

***Case No COMP/M.3062 -
IBM / RATIONAL***

Only the English text is available and authentic.

**REGULATION (EEC) No 4064/89
MERGER PROCEDURE**

Article 6(1)(b) NON-OPPOSITION
Date: 20/02/2003

*Also available in the CELEX database
Document No 303M3062*



COMMISSION OF THE EUROPEAN COMMUNITIES

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EEC) No 4064/89 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 Where possible the information omitted has been replaced by ranges of figures or a general description.

Brussels, 20.02.2003
SG (2003) D/228579

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying party

Dear Sir/Madam,

Subject: Case No COMP/M. 3062 – IBM/Rational
Notification of 17.01.2003 pursuant to Article 4 of Council Regulation
No 4064/89¹

1. On 17 January 2003, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No 4064/89² by which the undertaking International Business Machines Corporation (“IBM”, USA) acquires within the meaning of Article 3(1)(b) of the Council Regulation control of the whole of the undertaking Rational Software Corporation (“Rational”, USA) by way of purchase of shares.
2. After examination of the notification, the Commission has concluded that the notified operation falls within the scope of the Merger Regulation and that the concentration does not raise serious doubts as to its compatibility with the common market and with the EEA agreement.

I. THE PARTIES

3. IBM is active in the development, production and marketing of IT systems, equipment, services and computer softwares, including software development tools.
4. Rational is a software company which develops and markets software development tools.

II. THE OPERATION AND THE CONCENTRATION

5. The notified operation consists of the acquisition by IBM of the sole control over the whole of Rational. As a result of the operation, Rational will become a wholly owned subsidiary of IBM. The operation therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

III. COMMUNITY DIMENSION

¹ OJ L 395, 30.12.1989 p. 1; corrigendum OJ L 257 of 21.9.1990, p. 13; Regulation as last amended by Regulation (EC) No 1310/97 (OJ L 180, 9. 7. 1997, p. 1, corrigendum OJ L 40, 13.2.1998, p. 17).

² OJ L 395, 30.12.1989 p. 1; corrigendum OJ L 257 of 21.9.1990, p. 13; Regulation as last amended by Regulation (EC) No 1310/97 (OJ L 180, 9. 7. 1997, p. 1, corrigendum OJ L 40, 13.2.1998, p. 17).

6. The combined aggregate world-wide turnover of the undertakings concerned exceeded EUR 2.5 Bio in 2001 (EUR 102.9 Bio for IBM and EUR 0.78 Bio for Rational)³. In each of at least three Member States, the combined aggregated turnover of the undertakings was more than EUR 100 million in 2001 ([...]). In each of these three Member States, the aggregated turnover of each of the undertakings was more than EUR 25 million in 2001. In [...], IBM's turnover was EUR [...] and Rational's turnover was EUR [...]; in [...], IBM's turnover was EUR [...] and Rational's turnover was EUR [...]; and in [...] IBM's turnover was EUR [...] and Rational's turnover was EUR [...]. The aggregated Community-wide turnover of each of these undertakings was more than EUR 100 million in 2001. (IBM: EUR [...]; Rational: EUR [...]).
7. Furthermore, none of the parties to the concentration achieves more than two thirds of their aggregated Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension according to Article 1(3) of the Merger Regulation..

