COMMISSION DECISION

of 17 October 2001

declaring a concentration to be incompatible with the common market and the functioning of the EEA Agreement

(Case COMP/M.2187 — CVC/Lenzing)

(notified under document number C(2001) 3121)

(Only the English text is authentic)

(Text with EEA relevance)

(2004/237/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings [1], as last amended by Regulation (EC) No 1310/97 [2], and in particular Article 8(3) thereof,

Having regard to the Commission's decision of 22 June 2001 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

Having regard to the opinion of the Advisory Committee on Concentrations [3],

Having regard to the final report of the Hearing Officer in this case [4],

Whereas:

(1) On 4 May 2001, the Commission received notification of a proposed concentration pursuant to Article 4 of Regulation (EEC) No 4064/89 (hereinafter 'the Merger Regulation') by which CVC Capital Partners Group Ltd (hereinafter 'CVC') indirectly acquires within the meaning of Article 3(1)(b) of the Merger Regulation sole control of the Austrian undertaking Lenzing AG (hereinafter 'Lenzing') by way of purchase of shares.

(2) After examination of the notification, the Commission concluded that the notified operation fell within the scope of the Merger Regulation as amended and that it raised serious doubts as to its compatibility with the common market and the functioning of the EEA Agreement.

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[1] OJ L 395, 30.12.1989, p. 1; corrected version published in OJ L 257, 21.9.1990, p. 13.
[2] OJ L 180, 9.7.1997, p. 1.
[3] OJ C 69, 19.3.2004.
[4] OJ C 69, 19.3.2004.

(3) Following thorough investigation of the case, the Commission has now come to the conclusion that the proposed concentration is such as to create or strengthen a dominant position as a result of which effective competition in the common market and the functioning of the EEA Agreement would be significantly impeded.

I. **THE PARTIES**

(4) CVC manages and provides consultancy services to investment funds. It has a controlling interest in over 70 companies. Amongst these is the Acordis group ([5]) which is active in man-made fibres and speciality materials for industrial, textile, medical and hygienic applications.

(5) Lenzing is active in the manufacturing and marketing of man-made cellulosic fibres for textile and non-textile applications, engineering, plastic films and paper production.

II. **THE OPERATION**

(6) To acquire sole control of Lenzing, an Austrian acquisition vehicle controlled by CVC called Zellulosefaser Beteiligungsgesellschaft mbH will purchase Bank Austria's majority stake in Lenzing. On completion, CVC will also transfer its share capital of certain Acordis subsidiaries, including Acordis' activities relating to viscose staple fibres, lyocell (Tencel), textile viscose filament (Enka), industrial viscose filament (Cordenka) and Acordis' acrylic fibre operation in Kelheim (Germany) and Grimsby (UK) to Zellulosefaser Beteiligungsgesellschaft mbH. The share and convertible bond purchase agreement of 14 February 2001 will expire and become invalid if regulatory approval of the proposed operation is not obtained before [...]* (*).

III. **CONCENTRATION**

(7) CVC will indirectly acquire sole control of Lenzing through the notified operation which therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

IV. **COMMUNITY DIMENSION**

(8) The undertakings concerned have a combined aggregate worldwide turnover of more than EUR 5 billion (CVC, EUR [...]* million in 2000; Lenzing, EUR [...]* million in 2000). Each of them has a Community-wide turnover in excess of EUR 250 million (CVC, EUR […]* million in 2000; Lenzing, EUR [...]* million in 2000), but they do not achieve more than two thirds of their respective aggregate Community-wide turnover within one and the same Member State ([6]). The notified operation therefore has a Community dimension according to Article 1(2) of the Merger Regulation. It also constitutes a cooperation case under the EEA Agreement, pursuant to Article 2(1)(c) of Protocol 24 to that Agreement.

V. **PROCEDURE**

(9) On 30 May 2001, the parties offered commitments pursuant to Article 6(2) of the Merger Regulation in order to achieve first-phase clearance of the notified operation. As a result of this commitment offer, the period for preliminary examination pursuant to Article 10(1) of the Merger Regulation was extended from one month to six weeks.

(*) Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets and marked with an asterisk.

([5]) See Commission decision of 20 December 1999 in Case COMP/M.1755, *CVC/Acordis* (OJ C 30, 2.2.2000, p. 7; seller: Akzo Nobel), as well as Commission decision of 30 June 1998 in Case IV/M.1182, *Akzo Nobel/Courtaulds* (OJ C 265, 22.8.1998, p. 28) and Commission decision of 19 December 1991 in Case IV/M.113, *Courtaulds/Snia* (OJ C 333, 24.12.1991, p. 16).

([6]) Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C 66, 2.3.1998, p. 25).

(10) On 22 June 2001, the Commission decided to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation.

(11) On 9 August 2001, the Commission communicated a statement pursuant to Article 18 of the Merger Regulation and Protocol 21 to the EEA Agreement (hereinafter 'statement of objections') to the notifying party. After having access to the Commission's file on 13 August 2001, the notifying party submitted on 29 August 2001 a joint reply by CVC, Acordis and Lenzing to the statement of objections (hereinafter 'reply'). CVC informed the Commission's Hearing Officer on 21 August 2001 that it would not exercise its right to a formal oral hearing. On 11 September 2001, the Commission provided additional information to the notifying party in which it summarised certain factual elements from its file. The notifying party submitted additional comments on this information in a letter dated 17 September 2001 (hereinafter 'the supplementary letter').

