

***Case No COMP/M.3866 -  
SUN / STORAGE TEK***

Only the English text is available and authentic.

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

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Article 6(1)(b) NON-OPPOSITION  
Date: 26/08/2005

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 26.08.2005

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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 Where possible the information omitted has been replaced by ranges of figures or a general description.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.3866 – SUN/STORAGETEK  
Notification of 20 July 2005 pursuant to Article 4 of Council Regulation  
No 139/2004<sup>1</sup>**

1. On 20 July 2005, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 by which the undertaking Sun Microsystems Inc. (“SUN”, USA) acquires within the meaning of Article 3(1)(b) of the Council Regulation control of the whole of the undertaking Storage Technology Corporation (“StorageTek”, 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 Council Regulation (EC) No 139/2004 and does not raise serious doubts as to its compatibility with the common market and with the EEA Agreement.

**I. THE PARTIES**

3. SUN, publicly listed on NASDAQ, is providing network computing products and services, i.e. hardware and software for network computing infrastructures, namely computer systems and network storage systems, and support and professional services.

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<sup>1</sup> OJ L 24, 29.1.2004 p. 1.

4. StorageTek, publicly listed on NYSE, designs, manufactures and distributes a range of data storage solutions for the management, retrieval and protection of business critical information. It offers solutions in tape, disk and network products.

## **II. CONCENTRATION**

5. SUN will acquire sole control of StorageTek by way of purchase of shares. It therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## **III. COMMUNITY DIMENSION**

6. The parties have a combined world-wide turnover of more than € 5.000 million (€ 9.380 million for SUN, € 1.790 million for StorageTek; all figures relate to turnover achieved in 2004). The aggregate Community-wide turnover of each of at least two of the undertakings exceeds € 250 million ([...] for SUN; [...] for StorageTek). Neither SUN nor StorageTek has achieved more than two-thirds of its aggregate Community-wide turnover within one and the same Member State. The concentration therefore has a Community dimension.

## **IV. COMPETITIVE ASSESSMENT**

### **A. Relevant product market**

7. The Parties submit that the relevant product market for the assessment of the proposed transaction is the market for storage solutions. Computer storage involves the holding of data in an electromagnetic or optical form for access by single or multiple computer processors. A company's storage system forms a physical part of its IT infrastructure, but may be "architected" in different ways (e.g. local storage on desktops and servers, network storage, archived storage, etc.). The Commission identified storage solutions as a distinct relevant product market in its HP/Compaq<sup>2</sup> decision. It also identified potential discrete segments of the storage solutions market according to the type of storage media (i.e. the "hardware") used, such as disk, tape or optical. This approach appears to be consistent with the product categories tracked by IDC (International Data Corporation)<sup>3</sup>, an industry research body, as regards "storage hardware" (as opposed to "storage software" and "storage services").
8. According to the parties and following IDC's classification, the Parties are present in the following segments: i) disk storage<sup>4</sup>: both SUN and StorageTek are present as

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<sup>2</sup> Case No COMP/M.2609 – HP/COMPAQ.

<sup>3</sup> IDC provides market data and analysis for and about the information technology sector. The IT Industry widely recognises and relies upon IDC.

<sup>4</sup> IDC defines a disk storage system as a set of storage elements, including controllers, cables and (in some instances) a host bus adapter, associated with three or more disk drives. A system may be located outside of or within a server cabinet. Disk storage can be either directly attached to the server (DAS) or be served through network based storage solutions such as storage area networks (SAN) or network attached storage (NAS). All of these solutions are designed to meet customers' needs for storing data. Since StorageTek has no NAS products and SUN's presence is negligible, NAS products will not be further considered in the present assessment.

manufacturers and distributors; ii) tape storage<sup>5</sup>: StorageTek is present as manufacturer and distributor, while SUN is present as distributor (branded re-seller) only. IDC further divides tape storage products in: ii-1) tape drives; ii-2) tape automation systems; and as regards both tape drives and tape automation products, it considers segmentation by “tiers”: a) entry-level; b) midrange; c) enterprise tape products. The Parties’ presence is negligible at both the manufacturing and/or the distribution levels in the other storage solutions segments identified by IDC (optical jukebox storage, storage network infrastructure).