IV. COMPATIBILITY WITH THE COMMON MARKET

A. Relevant Product and Geographic Markets

8. Both parties are active in developing and marketing software development tools. These softwares are aimed at helping programmers to develop their own softwares. Customers are in-house enterprise software developers, independent software vendors or systems integrators. In particular, these tools enable developers to build visual models describing what features the software should contain, how it should work, to structure code development and to manage application development projects, to write code and to test applications on various software deployment platforms as well as to manage the different releases of the software.
9. Deployment platforms, referred to as “target” (or “runtime”) platforms, are those on which the applications being developed will finally run. In distributed environments, these platforms are in most cases based either on Microsoft .NET environment, operating only on Microsoft operating systems, or on Java platforms. The developed applications, once deployed, are managed by application servers (softwares that manage and optimise the working of the applications when faced with a heavy flow of requests coming from distant users connected to the server via a network). In the Java platform, the main application servers have been developed by Oracle, BEA and IBM. IBM markets its own Java-based application server, called Websphere on J 2 Enterprise Edition (J2EE). Microsoft also develops application servers for the Microsoft.NET platform.
10. Two broad categories of software development tools are commonly distinguished within the IT industry: (a) Application Design and Construction (AD&C) tools and (b) Application Life-cycle Management (ALM) tools. The first category is itself divided into the following segments: Application, Modelling, Design, and Construction tools (AMD&C), Third-generation language tools (3GL), Unified Development Environment tools (UDE), Software Construction Components (SCC), and Web Professional Development tools (WPD). AMD&C tools, notwithstanding the inclusion of *Construction* in the title of this segment, relate to tools dedicated to design and modelling of the application, i.e. the conception part, whilst the other segments relate to the building of the application. The second category is divided between Automated Software Quality tools (ASQ), and Software Configuration Management tools (SCM tools). Indeed, all

³ Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C66, 2.3.1998, p25).

those segments relate mainly to the different stages undergone when developing a software: analysis, design/modelling, building and testing. Throughout the software development process, developers may also have recourse to a “library” control system (or configuration management tools) in order to co-ordinate the development process within the team.

11. The parties offer AMD&C, 3GL, UDE, ASQ and SCM tools, but are not active in the SCC and WPD segments, or only marginally. While they do not acknowledge that these various segmentations constitute relevant markets, the notification nevertheless addresses software development tools on the basis of these distinctions. The parties however reject any sub-segmentation of these categories in order to define relevant products markets. In particular, they argue that the deployment platform for such softwares is irrelevant to the market definition exercise. In addition, the parties submit that, for all software development tools, the relevant geographic market is world-wide given the small transport costs relative to price, the similarity of consumer preferences, product specifications and patterns of sales of most major manufacturers. The market investigation confirmed to some extent the definition proposed by the parties but seemed to indicate that the deployment platform mattered for relevant market definition purposes.

AMD&C tools

12. AMD&C tools are employed in the analysis and design/modelling stages of software development. At the analysis stage, these tools assist in determining the functionality required by the software under development by allowing functionality requirements to be collated and visualised. During the design/modelling stage, the details of the software are then mapped out by generating data definitions, programming specifications and code. The parties acknowledge that AMD&C tools cannot be substituted for building (3GL, UDE, WPD or SCC) tools, testing (ASQ) tools or library (SCM) tools.
13. The parties have argued that no further delineation of AMD&C tools should be made on the basis of the targeted platform. At the analysis stage, software development tools are platform-agnostic so that the same tool can be used irrespective of the platform used. Moreover, several tool vendors provide support for both software deployment platforms (Windows/.Net and Java-based application servers).
14. The results of the Commission’s market investigation suggest, to some extent, a delineation of the AMD&C tool market according to the targeted platform. Whereas, at the analysis stage, AMD&C tools appear to be platform-agnostic, such development tools may require some code-generation for the purpose of the modelling/design phase in order to interoperate with the targeted platform. To the extent such tools generate code, they require tool vendors to have access to some of the application programming interfaces (APIs) for deployment on the targeted platform. Moreover, tool vendors providing products that support for both platforms may have to offer the same product in two versions (one for .Net and J2EE platforms). On the other hand, data submitted by the parties suggest that some of Rational’s AMD&C tools enable modelling and code generation for deployment in both .NET and Java environments in a single version, and that the cost and time to adapt a tool developed for one platform to another software may not be significant.
15. As regards demand-side considerations, the market investigation indicated that initial decisions by customers on software platform and hardware may largely drive future selection of software tools, in particular for the purpose of modelling/design, since developers must choose the programming language in which a specific application will be written. However, customers may also have a mixed IT environment, thereby obliging in-

house software developers to develop applications for multiple platforms. In that respect, according to an independent survey⁴, at least 20 % of developers target both the Java platform and the .NET architecture.

