices combined with discount policies. Optimisation software and visualisation software in particular are generally purchased "off-the-shelf" following bilateral negotiations on discounts from list prices. Therefore the notifying party argues that also the SCC sub-segments do not show the patterns of bidding markets. Furthermore, the majority of ILOG's revenues is derived from ongoing royalties rather than new licenses ([80-90]% of optimisation license revenues and [80-90]% of visualisation license revenues). Market shares can therefore reasonably be considered as meaningful indicators of the competitive situation in the relevant markets.
46. According to the notifying party, none of the vertical or conglomerate relationships are likely to raise any competitive concerns. IBM will not have the ability or incentive to leverage ILOG's position to impede effective competition in any of IBM's software activities.
47. First, with regard to a risk of input foreclosure, ILOG has no market power in any of the product markets where it is active. ILOG's global market share in the overall SCC market is around 20%. It has been submitted that this share substantially overstates ILOG's position, since IDC does not take into account a number of vendors which ILOG considers as its main competitors. The market investigation confirmed that customers consider as possible alternative sources for optimization or visualization software a number of companies (among which Fair Isaac (Dash) and Lindo Systems for optimization software and Tom Sawyer and Yworks for visualization software) and open-source software, which are not mentioned in IDC's list of SCC sales. It can reasonably be argued that ILOG's market share in this segment could be considered as lower than 20%.
48. Furthermore, the market investigation revealed that barriers to entry in this sector are not excessive (being essentially the technical expertise), especially in the visualization software segment, and that this market is not saturated and is likely to expand in the coming years. The market investigation also confirmed that a number of alternative suppliers provide software similar to that of ILOG and ILOG's products do not constitute an irreplaceable input.
49. Secondly, the notifying party claims that many customers of ILOG's optimisation and visualisation software benefit from long-term licenses and can thus continue post-merger to use ILOG's products under existing agreements on existing terms. The market investigation confirms that, in several cases, ILOG has granted very long (even perpetual) licenses for the use of its software. The merged entity would therefore not have the ability to foreclose these competitors of IBM by refusing them or making access more difficult to ILOG's products.
50. Thirdly, the notifying party states that IBM would have the incentive to continue to offer ILOG's products as standalone products post-merger, as IBM has a reputation for open standards and would have no incentive to restrict upstream sales of ILOG's products post-merger. IBM would therefore merely force competing software vendors to switch

to alternative providers of visualization and optimization software and no additional revenues in IBM's other software activities would offset the foregone sales of ILOG products.

51. Moreover, with regard to a risk of customer foreclosure for competing suppliers of visualisation and optimisation software, the notifying party states that IBM's share of demand is minimal on each of the respective downstream markets. In the SCMA market, its share is <1%, whereas in the overall software sector IBM holds a market share of approximately 8%, according to IDC.

Conclusion on vertical or conglomerate issues

52. In the course of the market investigation, no customer or competitor of ILOG or IBM expressed serious concerns as regards the possible anti-competitive effects of the proposed transaction.
53. It follows from the above that the concentration does not raise any serious doubts as to its compatibility with the common market in relation to possible vertical or conglomerate effects.

V. CONCLUSION

54. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation (EC) No 139/2004.

For the Commission

(signed)
Neelie KROES
Member of the Commission