(12) On 25 September 2001, the notifying party submitted commitments aimed at removing the competition concerns identified by the Commission in its statement of objections. They will be described and assessed further in recitals 254 et seq.

VI. **COMPATIBILITY WITH THE COMMON MARKET**

A. *THE RELEVANT PRODUCT MARKETS*

1. PRELIMINARY REMARKS

(13) The notified concentration relates to the fibres sector and, in particular, to the manufacture and supply of man-made staple fibres for both textile and non-textile applications (the latter are also referred to as 'non-woven' or 'unspun' applications). Whereas Acordis is active in a number of fibre areas ([7]), the only area where any competitive overlaps occur is the cellulosic staple fibre sector, in particular viscose staple fibres and lyocell staple fibres. The operation would create the world's leading supplier of these fibres. As the parties to the concentration view the product market as encompassing all kinds of natural, synthetic and cellulosic staple fibres (but not filament fibres), the following paragraphs on the classification of fibres are intended to provide the necessary background.

(a) ***The distinction between staple fibres and continuous filament yarn***

Staple fibres

(14) Staple fibres account for some 70 % of world fibre demand and have historically been used principally in textile applications. Natural fibres (except silk), whether they are of animal or plant origin, are staple fibres, that is to say fibres of limited length. Cotton and wool for instance, which are the two most widely used natural staple fibres, are characterised by staple lengths of about 40 mm and 70 to 80 mm respectively. Staple fibres are either spun into yarn and subsequently woven or knitted for textile applications, or used in unspun (non-woven) form, for instance — traditionally — as felts or filling material for cushions, bedspreads etc., but recently for an ever wider range of applications.

(15) Man-made staple fibres have been developed to imitate but also to enhance the qualities of natural fibres. Man-made staple fibres are of two types: whilst cellulosic fibres (such as viscose and lyocell)

([7]) The main Acordis activities in the filament yarn sector are: viscose textile filament, viscose industrial filament, acetate textile filament, polyester industrial filament, and industrial polyamide filament. Acordis is also active in acrylic staple fibres and carbon industrial fibres. Since these products do not cause any competitive concern, they are not considered any further.

are made from wood-pulp, synthetic fibres (such as polyester, polypropylene, polyamide and acrylic) are usually produced on a thermoplastic basis. The fibres are extruded in a bundle and afterwards cut into staples, thus turning them into staple fibres.

Continuous filament yarn

(16) Unlike staple fibres, (man-made) continuous filament yarn is produced by an entirely different production process in different plants and shows distinct performance characteristics; it is used for different applications. Although it is based in principle on the same cellulosic or synthetic raw material as man-made staple fibres, filament yarn is extruded in a single continuous filament and wound on a bobbin; it can be several kilometres long. Quality criteria for the raw material before extrusion are significantly higher (unevenness and impurities have to be excluded) and production quantities are significantly lower than in the staple fibres sector; filament yarn is therefore much more expensive than staple fibres ([8]). A major application of viscose filament yarn is for instance the reinforcement of car tyres, for which the strength of spun viscose staple fibres would be quite insufficient.

Commission practice

(17) In previous decisions ([9]), the Commission found that staple fibres and continuous filament yarns belonged to different product markets, and this distinction is not contested by the notifying party. Moreover, there is no horizontal overlap between the parties in the filament yarn sector: only the Acordis group is active in the production of various man-made cellulosic and synthetic types of filament yarn.

(b) ***The distinction by areas of application and types of fibre***

(18) Another fundamental distinction in previous Commission decisions in the fibres sector was made by area of application. The Commission found that fibres for textile applications, industrial applications and floor coverings (carpets) belonged to distinct product markets ([10]). In those markets, the Commission also found that fibres were to be distinguished on a fibre-by-fibre basis ([11]). This approach is also reflected in the 1996 Code on aid to the synthetic fibres industry ([12]).

(c) ***The product market definition suggested by the parties***

(19) The parties consider that the relevant product market comprises not only man-made cellulosic staple fibres but all man-made (cellulosic and synthetic) as well as natural staple fibres. They argue that there is a high degree of substitutability between different fibres, in particular between cotton, viscose and polyester.

([8]) For illustration see the following quotation from an internal document of the parties: [...]*.

([9]) See Commission decision in Case IV/M.1182, *Akzo Nobel/Courtaulds* (reference given above) et al.

([10]) See Commission Decision 93/9/EEC of 30 September 1992 in Case IV/M.214, *DuPont/ICI* (OJ L 7, 13.1.1993, p. 13) et al.

([11]) For instance, in the textile filament yarn markets as regards viscose and acetate (Commission decision of 19 December 1991 in Case IV/M.113, *Courtaulds/Snia* and Commission decision of 30 June 1998 in Case IV/M.1182, *Akzo Nobel/Courtaulds*), polyester and polyamide (Commission decision of 3 February 1994 in Case IV/M.399, *Rhône-Poulenc-Snia/Nordfaser* (OJ C 42, 12.2.1994), polyester and viscose (Commission decision of 10 February 1995 in Case IV/M.533, *TWD/Akzo Nobel/Kuagtextil* (OJ C 46, 23.2.1995, p. 5)); in the carpet fibre markets as regards polyamide (nylon) and polypropylene fibres (Commission decision in Case IV/M.214, *DuPont/ICI* (reference given above).