9. StorageTek manufactures and sells [...] of its storage solution through OEM (original equipment manufacturer) channels (i.e. sells to OEM customers) and independent resellers. These OEM customers and independent re-sellers purchase storage solutions on an OEM basis and resell them downstream under their own brand label. As stated above, SUN is not a manufacturer of most storage solutions and is mostly a re-seller. In particular, SUN is a very important branded reseller of storage solutions of StorageTek, as well as of some StorageTek’s competitors such as HP (for tape drives), Quantum (for tape drives and tape automation) or ADIC (for tape automation). SUN competitors at the downstream level (branded level) may also be purchasers of StorageTek storage solutions at the OEM level.
10. Competitors and customers, who replied to the Commission’s market investigation, gave a mixed picture as to whether the various segments of storage solutions would form each a separate market. While they consider such delineation of the market could be meaningful from a technology and performance perspective, however, customers typically address their IT storage needs by any combination of disc, tape or optical storage. However, as the notified transaction does not give rise to competition issues irrespective of the market definition, it can be left open for the purpose of the present case whether a further delineation of the market for storage solutions would be necessary.

## **B. Relevant geographic market**

11. With respect to the geographic scope, the Parties submit that the market for storage solutions is worldwide. They state that manufacturers distribute essentially the same products to all their customers regardless of geographic location. In that regard, all major suppliers of storage solutions would offer their products to customers all over the world. Transport costs, technical requirements and language-specific demand characteristics would not constitute significant limitations to cross-border trade.
12. The Commission had taken the view in its previous HP/Compaq decision<sup>6</sup> that the geographic scope of the storage solutions market(s) is at least EEA-wide.

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5 IDC divides tape storage into tape drives and tape automation systems. Tape drives are removable storage devices mainly used for archiving data (the drive acts like a tape recorder, reading data from the computer, writing it onto the tape and retrieving previously recorded data from the tape). The benefit of tape storage is that it typically has larger capacities for storing data at a lower cost than disk storage. Tape automation systems (tape loaders/tape libraries) can hold multiple tape drives. A tape automation systems is a high-capacity data storage system (for servers, SAN, disaster recovery centres, data warehousing, etc.) for storing, retrieving, reading and writing multiple magnetic tape cartridges.

6 The Commission states at paragraph 25 of its HP/Compaq decision that the geographic market for storage solutions appears to be at least EEA-wide.

13. However, for the purpose of the present case, it is not necessary to decide on the geographic scope since even at the narrower EEA-wide level the proposed transaction would not lead to competition concern.

### C. Assessment

#### *Horizontal overlap at OEM/Branded level: storage solutions and disk storage*

14. Table 1 below provides an overview of the worldwide shares (based on 2004 revenues). The Parties stated that the EEA market shares are not materially different from the worldwide ones, or that any possible difference is limited and is not such as to affect significantly the appraisal of the effects of the merger in the EEA. Replies from the market investigation have largely confirmed this view of the parties.

Table 1: OEM/Branded level market shares, world-wide<sup>7</sup>

Relevant product market	SUN	StorageTek	SUN + StorageTek	Competitor 1	Competitor 2	Competitor 3
Overall market: storage solutions	[5-10]%	[<5]%	[5-10]%	[15-25]%(IBM)	[10-20]%(HP)	[10-20]%(EMC)
Segment: Disk storage systems	[5-10]%	[<5]%	[5-10]%	[20-25]%(HP)	[10-25]%(IBM)	[10-20]%(EMC)
Sub-segment: External disk storage systems (DAS)	[5-10]%	[<5]%	[5-10]%	[10-15]%(HP)	[10-15]%(Hitachi)	[10-15]%(IBM)
Sub-segment: Disk storage systems (SAN)	[5-10]%	[<5]%	[5-10]%	[20-30]%(HP)	[20-30]%(EMC)	[10-20]%(IBM)