16. Nevertheless, for the purpose of the present case, the exact product market definition can be left open as, on the basis of all possible products market definitions; the proposed transaction will not generate any competition problems.
17. In line with previous decisions relating to the IT software industry⁵, the relevant geographic market for software development tools appears to be at least EEA-wide. It is not necessary to define precisely the geographical scope of the market as whatever the definition retained, the notified operation does not give rise to any competition concern.

3 GL tools and UDE tools

18. 3 GL tools, as well as UDE, WPD and SCC tools are employed in the “build” phase of software development. The build stage involves writing the software code and may also involve certain basic testing of the application (“de-bugging”). Building tools provide, at their simplest, edit and compiler functionality when writing an application’s code, whilst more advanced tools contain ready-to-use code sequences and can automatically generate code.
19. Since such tools may generate code, they require access to some APIs for allowing a proper deployment on the targeted platform. Indeed, the parties acknowledge that software tool vendors provide different versions of their build tools depending on the target platform chosen by the software developer. For the reasons stated above, this would suggest, a delineation of the market according to the targeted deployment platform. However, there is no need to determine the precise delineation of the relevant product market since, on the basis of all plausible product market definitions, the proposed transaction will not generate any competition problems.
20. The market investigation also confirmed that 3 GL and UDE tools could not be substituted for analysis and design (AMD&C) tools, test (ASQ) tools or library (SCM) tools. The parties submit that there may be a degree of demand-side substitutability between 3 GL and UDE tools. However, there is no need to determine the precise delineation of the relevant product market as the proposed transaction will not generate any competition problems whether there is a single relevant market that includes both 3GL and UDE together or one for each of these categories of sotwares.
21. As for other software development tools, the geographical market appears to be at least EEA-wide.

ASQ tools

22. ASQ tools are employed at the “test” stage of software development and enable to identify code errors (“de-bugging”) or to ensure that the software will operate successfully on the intended deployment platform. They provide an automated way to perform such tests.
23. ASQ tools must test the written code in the target environment and, similarly, tool vendors need access to the deployment platform's APIs in order to develop and market competitive tool products. Although test tool vendors may provide multiple platform

⁴ Evans Data Corp. June 2002 (Enterprise Development Management Issues).

⁵ Case IV/M.2024, Invensys/BAAN, par. 13-14.

support in a single product version, demand-side considerations also suggest a delineation of the market according to the targeted deployment platform. However, for the purpose of the present case, the exact product market definition can be left open, as, on the basis of any plausible product market definition, the proposed transaction will not generate any competition problems.

24. As for other software development tools, the geographical market appears to be at least EEA-wide.

SCM tools

25. SCM tools are library system tools that enable elements of the application to be stored and retrieved during development and facilitate the development's team management of the development process by, for example, controlling version changes by each programmer on a software development project. The ability to access the library from a remote site enables developer teams in different locations to work on the same development project.
26. By contrast to other software development tools, SCM tools do not need to interoperate with the target deployment platform and therefore appear to be platform-agnostic.
27. As for other software development tools, the geographical market definition appears to be at least EEA-wide.

B. COMPETITIVE ASSESSMENT

28. The merger will lead to limited or even no overlaps in the relevant markets, irrespective of whether the markets are sub-delineated based on the targeted distributed platform (Java vs.NET), since IBM is mainly present on markets corresponding to the building stage of the software development process (3GL, UDE tools) whilst Rational markets products which are used for the analysis and design of software applications (AMD&C), as well as for the testing (ASQ tools) and the management of the software development process (SCM tools). As these various markets are inter-related, this decision examines both horizontal and conglomerate/vertical effects.