([12]) OJ C 94, 30.3.1996. Commission notice on the extension of the period of validity (OJ C 24, 29.1.1999, p. 18).

2. METHODOLOGY

(20) The Commission has carried out an in-depth market investigation, involving both direct customers of the parties and downstream customers, as well as the parties themselves and their competitors. It has received submissions from over 100 respondents, most of which are direct customers of the parties. This market investigation has enabled the Commission to carry out both a demand-side and a supply-side analysis of the relevant issues, namely whether the following distinctions need to be made:

— a distinction between man-made cellulosic staple fibres (viscose and lyocell), synthetic staple fibres (in particular polyester and polypropylene), and natural fibres (in particular cotton),

— a distinction between different types of man-made cellulosic staple fibres (viscose and lyocell), and

— further distinctions along application lines and between customer groups.

(21) The Commission has also evaluated extensive information on the parties' sales volumes and prices charged over several years and has carried out an analysis of price correlations and elasticities.

(22) The fibres which the notifying party regards as the closest substitutes for man-made cellulosic staple fibres are cotton, polyester and polypropylene (the latter to a much more limited degree, mainly in the non-woven area). The Commission's reasoning relating to the definition of the relevant product markets will therefore focus on the substitutability of these fibres with viscose staple fibres and lyocell staple fibres, as well as on the substitutability between viscose staple fibres and lyocell staple fibres.

The parties' submissions

Customer reply rate

(23) In their reply ([13]), the parties submit that the reply rate to the Commission's market investigation falls well short of 50 % and that the contents of its file are necessarily unrepresentative of the wider market reaction.

(24) The Commission, having considered this argument, maintains that the results of its market investigation provide a reliable factual basis for its assessment of the notified operation. The reply rate of the parties' immediate customers in the EEA, who are crucial for the assessment of the effects of the notified operation on the European market, has been well above 50 % both in absolute numbers and as a percentage of the parties' volume of sales. Furthermore, it should be noted that the Commission's market investigation involved both small and large customers in all segments of the parties' relevant business. Its results can therefore be regarded as representative. The lower reply rate of customers located outside the EEA, and of downstream customers, whose inclusion into the market investigation was of a merely complementary character, does not affect the representativity of the Commission's investigation ([14]).

([13]) At paragraph 2.4. The same submission is made in the parties' letter (on page 3) where the notifying party also points to alleged 'duplication'. The Commission maintains that its evaluation of the market investigation is not inflated by double-counting.

([14]) It should be noted that of the customer contact details supplied by the parties (in their reply, these are said to be more than 300), a significant number could not be used in the Commission's market investigation because these contact details, in particular the fax numbers, were not correct. Although the Commission drew the parties' attention to this fact at an early stage, the parties did not supply correct contact details.

Methodology in applying the SSNIP test

(25) In its supplementary letter ([15]), the notifying party also claims that there was a fundamental error in the Commission's methodology in applying the SSNIP ([16]) test and that the Commission's approach in questions 8 to 15 of its phase II questionnaires to customers was flawed ([17]). According to the notifying party, results of such a hypothetical test are subjective, inevitably arbitrary and unreliable. The notifying party argues that the Commission's questions to the parties' customers failed to make it clear that price increases of one fibre would be relative to the price of other fibres, and that they failed to specify a timeframe in which that switching might take place; according to the notifying party, a timeframe of at least one year would have been appropriate. It is also submitted that the questionnaires did not include an option relating to reductions in volume of viscose or lyocell-based production. Finally, the notifying party submits that the Commission should have asked for empirical data on the extent to which customers have in the past reduced their viscose and lyocell consumption in response to non-transitory relative price differentials between viscose and lyocell and other fibres.

(26) The Commission, having considered these arguments, maintains that its market investigation, in particular its questions addressed to the parties' customers during the phase II investigation, is a reliable and objective basis for the definition of the relevant product markets and for the competitive assessment of the notified operation. The application of the SSNIP test in this case is in line with consistent Commission practice ([18]). In particular, it should be noted that the SSNIP test is by definition of a hypothetical nature. Furthermore, it generally presupposes a non-transitory price increase, thereby excluding from the test any transitory price fluctuations. Consequently, the Commission's questionnaires explicitly referred to 'permanent' price increases. The indication of a concrete timeframe for switching would have been arbitrary, and the parties have failed to state any reasons why a timeframe of 'at least one year' for switching would, in their opinion, have been appropriate.

(27) Furthermore, each of the contested questions to the parties' customers made it clear that the underlying hypothetical price increases for viscose staple fibres or lyocell were to be seen in the context of the existence of other, alternative fibres; the Commission explicitly asked whether customers would 'use other types of fibres instead' or 'switch from VSF or lyocell to another type of fibre' ([19]). It is clear from the foregoing that the Commission's market investigation referred to hypothetical, relative price differences between viscose staple fibres, lyocell, and other types of fibres. It should also be noted that the questions referred to a price increase only in respect of VSF or lyocell, which makes it clear, along with the references to other fibres, that the prices of the latter are supposed to be static.