15. The new entity's combined market share in the above segments and sub-segments remains below 15%. In all these segments and sub-segments the new entity faces competition from strong players<sup>8</sup> like IBM, HP, EMC, Quantum or ADIC. Moreover, in none of the sub-segments the new entity would come close to the first or second player in terms of market share.
16. Most respondents to the market investigation see SUN and Storagetek as smaller players in these segments compared to IBM, HP or EMC. Hence, it can be concluded that sufficient alternative supply sources do exist for them to source their needs of these kinds of storage solutions.

#### *Segments with overlap but with "OEM re-seller" effect (Branded level): tape drives and tape automation systems*

17. In some segments and sub-segments, although the combined entity may have a significant combined share, SUN's contribution is derived, to a significant extent, from re-selling StorageTek's products purchased at OEM level. Table 2 below provides an overview of

<sup>7</sup> The data are mostly derived from IDC research and partly from some studies made about this sector of the industry.

<sup>8</sup> In most of these segments and sub-segments, either IBM or HP is the number one or number two player.

the markets shares on a worldwide basis (based on 2004 revenues). Again, the Parties stated that the EEA market shares are not materially different from the worldwide ones; the market investigation largely confirmed this view.

Table 2: Branded level market shares, world-wide<sup>9</sup>

Relevant product market	SUN	StorageTek	SUN + StorageTek	Competitor 1	Competitor 2	Competitor 3
Segment: Branded tape drives	[5-15]%	[<5]%	[10-15]%	[30-40]%(IBM)	[25-35]%(HP)	[10-15]%(Dell)
Segment: Branded tape automation systems	[1-10]%	[15-25]%	[20-30]%	[25-35]%(IBM)	[15-25]%(HP)	[5-10]%(ADIC)
Sub-segment: Branded midrange tape automation	[1-10]%	[10-15]%	[15-25]%	[20-30]%(HP)	[20-30]%(IBM)	[10-20]%(ADIC)
Sub-segment: Branded enterprise tape automation	[1-10]%	[45-55]%	[50-60]%	[40-50]%(IBM)	< 1%(Others)	None

18. In the above-mentioned segments, SUN procures its products from StorageTek under an OEM agreement and then re-sells these products under its own brand label. As regards the overall segment “branded tape automation”, apart from StorageTek, SUN procures products also from ADIC and Quantum, while as regards “branded enterprise tape automation” SUN only procures products from StorageTek. Therefore, at the branded level, SUN’s shares already include some (all as regards “branded enterprise tape automation” products) storage solutions stemming from StorageTek’s manufacturing activity.
19. In the segment “branded tape drives” post merger the combined market share would be below 15% with a marginal overlap. Competition concerns can therefore be excluded.
20. In the segment “branded tape automation”, the combined share would be [20-30]% but the parties would face competition from strong players like IBM ([25-35]%), HP ([15-25]%), ADIC ([5-10]%), Dell ([5-10]%), Quantum ([<5]%). SUN’s market share, however, is largely from sales of the products originally manufactured by StorageTek and to a smaller extend that from other competitors, ADIC and Quantum. In absence of precise figures from industry reports, the parties estimate that SUN’s market share attributable from the branded sales of StorageTek’s products would represent less than [1-10]% as given in Table 2. Even if SUN’s market share is entirely taken into account, however, there would be no real change brought to competition but from some vertical integration. Respondents to the market investigation considered that post-transaction there would remain enough suppliers to ensure sufficient competition.
21. In the sub-segment “branded mid-range tape automation” the combined share would be [15-25]%, but other suppliers with more important share of sales than the parties are present (mainly HP and IBM). The market share attributable to SUN is composed wholly of products sourced from Storagetek. There is therefore no real change brought to competition but from some vertical integration, as discussed below. Respondents to the

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<sup>9</sup> The data are mostly derived from IDC research and partly from some studies made about this sector of the industry.

market investigation considered that post-transaction there would remain enough suppliers to ensure sufficient competition.