Horizontal effects

29. As regards AMD&C tools, the parties' combined share of 2001 sales of AMD&C tools was 32% world-wide and around 30% in the EEA, reflecting a minor increment brought by IBM of around 1%⁶. The increment remains marginal in case of a definition based on the targeted platform. The parties have further argued that these figures also fail to reflect Microsoft's strong presence on this market (whose products are used by more than 36% of enterprise developers world-wide)⁷, as well as the importance of in-house developed tools in the AMD&C category. Whilst Rational/IBM will remain in a leading position on this market, it will however face the continued presence of well-established suppliers such as Borland (9% in Western Europe), Telelogic (8% in W-E), Oracle (8% in W-E), as well as a large number of small suppliers accounting for more than 30% of the overall sales. In any case, it can be excluded that this horizontal overlap of a marginal nature may bring any creation or strengthening of a dominant position.

⁶ Source: International Data Corporation (IDC). IDC is a provider of technology intelligence, industry analysis, market data, and strategic and tactical guidance to builders, providers, and users of information technology.

⁷ Evans Data Corp. at p. 194.

30. With regard to 3 GL tools, the parties' combined share of 2001 sales accounted for 27% world-wide and 31% in Western Europe, reflecting a minor increment of less than 1% from Rational⁸. The increment remains marginal in case of a definition based on the targeted platform. Therefore, although the merged entity will remain the leading tool vendor on the market, there will be no significant change in that respect as a result of the concentration. In addition, IBM will continue to face well-established competitors such as HP (14% in W-E), Microsoft (10% in W-E) or Fujitsu and Sun Microsystems, as well as smaller companies which, nevertheless, accounted for more than 26% of the sales in W-E.
31. On the market for UDE tools, the overlap between the parties' offerings will be minimal and will only result from Rational's recent acquisition of NeuVis which only represented less than 0.1% of the sales world-wide in 2001 (and no sales in Western Europe). In any case, IBM will remain the second player on the market (13% world-wide and 11% in Western Europe in 2001), behind Microsoft (21% world-wide; 19% Western Europe) and will continue to face competitors such as SAS Institute (7% in Western Europe), Oracle (5%), Borland (4%) as well as a large number of small tool vendors (aggregate sales of 37%). Therefore, it can be excluded that the notified concentration may create or strengthen a dominant position.
32. Some horizontal overlap will also occur on the market for ASQ tools, where Rational's market shares (15% world-wide or Western Europe in 2001) will add to IBM's more limited presence (4% world-wide and Western Europe in 2001). However, Mercury Interactive (28% world-wide and 25% in Western Europe) will maintain a stronger position on this market, as well as Compuware if considered world-wide (19%; 14% in Western Europe).
33. Finally, as concerns SCM tools, the parties' combined share of 2001 sales represented 38% world-wide and 36% in Western Europe, reflecting an increment of 2% for IBM sales of SCM tools for its legacy platforms. It can therefore be excluded that this horizontal overlap of a marginal nature may bring any creation or strengthening of a dominant position. In addition, IBM will continue to face competition from well-established suppliers such as Merant (13%), Telelogic (11% in Western Europe, and 6% world-wide), Serena Software (10% world-wide and 6% in W-E) or from other companies such as Microsoft, Computer Associates, and other smaller companies (aggregate sales accounting for 19% of the sales in Western Europe). Furthermore, the parties argue that, in any case, those figures do not accurately reflect Microsoft's presence on the market through products that combine SCM tools with other tools. According to IDC, 40% of developers primarily use these Microsoft integrated products for SCM.

Conglomerate/Vertical effects

34. Despite the fact that, with respect to horizontal effects, the concentration will thus not bring any substantial change on the markets concerned irrespective of any further delineation based on targeted platforms, the Commission has also investigated whether the increase in the range of software development tools which would be offered by IBM could raise conglomerate concerns, and/or whether the transaction would enable IBM to leverage Rational's presence on a given market on the neighbouring markets, or vice versa.

⁸ Source: IDC.