(28) Moreover, and contrary to the notifying parties submissions, the Commission's questionnaires did include a question relating to reductions in volume of viscose and lyocell-based production. Customers were asked by how much their behaviour in the event of a price increase would reduce their overall VSF or lyocell consumption, as the case might be ([20]).

([15]) At paragraphs 2.2 (third bullet point), 2.16 et seq. and 3.11.

([16]) Small but significant, non-transitory increase in price (SSNIP).

([17]) Question 8 of the Commission's phase II questionnaire to customers reads as follows:
'8. (1) For the manufacture of each of your abovementioned products (groups) made of viscose staple fibres, if the price of viscose staple fibre were to rise permanently by 5 %, would you:
a) use 100 % other types of fibres instead of VSF;
b) reduce the VSF percentage in the blend;
c) cease producing this product, or
d) not change anything?
(2) By how much would this reduce your overall VSF consumption?
(3) By how much would the prices of your VSF products rise in case you did not use other types of fibres, nor reduced the percentage of VSF nor ceased producing?'Question 9 repeats question 8, based on a 10 % price increase.
Question 10 repeats question 8, referring to products or groups of products made of lyocell.
Question 11 repeats question 10, referring to a 10 % price increase.
Question 15 reads as follows: 'In general and in the event of a permanent price increase of 5 to 10 % would you (fully or partly) switch from VSF or lyocell to another type of fibre and by how much would these switches reduce your consumption of VSF or lyocell?'.

([18]) Commission Notice on the definition of relevant market for the purposes of Community competition law (OJ C 372, 9.12.1997, p. 5) paragraph 17.

([19]) See footnote 17. It should be noted that question 15 even provided addressees with concrete possibilities of switching, such as 'VSF to lyocell' or 'lyocell to VSF'.

([20]) Questions 8(2), 9(2), 10(2) and 11(2) of the phase II questionnaire to customers (see footnote 17).

(29) Finally, the Commission notes that its assessment is not only based on a prospective analysis of hypothetical future switching to other fibres, but also on empirical data of market movements in the past. Indeed, the Commission's price correlation analysis (see below, in particular recitals 72 et seq.) was aimed at establishing patterns of substitution in the past, based on empirical data provided by the parties themselves. (It can also be noted that the parties' objections about the application to past data of statistical techniques such as correlation — discussed in the next section — is inconsistent with their insistence in the supplementary letter on use of data on past practice — which must, of course, be analysed in order to be useful.)

Use of correlation data

(30) In their reply, finally ([21]), the parties express the view that the Commission has overemphasised correlation data rather than actual switching examples in its statement of objections. The Commission, having considered these arguments, does not share the parties' view and will comment in recitals 78 to 79 and 110 to 114 on its use of correlation data and the issue of switching to other fibres.).

3. THE BASIC DISTINCTION BETWEEN VISCOSE STAPLE FIBRES, LYOCELL STAPLE FIBRES, COTTON, POLYESTER AND POLYPROPYLENE

(31) The market investigation has revealed that a basic distinction between viscose staple fibres, lyocell staple fibres, cotton, polyester and polypropylene needs to be made.

(a) ***Demand-side substitutability***

(32) For two products to be regarded as substitutable, the direct customer must consider it a realistic and rational possibility to react to, for example, a small but significant, non-transitory increase in the price of one product by switching to the other product in a relatively short period of time. Each product must be a reasonable alternative for the other in economic and technical terms ([22]). Although it can be acknowledged that different types of fibres are to a limited degree interchangeable, demand-side substitutability between man-made cellulosic fibres and other fibres, and between the two main types of cellulosic fibres (viscose and lyocell), is not sufficient to conclude that they belong to the same product market. These findings have been confirmed by the results of the market investigation.

Viscose staple fibres

Distinctive product characteristics

(33) Viscose staple fibres (hereinafter 'VSF') are a product that shows very specific characteristics, distinguishing it from any other fibre. In the context of the market investigation carried out by the Commission, a high number of customers pointed to these characteristics. The prime feature of VSF is its high moisture absorbency combined with its high liquid retention capacity, which goes beyond the absorption capacities of all other fibres regarded as close substitutes by the notifying party, namely cotton, polyester and polypropylene. This feature makes VSF eligible for a wide variety of applications both in the textile area (due to the resulting wearing comfort) and in the non-woven area (household applications, medical and hygienic applications, personal care products, and industrial applications such as filters or inside support material for artificial leather) ([23]).

([21]) At paragraphs 2.2 (third bullet point), 2.16 et seq. and 3.11.

([22]) See Commission Decision 93/9/EEC of 30 September 1992 in Case IV/M.214, *DuPont/ICI* (OJ L 7, 13.1.1993, p. 13) paragraph 23; see also the Commission Notice on the definition of relevant market for the purposes of Community competition law (OJ C 372, 9.12.1997, p. 5) paragraphs 15, 17.

([23]) This is confirmed by the following statement in an internal document submitted by CVC: [...]*.

