Case No COMP/M.2820 STMICROELECTRONIC
S / ALCATEL
MICROELECTRONICS

Only the English text is available and authentic.

REGULATION (EEC) No 4064/89 MERGER PROCEDURE

Article 6(1)(b) NON-OPPOSITION

Date: 24/06/2002

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COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 24.06.2002

SG (2002) D/230331

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 Where possible the information omitted has been replaced by ranges of figures or a general description.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

Dear Sirs,

Subject:

Case No COMP/M.2820 – STMicroelectronics/ Alcatel Microelectronics Notification of 22.05.02 pursuant to Article 4 of Council Regulation No 4064/89¹

- 1. On 22/05/2002, the Commission received a notification of a proposed concentration by which the undertaking STMicroelectronics N.V. ("STM") acquires within the meaning of Article 3(1)(b) of the Council Regulation control of the whole of the undertaking Alcatel Microelectronics N.V. ("AME").
- 2. After the examination of the notification, the Commission has concluded that the notified operation falls within the scope of the Merger Regulation and does not raise serious doubts as to its compatibility with the Common market.

I. THE PARTIES

3. STM Microelectronics N.V (hereafter STM) is a global independent semiconductor company which designs, develops, manufactures and markets a broad range of semiconductor integrated circuits and discrete devices used in a wide variety of microelectronic applications, including telecommunications systems, computer systems, consumer products and industrial automation control systems.

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).

4. Alcatel is a French group which is mainly active in four areas of business: networking, optics, e-business and space and components. As regards to networking, Alcatel produces both equipment and, through Alcatel Microelectronics (hereafter AME), semiconductors. AME is a wholly subsidiary of the Alcatel Group. It is active in the design, manufacture and marketing of semiconductor devices.

II. THE OPERATION

- 5. Pursuant to the proposed transaction, following the terms of the Share Purchase Agreement signed on 15 April 2002, Alcatel Bell, a wholly owned subsidiary of the Alcatel group, will sell to STM one hundred percent of the share capital and voting rights of AME.
- 6. STM also plans to resell the mixed signal division of AME (which includes industrial, computer peripherals and automotive applications, ISDN, Analog Line Card).

III. CONCENTRATION

7. This operation is an acquisition of the sole control of AME by STM within the meaning of Article 3 (1) b) of Council Regulation (E.E.C) n°4064/89.

IV. COMMUNITY DIMENSION

8. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 2,5 billion² (STM: [...] m€; AME: [...] m€). In France, Germany and Belgium the aggregate turnover of both STM and AME is more than EUR 25 million³. At least in these 3 member states, the aggregate turnover of all the undertakings concerned is more than EUR 100 million. Finally, the aggregate Community-wide turnover of both STM and AME is more than EUR 100 million (STM: [...] m€; AME: [...] m€), 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.

V. COMPETITIVE ASSESSMENT

A. RELEVANT PRODUCT MARKETS

- 9. Both STM and AME are manufacturers of semiconductor devices. Semiconductors are a class of crystalline solids with electrical conductivity between that of a conductor and an insulator. Such materials can be treated chemically to allow transmission and control of an electric current. Examples of devices built with semiconductor material are diodes, transistors, and integrated circuits (ICs), or more generally, chipsets.
- 10. Semiconductor devices are sold to equipment manufacturers. Equipment manufacturers incorporate the semiconductor devices in the electronic equipment they manufacture (mobile phones, pagers, modems, etc). The semiconductor device is thus not an end-

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.

³ STM: France: [...] m€; Germany: [...] m€; Belgium: [...] m€ AME: France: [...] m€; Germany: [...] m€; Belgium: [...] m€

- product in itself. Their clients are mainly equipment manufacturers and they are consequently remote from the end-consumers.
- 11. There are six major applications for specific semiconductor devices: communication, consumer, computer, military, industrial and automotive. The chipsets manufactured for each application differ in their function and are not substitutable from one application to another. Moreover, within each application, chipsets can be further classified into various groups or categories, according to the more specific functions they are designed to fulfil, or the type of electronic equipment they will be inserted in.
- 12. The parties are only active in chipsets for automotive sector and communications systems.
- 13. STM plans to resell the automotive activity to AMI Semiconductors. However, as the turnover of AME is minimal for this application the impact of the operation would be also minimal. Thus, there is no need to define precisely this activity.
- 14. In Communication systems, a distinction can be made between chipsets that will be inserted in wireless electronic equipment and those that will be inserted in electronic equipment used in wireline communication systems. Indeed, wireless technologies use chipsets that consume very little energy (less than 100 mW) and this is not the case for wireline technologies. Modulation, canal and source coding are totally different in chipsets used in wireline and wireless systems. Powers of processor calculation are not comparable.
- 15. Within the wireless systems, the parties are only active in chipsets for GSM. In this segment, the turnover of AME is minimal. So, the precise market has no need to be further defined
- 16. Wireline systems can be divided into transmission and access to signal and data. According to the parties, access comprises the technology that allows for signal or data to be sent to the user whereas transmission deals with the translation of signal or data into a format intelligible to the human end consumer.
- 17. Within the transmission to signal and data sector, the parties are both active in the production and sell of chipsets for analog line card. STM plans to resell this activity to AMI. In this segment, the combined market share of the parties are anyway below 15%. So the precise market has no need to be further defined.
- 18. Within the access to signal and data sector, and more particularly broadband access, the parties are both active in the production and sell of XDSL chipsets and ISDN chipsets and submit that XDSL chipsets and ISDN chipsets are two distinct product markets. Indeed, the two kinds of chipsets are not substitutable in the demand point of view because modulation, canal and source coding in XDSL and ISDN chipsets are totally different.
- 19. The parties submit that there can be distinguished several varieties of chipsets within the XDSL technology, even if they consider that they are substituable both from a demand and a supply point of view. Both AME and STM produce chipsets for one of them, the ADSL. It deliverers faster downstream speed than upstream and it can theoretically work up to 18000 feet from the Central office. The parties are not active in the others XDSL subcategories such as:
 - Symmetric DSL (SDSL) which offers a symmetric transmission of data for a user not located in a distance more than 10000 feet,