35. As regards conglomerate aspects, this acquisition will enable IBM to widen its offer of software development tools. However, it seems unlikely that IBM will have the incentives to impose on the market a bundling of some of its software development tools with Rational's products, such as SCM and AMD&C tools. On each of these markets, the merged entity will have a market share of less than 40%. It will be faced with various competitors, including important players such as Microsoft, Oracle or Borland. It follows that alternative and comparable bundles of software development tools, including build and test tools, could be offered on the market. The position on the various markets of the combined IBM - Rational would not be such that it could exclude competitors through bundling. In addition, customers tend to be large and sophisticated buyers who, according to the market investigation, already tend to have a "mix and match" policy as long as they retain a choice between suppliers, which will still be the case post-merger. Hence, the fact that IBM will dispose of a portfolio of software development tools will not be such as to confer it a dominant position on one of these tool markets, nor will IBM be in a sufficiently strong position in one of these markets to leverage its position on another neighbouring market.
36. The Commission also examined whether the transaction would bring the capacity and incentives to IBM to foreclose competing tool vendors to an appreciable extent by denying timely interface information to those willing to support IBM's application server. Particular consideration was given to the fact that, as indicated above, the targeted deployment platform may play an important role first in the development of their softwares by tool vendors, and second in the selection of some software development tools (AMD&C, 3GL, UDE, and ASQ tools) by customers.
37. Java-based application servers such as IBM's Websphere contain both open-standard J2EE APIs and proprietary APIs. There is no issue of access to open-standard APIs. The market investigation has indicated that proprietary APIs have, until now, been readily and timely made accessible by IBM on a voluntary and non-discriminatory basis to all ISVs in order to enable them to develop applications that interoperate with IBM software products (through a program called developerWorks). Pre-merger, IBM has not had the ability, nor the incentive, to leverage its position in the building tool markets (3GL, UDE tools) where it was already active, as a result of its presence in Java-based application servers. It therefore needs to be examined whether IBM would gain the incentive and capacity to change its access policy to third parties as to its proprietary APIs.
38. Figures provided by the parties on the basis of two different independent studies indicated that, on a hypothetical market consisting of Java-compatible application servers, IBM would account in 2001 for 34%⁹, or 23%¹⁰, of the sales world-wide, tied with BEA (34% and 25% respectively) and before companies such as Oracle (6 to 12%), Sun (7-8%), Sybase, Macromedia or Borland. No third party was able to provide alternative reliable estimates of IBM's and its competitors position. The parties contested such market definition since it would, in particular, fail to reflect the competitive position of Microsoft with its recently introduced .NET technology. It therefore appears that IBM would not benefit from sufficient competitive strength in the Java-based environment in order to discriminate in its provision of API information to Rational's competitors. IBM will keep an interest in ensuring that the broadest range of tool vendors use its products.
39. In addition, the parties further argued that tool vendors need access only to the core open-standard J2EE APIs to develop competitive tools that help developers to create software

⁹ Source: Giga Information Group.

¹⁰ Source: IDC.

applications which are fully compatible with Websphere. For example, none of Rational's tools make use of the proprietary APIs of Websphere or other application servers.

40. Conversely, the withdrawing of Rational's multi-platform support to the benefit of solely IBM products, in particular as regards other Java-based application server suppliers such as Oracle, Sun, or BEA, would not necessarily be in the interest of IBM. The parties underlined that IBM would have a clear incentive to maintain the value of Rational's business and not to cut off the actual and potential sales opportunities for Rational's tools. In addition, Rational's would risk being less attractive to developers who demand tools that support multiple application servers.
41. Last, IBM and Rational have so far developed products compatible with a wide range of platforms, among which the two main standards: Java virtual machine (open standard) and Microsoft.NET platform (proprietary platform). It seems therefore unlikely that IBM may find it profitable to limit the range of platforms with which these products are compatible.

IV. CONCLUSION

42. In light of the above, the Commission has concluded that the proposed transaction is not likely to create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the EEA or any substantial part of that area.
43. 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 (EEC) No 4064/89.

For the Commission,
Signed by Mario MONTI,
Member of the Commission