(34) A feature distinguishing VSF from polyester and polypropylene is its biodegradability which is a relevant factor particularly in the area of disposable non-woven applications. As compared with cotton, it is VSF's softness and drape which is of particular relevance in the textile area ([24]). Furthermore, VSF has particular dyeing characteristics distinguishing it, both in the area of textile and non-woven applications, from cotton and polyester.

(35) On the other hand, VSF also has distinctive product characteristics which limit its use in certain areas of application. For instance, VSF's high wet elongation and low wet tenacity render it unsuitable for machine washing in its pure state. Facilitated by its good processability, VSF is a popular material for blending, both with cotton and with polyester, thus making use of the respective advantages and minimising the disadvantages of each individual fibre. This in itself can be seen as an indication of VSF's distinctiveness, especially when taking into account that VSF is more expensive ([25]) than other fibres: if the use of VSF did not provide an added value to products, it would not be chosen, given its higher price.

Inflexibility of demand

(36) The market investigation carried out by the Commission has revealed that there is insufficient demand-side substitutability between VSF and other fibresfor them to be included in the same relevant market. Indeed, a majority of the customers interviewed stated that they were not in a position to replace VSF in their products at all. According to their replies, some customers would have to cease manufacturing the product concerned and the vast majority of customers would simply not change anything in the event of an increase of 5 to 10 % in the price of VSF. The most common reasons for not switching were the specific product characteristics of VSF and the requirements set by downstream customers.

(37) In their reply ([26]), the parties also submit that a majority of customers (52 %) said they would reduce volumes in response to a small but non-transitory increase in price; that the reaction of 18 % would depend on market conditions and that only 24 % stated they would not switch or reduce volume. Furthermore, the parties argue that greater weight should be given to actual evidence of switching ([27]).

(38) The Commission, having considered these arguments, maintains its initial conclusions drawn from the results of the market investigation. First, it needs to be noted that the parties' methodology in computing their figures is inconsistent as it does not distinguish between replies to the Commission's phase I questionnaires and those given to its phase II questionnaires, thus inevitably double-counting answers by certain customers who responded to both questionnaires. In addition, the questions addressed to customers in phase I and phase II were substantially different and cannot be jointly evaluated ([28]). Also, given that the reply only states percentages and neither absolute numbers nor precise references to the Commission's file, the Commission is not in a position to verify these figures. The Commission cannot therefore rely on the parties' figures for its assessment of the notified operation and points to its own analysis of switching volumes cited in recital 40.

(39) Secondly, as regards the evidence of actual (full and partial) switching referred to by the parties, the Commission does not deny that certain customers do switch fibres. It should, however, be noted that these are isolated examples which are not representative of the general reaction of the market as revealed by the Commission's market investigation ([29]).

([24]) This is confirmed by the following statement in an internal document submitted by CVC: [...]*.
([25]) [...]*.
([26]) At paragraphs 2.5 et seq., in particular at paragraph 2.7.
([27]) At paragraph 2.18 and in Appendices 6 and 7.
([28]) The evaluation of these questionnaires is discussed in recitals 40, 188 and elsewhere.
([29]) The examples stated by the parties in their reply (Appendices 6 and 7) represent less than 10 % of their total customer base.

(40) Furthermore, based on the anonymised summary of customers' expected switching behaviour in the event of a small but permanent price increase of 10 % ([30]), the Commission has weighted the customer responses to its market investigation by each customer's individual quantity of fibre purchases in the year 2000. The result of this analysis is that the effect of a 10 % VSF price increase on fibre sales by the parties to these customers would remain below 5 % in terms of losses of sales due to customer switching ([31]), thereby fully confirming the Commission's view on insufficient demand-side substitutability between VSF and other fibresfor them to be included in the same relevant market.

(41) In its letter, the notifying party argues that the Commission has failed to include in the switching effect those customers who said they would reduce or stop production of VSF or lyocell-based products in the event of a 5 to 10 % price increase for VSF or lyocell.

(42) The Commission, having considered this argument, maintains that those customers who replied that they would stop or reduce their VSF-based production do not belong to the same category as those who would switch to other fibres. Whilst customers saying they would switch can theoretically be seen as indicative of a wider product market if such switching happens to an extent high enough to make a 5 to 10 % price increase unprofitable, customers replying that they would stop or reduce production are to be seen as indicative of exactly the opposite in terms of product market definition. Indeed, the latter customers indicate, by the very nature of their response, that they are heavily dependent on a specific type of fibre and not able to switch even in the event of significant, non-transitory price increases.

Long-term and short-term consumption trends

(43) The notifying party points to long-term trends in staple fibre consumption, showing, for instance, a decline of VSF consumption after it peaked around 1970. It compares this phenomenon with the steep rise in polyester consumption, and with the rising consumption of other synthetic fibres such as polypropylene ([32]).

(44) The Commission notes, however, that the decline of VSF consumption ([33]), which has in any event slowed significantly in Europe in the 1990s, does not prove by itself VSF's substitutability with other types of staple fibres. On the contrary, it is VSF's ability to find new areas of application, such as the booming non-wovens sector ([34]), which should be viewed as indicative of its distinctiveness from and its insufficient substitutability with all other fibres. If VSF, which is in general higher-priced than other fibres ([35]), was completely interchangeable with these fibres, it would have been entirely replaced ([36]).