- Very High Data Rate (VDSL) which STM described as to be in its experimental phase and to target high speed at lower distance,
- Rate Adaptive DSL which STM described as to be very similar to ADSL,
- The HSDL (high-data-rate DSL) and GDSL (Giga-data-rate DSL) whose line developed whose line can exceed 24000 feet using repeaters.
- 20. The investigation lead by the Commission has confirmed the view of the parties. Operators responding to the Commission's market investigation pointed out that each kind of technology need specific chipsets which can not be interchangeable from a demand-side point of view. The DSL chipsets are thus described to be part of the same product market because satisfying the same need. From a supply point of view, operators also take the view that chipsets produced for one application or technology need a specific area of expertise. They underlined that it would require significant time and would incur significant costs to begin producing one chipsets used in another technology than those they currently market.
- 21. The question to know whether the XDSL chipset markets can be further segmented into ADSL, VDSL, RADL, HDSL and GDSL is not to be raised in the present assessment. The parties are only active in ADSL segment and the operation would not give rise to competition problems even with a narrowest definition.

B. RELEVANT GEOGRAPHIC MARKETS

- 22. The parties claim that the markets for semiconductors are worldwide because their clients have plants localised all around the world, there is no quotas, tariffs or technical specifications, there is no significant price difference between countries and transport costs are very low. Moreover, their main competitors are international firms established worldwide.
- 23. The result of the Commission's market investigation has confirmed the parties'definition of the relevant geographic market. Competitors underline that they don't face any barriers to entry particularly as regards to certification and transportation cost. The costs of establishing a local presence do not appear significant since there is no need to produce locally and to sell locally. The customers (the system makers) are big companies who buy their semi-conductors on a worldwide scale. Consequently, average price levels tend to be the same across the world.

C. ASSESSMENT

- 24. The parties account for combined market shares of more than 15% only for XDSL chipsets.
- 25. With regard to XDSL chipsets, the parties account for a combined market share of sales of [15-25%] in 2001(STM: [0-10%]; AME: [10-20%]) beside Globespan Virata ([15-25%]).
- 26. With regard to ADSL chipsets, the parties account for a combined market share of [35-45%] in 2000 (STM: [0-10%]; AME: [30-40%]). STM will become the leader of this segment but this position is not likely to give dominance to the new entity.
- 27. Indeed, the combined entity would be facing competition from Globespan ([20-30%]), Analog devices ([10-20%]), Centilium Communication (0-10%]) Conexant ([0-10%]) and Texas Instrument ([0-10%]). Most of the competitors are present on several varieties of

XDSL chipsets whereas the parties are only present on the ADSL segment. For example, Globespan, is active in 5 varieties (ADSL, VDSL, G.SHDSL, SDSL, HDSL), Texas Instrument in 2 varieties (ADSL, VDSL), and Conexant in 3 varieties (ADSL, SDSL and HDSL). Therefore, the range of products of competitors appears to be broader.

- 28. Moreover, the market shares can vary greatly from one year to another. For instance, Globespan which had a market share of [10-20%], in 1999, gained [5-15%] in 2000 (passing thus from [10-20%] to [20-30%]) whereas during the same period AME lost around [0-10%] (passing thus from [35-45%] to [30-40%]).
- 29. Provided they have a good level of Research and Development, competitors can enter more easily the Market by only designing the Chipsets and outsourcing their production to a third party. The rise of "fabless" companies (such as Globesplan) has thus been described by competitors as an increase in competition over the last few years.
- 30. Finally, customers are sophisticated networking equipment manufacturers. There is little customer or brand loyalty in the semiconductor market. Consequently, the chipsets markets appear to be very price sensitive. The market investigation has shown that the new entity won't be able to raise prices. This is so because customers can and do have more than one supplier for a given chipset and because they can also switch suppliers at very short notice to another competitor.

VI. CONCLUSION

31. 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