

***Case No COMP/M.2821 -
HITACHI / IBM
HARDDISK BUSINESS***

Only the English text is available and authentic.

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

Article 6(1)(b) NON-OPPOSITION
Date: 02/08/2002

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 02/08/2002

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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 Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying party :

Dear Sir/Madam,

**Subject: Case No COMP/M.2821 – Hitachi / IBM Harddisk Business
Notification of 02.07.2002 pursuant to Article 4 of Council Regulation
No 4064/89**

1. On 02.07.2002, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No 4064/89¹ (“ECMR”) pursuant to which the Japanese undertaking Hitachi, Ltd. (“Hitachi”) would acquire within the meaning of Article 3(1)(b) of the ECMR control of the Harddisk business of the US undertaking International Business Machines Corporation (“IBM”).
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.

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).

I. THE PARTIES

3. Hitachi Ltd. is part of the Hitachi group of companies, a multinational corporation with activities in a wide variety of product segments including electronic devices, power and industrial systems, digital media and consumer products, and information and telecommunications systems. Information and Telecommunications Systems products include system integration, software, RAID² storage systems, servers, PCs, switches, fibre optic components and Harddisk Drives (“HDDs”).
4. IBM is a corporation organised under the laws of the State of New York. IBM is the ultimate parent company of the IBM group of companies, which develops, produces, and markets information technology (“IT”) systems, equipment including HDDs, computer software, and services, principally in the IT sector, and ancillary products.

II. THE OPERATION AND THE CONCENTRATION

5. The notified operation consists of the acquisition by Hitachi of substantially all of IBM’s HDD business, excluding the business assets of three facilities (Mainz, Germany, Veszprém, Hungary, and Rochester, USA). The transaction will include laboratory, engineering, manufacturing, distribution, and sales assets operated by IBM’s Storage Technology Division directly or under its auspices by IBM’s controlled affiliates, and will also include certain personnel and R&D. To effect the transaction, IBM will contribute the designated HDD assets into a new holding company of which Hitachi will acquire virtually all of the voting shares. IBM will retain a 30% economic interest in the new company (with no management, voting or veto rights) which it will sell for an agreed price to Hitachi over a period of three years. The operation therefore constitutes a concentration within the meaning of Article 3(1)(b) of the ECMR.

III. COMMUNITY DIMENSION

6. The undertakings concerned have a combined aggregate world-wide turnover of more than 5,000 million Euro (Hitachi 66,000 million Euro and IBM 85,866 million Euro in FY 2001)³. Each of Hitachi and IBM’s HDD business have a Community-wide turnover in excess of EUR 250 million (Hitachi [...] million Euro, IBM’s HDD business [...] million Euro in FY 2001), but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension. It does not constitute a co-operation case under the EEA Agreement.

IV. RELEVANT PRODUCT AND GEOGRAPHIC MARKETS

7. Both Hitachi and IBM currently produce HDDs principally for original equipment manufacturers (“OEMs”) and large distributors. HDDs are compact high performance data storage devices used in personal computers, work stations, mainframes and multi-

² Redundant Array of Inexpensive Disks: Technology to decrease the risk of data loss and down-time in case of a fault.

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). To the extent that figures include turnover for the period before 1.1.1999, they are calculated on the basis of average ECU exchange rates and translated into EUR on a one-for-one basis.

use computer networks to record, store and retrieve digital information. HDDs store information on a magnetic film deposited on circular disks which rotate at high speed. The information is written and read by read/write heads positioned over the disks.

8. Unlike some of the other competitors in this line of business, both Hitachi and IBM are currently vertically integrated; upstream in the production of disks and heads for their captive use and downstream in the devices that use HDDs, such as computers and consumer electronics products. However, following the transaction, IBM will have to purchase all its HDD products from third party suppliers.

Relevant product markets

9. Hard disk drives include several types of products which may be segmented according to final application (e.g. desktop, laptop and disk storage drives), disk size (also known as form factor, e.g. 3.5", 2.5") and storage capacity (e.g. 20 GB, 40 GB drives).⁴ Hard disk drives may also be differentiated on the basis of the interface between the microprocessor and the hard disk drive. The interface is the communication channel over which all the data that is read from or written to the hard disk flows. The most popular interface used on desktop PCs is the IDE/ATA interface⁵. A more advanced and flexible interface is SCSI⁶ used primarily in servers. Currently, 3.5" SCSI HDDs are mainly used in server computers, 3.5" IDE/ATA HDDs mainly in desktop computers, and 2.5" IDE/ATA HDDs for mobile (e.g., laptop) applications. There are also HDDs of 1.8" and 1.0" size that are used in certain mobile applications.
10. The notifying parties submit that HDDs form part of a larger data storage market which includes all types of HDDs and other forms of storage systems, due in part to the high degree of innovation and continuing evolution in the industry towards new storage formats. The Parties also argue that there is a high degree of supply-side substitutability as incumbent manufacturers of one or more types of HDDs would be capable of establishing a significant presence in other HDD segments.
11. The Commission's market investigation has, in general, supported the view that there may be a separate relevant market for 2.5" HDDs. Although market information indicates potential for future interchangeability between 3.5" and 2.5" IDE/ATA drives in desktop applications, performance and price characteristics indicate a separate market for 2.5" HDDs used in mobile applications. These characteristics include smaller physical size of 2.5" HDDs and requirements for improved acoustic performance, lower power consumption, and durability in terms of vibration and shock resistance. However, for the purpose of this decision it is not necessary to define the relevant product markets since the transaction will not create or strengthen a dominant position in any of the possible alternative markets.