([30]) The information was made available to the parties on 11 September 2001 (see recital 10).

([31]) The figure indicates the volume of sales lost due to customer switching on total volume of sales to customers responding to this question. The sample of customers responding is highly representative, constituting well above 50 % of the parties' total sales in the EEA. The Commission has also asked a different question on switching in phase I of the investigation which, as it explicitly includes an estimation on the reactions of downstream customers, will be discussed in the assessment of competitive constraints in recitals 187 to 190. Likewise, the issue of volume reduction due to stopping production will be discussed there.

([32]) Nowadays, viscose accounts for some [< 5 %]* of all world staple fibre consumption (combined with lyocell: [1 500 to 1 700]* kilotonnes per year, [...]*), but viscose has twice the relative importance in the EEA [< 10 %]* where cotton is used significantly less than in other geographic areas [< 40 %]* in the EEA, [< 60 %]* worldwide). The respective figures for polyester are: [< 25 %]* in the EEA, [< 25 %]* worldwide; and for polypropylene: [< 15 %]* in the EEA, [< 10 %]* worldwide.

([33]) This decline is largely due to a decline in textile VSF consumption (which is in turn linked to the general decline in European textile production). As regards the changing percentages of textile and non-woven consumption, see recitals 145 to 148.

([34]) Note, for instance, the increasing use of VSF for disposable non-wovens (wipes, surgical gowns, swabs, wound dressings) where VSF has itself replaced (predominantly non-disposable) cotton fabrics and gauzes.

([35]) See footnote 25.

([36]) See also the results of the Commission's price correlation analysis (Table 1/recitals 72 to 74).

(45) Moreover, the replacement of one fibre by another is often driven by major technological developments and cannot be seen as an indication of a general and sufficient substitutability amongst fibres. Again, this is particularly evident in the non-wovens industry. For instance, the use of VSF for baby diaper coverstock has all but stopped, due to important modifications of the product itself, such as the manufacture of multilayered diapers and the development of super-absorbent polymers. As regards the textile industry, new spinning and finishing technologies as well as the development of new synthetic or cellulosic materials can have a major influence on fibre use and consumption. The use of different fibres in substantially altered products, however, cannot be seen as indicative of the existence of a common product market for both types of fibres.

(46) In their reply ([37]), the parties deny the occurrence of major new developments in the spinning and finishing technologies in recent years.

(47) The Commission, having considered this submission, maintains that major technological developments in the cellulosic fibres sector did occur in the past and can occur in the future, having an important influence on fibre processability and thus on fibre consumption. It refers to the parties' own product developments, such as a non-fibrillating lyocell fibre, and their cooperation with both spinners and dyers on lyocell treatment. Also, not all qualities of fibres are equally suitable for OE rotor spinning ([38]). Even in the absence of major technological developments, the use of different fibres in substantially altered products cannot be seen as indicative of the existence of a common product market for both types of fibres.

(48) Secondly, the parties argue in their reply ([39]) that in non-woven applications, VSF was subject to a 'boom and bust' cycle. Competing suppliers and customers would identify cheaper alternative fibres as soon as their end-use becomes sufficiently large. They would invest in any necessary technological developments leading to viscose being supplanted. According to the parties, this should be seen as evidence of viscose's vulnerability in the non-woven sector.

(49) The Commission, by contrast, takes the view that these arguments, as described in the Reply, do not counter its analysis. Its main point of disagreement with the parties is the interpretation of changing patterns of fibre use due to technological change. In this respect, the Commission maintains that such changes, which are only effective in the medium to long term, cannot be seen as indicative of VSF and other fibres belonging to the same product market. Technical changes that could enable the use of cheaper alternative fibres are by their nature characterised by uncertainty, and their impact would anyway be felt only in the medium to long term. The current VSF customers, even if they are strong enough actively to pursue a strategy of promoting technological product development in order to be able to use cheaper alternative fibres, do not have any switching option before such technological development has occurred. The Commission's

([37]) At paragraph 2.27.

([38]) Evidence on technological development in spinning can be found on the following websites by leading OE rotor spinning technology companies:

1. http://www.suessen.com/htmls/foemi.htm.
   According to the Suessen site, the OE spinning technology, which is based on developments of the 1960s and 1970s, had its commercial breakthrough in the 1980s and has been considerably improved since that time, e.g. by enhancing spinning speed by 50 % between 1983 and 1995. That these developments are not entirely neutral with respect to fibres is equally indicated on the Suessen website which states: 'Polyester and other synthetic fibres are prone to thermal and mechanical fibre defects, particularly at high production speeds.' (http://www.suessen.com/htmls/foepp5.htm).
2. http://www.elitex-saurer.cz/indexger.htm
   The Elitex-Saurer webpage also contains evidence on the fibre specificity at (or at least reduced fibre range suitability) for use with certain components of spinning machines, e.g. with navels and particularly opening rollers.

([39]) At paragraph 2.27.

market investigation has not revealed any major shifts away from commodity VSF that are to be expected in the short term due to current or foreseeable impending technological developments ([40]).