22. As regards the “branded enterprise tape automation” systems, the combined share would be [50-60]% (with [1-10]% increment), IBM being the only other competitor. Already pre-merger, no OEM channel distributes StorageTek “branded enterprise tape automation” systems other than SUN, hence the market share attributable to SUN is composed wholly of products sourced from Storagetek. A number of respondents to the market investigation consider this market to be of mature nature and to some degree of niche character and they consider that there have already been only two established players, namely IBM and StorageTek. Therefore, the merger would consolidate (by means of “vertical” integration) an already pre-existing situation in the market and would not lead to any significant impediment of competition.

***Vertical issues: enterprise tape drive and enterprise tape automation***

23. At the OEM level, only StorageTek is present and, as a manufacturer, has substantial market shares as regards some sub-segments of the storage solutions, especially if segmentation by “tiers” is made, i.e. “enterprise tape drives” and “enterprise tape automation” systems. Table 3 below illustrates the worldwide market shares in these segments (based on 2004 revenues). Like for the other segments, the Parties stated that the EEA market shares are not materially different from the worldwide ones; the market investigation largely confirmed this view.

Table 3: OEM level market shares, worldwide<sup>10</sup>

Relevant product market	SUN	StorageTek	SUN + StorageTek	Competitor 1	Competitor 2	Competitor 3
Sub-segment: enterprise tape drive	[0-10]%	[50-60]%	[50-60]%	[40-50]%(IBM)	[<5]%(NEC)	[<5]%(Fujitsu)
Sub-segment: enterprise tape automation	[0-10]%	[45-55]%	[45-55]%	[40-50]%(IBM)	None	None

24. In both of the above mentioned segments, the figures suggest that competition is essentially between StorageTek and IBM for the supply of products to the downstream level of the supply chain. Despite the high market shares of StorageTek pre-merger, the competitive situation is unlikely to be changed due to the present transaction.
25. The Parties appear to have an economic incentive post-merger to continue the supply of their products through OEM channels. Sales through OEM channels represent a vital distribution channel to StorageTek and SUN, whereby it represents approximately [...] of StorageTek’s revenue and [...] of SUN’S revenue in 2004. If SUN decides to stop selling StorageTek’s products through OEM channels, it would loose a large amount of revenues from StorageTek. Although SUN could start selling through its own channels, such alternative would unlikely compensate for the losses. However, customers largely source storage solutions from specialised vendors, and it is unlikely that SUN would be as

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<sup>10</sup> The data are mostly derived from IDC research and partly from some studies made about this sector of the industry.

successful to establish storage solutions under its own brand since the market perceives SUN mainly as vendor of servers. Moreover, SUN's business plan post-merger is based on preservation and growth of the revenues stemming from sales through OEM channels.

26. Conversely, it appears unlikely that the merged entity will have an economic incentive to stop selling third party storage products mainly because of the broad storage requirement of its customers. Virtually all of the most important other storage vendors (IBM, HP, EMC, Dell, Hitachi) sell a substantial amount of third party solutions in order to be able to offer a broader set of products and/or storage solutions to customers. No possible foreclosure would appear to occur upstream or downstream because of the alternative source of supply available to customers.
27. As regards "enterprise tape automation" systems, at the OEM level, pre-merger competition is between IBM and StorageTek only. At present SUN does not re-sell IBM systems, and the merged entity (SUN post-merger) will not likely start entering in that business. Respondents to the market investigation have largely shared this view and they see no potential foreclosure effect arising from the proposed transaction.

## **V. CONCLUSION**

28. 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)  
Andris PIEBALGS  
Member of the Commission