Relevant geographic market

12. The notifying parties submit that the geographic scope of any possible HDD market is world-wide, based upon several factors. The parties and their competitors manufacture

⁴ Case No. COMP/M.2199 Quantum HDD/Maxtor, 8.12.2000.

⁵ IDE/ATA refers to the Integrated Drive Electronics / AT Attachment Interface.

⁶ SCSI is the abbreviated form of "Small Computer Systems Interface"

or source their disk drive products at facilities located principally in Asia and the U.S. and supply them world-wide. Moreover, transport costs for HDDs are low relative to the value of the products and there are no significant barriers to trade. Sales are typically initiated with OEMs through one central purchasing department where product qualification is conducted and pricing is negotiated. Finally, average unit prices are similar in the EEA and elsewhere. This view is consistent with previous decisions of the Commission⁷, and the global nature of the market for HDDs has been confirmed by the Commission's investigation. However, for the purposes of this decision, a definition of the geographic market is not necessary, since the concentration will not create or strengthen a dominant position in any of the possible alternative markets.

V. COMPETITIVE ASSESSMENT

13. The market for hard disk drives has been characterised by a steady decline in prices, a high degree of product innovation, and short product life cycles generally ranging from six to 12 months due to technical innovation.
14. Customers for all types of hard disk drives are generally large and sophisticated buyers who source their HDD needs on a non-exclusive basis to maintain security of supply. Purchases generally involve short term contracts to fill immediate requirements, and potential suppliers must undergo qualification procedures for each new product generation. Customers have indicated that the costs of switching demand between suppliers are low. Market shares are correspondingly volatile.

Overall HDD Market

15. Figures provided by the notifying parties show that in a possible market for all HDDs, the merged entity would be the second largest manufacturer world-wide following the transaction based on 2001 sales revenues with a combined market share of 23% (Hitachi 4%, IBM 19%) behind Seagate with 25%. The five other global HDD manufacturers have market shares between 4% and 21% and include Maxtor, Western Digital, Fujitsu, Samsung and Toshiba. At the EEA level, the merged entity would be second at 21% (Hitachi 2%, IBM 19%) behind Seagate with 32.5% and would face competition from the same competitors as at the global level. The market investigation of the Commission generally confirmed the information submitted by the parties.

Mobile HDD Market

16. If a narrower separate market for 2.5" IDE/ATA mobile HDDs is considered, according to information supplied by the parties, the transaction would result in the merged entity having 62% of world-wide sales (Hitachi 17%, IBM 45%) and 58% in the EEA (Hitachi 15%, IBM 43%) based on 2001 sales values, with Toshiba having 25% world-wide and 26% in the EEA and Fujitsu having 12% world-wide and 16% in the EEA.
17. The notifying parties claim that the transaction will not result in the creation or strengthening of a dominant position due to relatively low barriers to entry for incumbent HDD manufacturers, imminent entry by two significant HDD manufacturers, and the existence of large and sophisticated purchasers, including IBM, who will be a new customer in the market following the transaction.

⁷ Case No. IV/M.656 Seagate/Conner, Case No. COMP/M.2199 Quantum/Maxtor.

18. The Commission's investigation indicates that barriers to entry into the 2.5" HDD market are relatively low for incumbents who already participate in other segments of the HDD business such as 3.5" SCSI and 3.5" IDE/ATA drives. Production processes are similar across the various segments of HDD production, components are readily available, and competitors consider that intellectual property rights are not an obstacle to entry due to extensive cross-licensing of such rights among HDD manufacturers. Furthermore, the dynamic nature of HDD development allows for relatively fast changeover and low switching costs between production lines. Since each generation of HDD is produced and sold for only six to 12 months, HDD manufacturers are able to switch production to the 2.5" size as part of a scheduled change in generations.
19. About 1% of mobile HDDs have form factors of 1.0" and 1.8" for use in various non-traditional mobile applications, e.g. digital cameras, personal digital assistants and mp3-players. As only IBM currently produces 1.0" HDDs the transaction will not lead to any addition of market shares.
20. The Commission has received information regarding the likelihood of imminent entry into the 2.5" mobile HDD segment by other manufacturers who are currently active in other HDD segments. The Commission is of the view that such imminent entry or the threat of entry by other HDD manufacturers will effectively constrain the ability of the merged entity to behave independently of competitive market considerations in this segment of the HDD market.
21. In light of the above, the Commission concludes that the proposed transaction does not give rise to serious doubts as to its compatibility with the common market.

Desktop HDD Market

22. The transaction does not give rise to any significant competitive effects in the highly competitive market for 3.5" IDE/ATA HDDs as IBM's world-wide and EEA-wide market shares are below 15% and Hitachi is not active in this market.

Server HDD Market

23. On the narrower basis of a market for 3.5" SCSI drives, according to information supplied by the parties, the merged entity would account for approximately 25% of sales world-wide (Hitachi 5%, IBM 20%) behind Seagate with 53%, with Fujitsu and Maxtor with 16% and 7% respectively. At the EEA level, the merged entity would have approximately 23% of sales (Hitachi 2%, IBM 21%) behind Seagate with 53%, with Fujitsu at 17% and Maxtor at 8%. Following the transaction there will be four competitors for the supply of server HDDs. Seagate will continue to be the clear leader in server HDDs which will not be significantly affected by the transaction.

V. CONCLUSION

24. 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.

25. 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 and Article 57 of the EEA Agreement.

For the Commission

Signed by
Michel BARNIER
Member of the Commission