(50) A similar consideration as that relating to technological developments is valid with respect to the changes in fashion, with the obvious difference that fashion, unlike technological developments, accounts for short-cycled changes in consumption patterns. The types or blends of fibres used for the production of a specific kind of garment may change from year to year, depending on fashion trends. Other types or blends of fibres will not be sufficiently substitutable in the event of changing fashion as the products made from them will not be considered fashionable and therefore worth buying. Indeed, in the Commission's market investigation, a significant number of textile customers' responses indicate that fashion has a significant impact on the consumption of VSF ([41]).

(51) In their reply ([42]), the parties argue that the Commission's assessment does not take into account the 'value for money competition' between fibres. Furthermore the parties submit that fashion is transient.

(52) The Commission, having considered these arguments, maintains its analysis. Firstly, it is worth being noted that the parties themselves acknowledge that customers 'are not merely assessing the price differentials between different garments; they are looking at the basket of price, aesthetics, functionality, brand, style etc.' in their choice of particular garments ([43]). This confirms, in the Commission's view, that the choice of fibres does not primarily depend on price considerations. Secondly, the Commission agrees with the parties' view on the essentially transient character of fashion and considers that this very fact confirms its above analysis on the limited substitutability between fibres at any given moment.

(53) It can therefore be concluded that the choice of VSF by customers does not primarily depend on price considerations but rather on the specific product characteristics of VSF, product innovation and consumer preferences at a given point in time ([44]). Substitution cannot be considered sufficient to make potential price increases unprofitable for a hypothetical monopolist.

([40]) [...]* However, one of only three customers cited in support of this hypothesis explicitly states: 'Until the development work is done it is impossible to give detailed answers to your Q.16' (Commission file page 3217. Question 16 which this customer refers to asks 'If switching to other types or blends is not an option for you or if switching is not possible to a sufficient degree in order to offset VSF or lyocell price increases please indicate the reasons for not switching or for not switching to a sufficient degree…'). Another customer's switch to polyester is apparently unrelated to this potential new development as he has effected such switches in the past. The third customer cited 'foresees two different possibilities', one of them the increasing use of wood-pulp, the other one the increasing use of polypropylene and polyester to replace 'some quantities of viscose'. (Commission file, page 572). While it is not clear if this customer refers to the same development as the one mentioned above it is clear that he refers to a development that would not entirely supplant VSF. The parties' references furthermore have to be complemented by the majority of wipes manufacturers who evidently do not expect such changes to happen in the short to medium term. Statements like the following ones are characteristic of the large majority of wipes manufacturers' unawareness of any major development supplanting VSF in the wipes area in the near future: 'The moisture absorbency is one of the most important product functions of housecleaning products. This function is only possible using VSF.' (Commission file, page 4768); 'We could not switch due to product requirements and their relationship to viscose. There is no commercially viable fiber substitute for viscose that gives the same properties…Increasing portion of synthetic fibres such as polyester or polypropylene would alter unacceptably the fabric characteristics …' (Commission file, page 4332).

([41]) See also D. Morris, Comité International de la Rayonne et des Fibres Synthétiques: Myths and Realities of Interfibre Competition, paper presented at International Wool Textile Organisation, 65th International Wool Conference, Cape Town, Republic of South Africa, April 1996: 'Viscose staple consumption rose during the late 1980s for reasons of fashion.'

([42]) At paragraph 2.17.

([43]) At paragraph 2.17 of the reply.

([44]) See also D. Morris, Comité International de la Rayonne et des Fibres Synthétiques: Myths and Realities of Interfibre Competition, paper presented at: International Wool Textile Organisation, 65th International Wool Conference, Cape Town, Republic of South Africa, April 1996: 'In fact it would appear that changing end-uses, product innovation and consumer preference are the main reasons for switching fibre and not price relativities. (…) However, to state that price competitiveness is non-existent is not valid per se would be too extreme, it is merely only appropriate with respect to very large price movements, and large changes in price relativities in the order of 20 per cent.'

Lyocell

(54) The parties have also taken the view that a specific market for lyocell does not exist. They have argued that lyocell is a product still looking for its proper market and should be regarded as substitutable with other fibres, especially with VSF, but also with cotton and polyester. This view has not been confirmed by the results of the market investigation and the price correlation analysis carried out by the Commission.

(55) On the contrary, the lyocell staple fibre (hereinafter 'lyocell') ([45]) shows specific product characteristics which clearly distinguish it from VSF. These product characteristics are, in particular, its high tenacity in both wet and dry states and its low shrinkage in water which allows to minimise finishing losses and shrinkage in laundering.

(56) Lyocell is often used as a blending fibre, in connection with other fibres such as viscose, linen, cotton, polyamide or polyester. So far, its particular properties have primarily been exploited by producers of branded quality textiles ([46]) even though lyocell is currently priced much higher than any other of the fibres considered ([47]). Indeed, for luxury jeans, one of the most prominent applications of lyocell, VSF is considered entirely unsuitable.

(57) Similarly, textile applications may serve to illustrate the distinctiveness of lyocell towards cotton. Despite its significantly higher price, lyocell is used, for instance, in certain types of jeans because it can add a specific touch and drape to the product. Moreover, lyocell's dry tenacity and water retention are also superior to those of cotton.

(58) As compared with synthetic fibres, it is the cellulosic character of lyocell that provides for its high moisture absorbency and leads, in textile applications, to high wearing comfort which cannot be matched by synthetics. Furthermore, lyocell's biodegradability, which it has in common with other cellulosic and natural fibres, clearly distinguishes it from any of the synthetic fibres mentioned as a substitute. Biodegradability is a relevant factor particularly in disposable non-wovens and has been mentioned as such in response to the Commission's market investigation.

(59) Finally, lyocell has a very particular characteristic which it does not share with any of the conventional fibres: its tendency to fibrillate ([48]). On the one hand, this tendency can constitute a disadvantage as it requires special spinning and dyeing techniques and contributes to the effect of 'greying' after repeated washing. On the other hand, the fibrillating character of the lyocell fibre can be exploited to create unique fabrics with exceptional drape and soft touch — the 'peach-skin effect'. No other fibre can produce this effect to any comparable extent.

(60) In their reply ([49]), the parties submit that the Commission's statement of objections completely ignores that cotton is lyocell's main competing fibre. Furthermore, the parties argue that the Commission committed a factual error by stating that other fibres were unable to replicate lyocell's specific characteristics, in particular its tendency to fibrillate; they refer to customer call notes of Acordis and provide samples of fabrics.

([45]) Lyocell filament yarn is currently not being produced commercially. Therefore, the term 'lyocell' in this document exclusively refers to lyocell staple fibres, except in 'lyocell production technology' (see recitals 246-247) where it refers to both lyocell staple fibre production technology and lyocell filament production technology.

([46]) It should, however, be noted that the same product characteristics make lyocell eligible for certain non-woven applications such as filters and wipes. In these applications, as in the textile sector, the higher wet strength and lower shrinkage of lyocell can be a distinct advantage over VSF.

([47]) This is true in particular for textile applications, representing [...]* % of lyocell sales (source: [...]*).

([48]) I.e. small longitudinal particles or fibrils partly detaching from the main body of the fibre.

([49]) At paragraphs 3.12 et seq.; see also Appendices 5 and 9 of the reply.

(61) The Commission, having considered these arguments, maintains its analysis. First, it should be noted that the competitive relationship between lyocell and other fibres, in particular between lyocell and cotton, has been a main subject both in the Commission's market investigation and in its price correlation analysis (see recital 74).

(62) Secondly, the Commission notes that the examples of switching amongst customers set out by the parties in Appendix 9 of their reply are not representative of the overall customer response to the market investigation. Whilst the Commission does not deny that switching occurs to a certain degree, it does not consider these examples of switching sufficient for lyocell to be included in a wider product market comprising other types of fibres (see recitals 63 and 67).

(63) The market investigation carried out by the Commission has confirmed that there is not sufficient demand-side substitutability between lyocell and other fibres for them to be included in the same relevant market. Indeed, the vast majority of the customers interviewed stated that they were not in a position to replace lyocell in their products at all. According to their replies, certain customers would have to cease manufacturing the product concerned and the vast majority of customers would simply not change anything in the event of an increase of 5 to 10 % in the price of lyocell. The most common reasons for not switching were the specific product characteristics of lyocell and the requirements set by downstream customers ([50]).

(64) In their reply ([51]), the parties argue that the Commission subjectively interprets the reaction of direct lyocell customers. The parties submit that the percentage of direct lyocell customers who stated that they would not switch amounts to only 11,5 %.

(65) The Commission, having considered these arguments, maintains its initial conclusions drawn from the results of the market investigation. First, it needs to be noted that the parties' methodology in computing their figures is inconsistent as it does not distinguish between replies to the Commission's phase I questionnaires and to its phase II questionnaires, thus inevitably double-counting answers by certain customers who responded to both questionnaires. In addition, the questions addressed to customers in phase I and phase II were substantially different and cannot be jointly evaluated. Moreover, the parties have misinterpreted certain customer responses on the Commission's file which they include in their own analysis ([52]). The Commission cannot therefore rely on these figures for its assessment of the notified operation.

(66) Finally, as regards the evidence of actual (full and partial) switching referred to by the parties, the Commission does not deny that certain customers do switch fibres. It should, however, be noted that these are isolated examples which are not representative of the general reaction of the market as revealed by the Commission's market investigation ([53]).

([50]) These findings are confirmed by the following statement in an internal document submitted by CVC: [...]*.

([51]) At paragraphs 3.2 et seq.

([52]) At paragraphs 3.3 and 3.4 of the reply. For instance, regarding the two groups 'Would switch 100 % or cease production' and 'Would reduce volume of lyocell purchased by > 5 %' in the parties' evaluation, the following points can be made:

- The document on pp. 3860 to 3875 of the Commission's file does not indicate that this customer would switch or cease production.
- At least two of the three documents (pp. 2994 to 2997; 3163; 3224 to 3225) counted in these two groups are responses by the same customer to the same questionnaire and therefore should not be double and triple-counted.
- The parties misunderstand the reply on pp. 3309 to 3314: the customer refers to various product groups, not for all of which the customer would partially (by 10 %) switch. In particular, the product group in which he would not switch is the one for which lyocell is used.
- The parties indiscriminately regard switches occurring at a 5 % price increase and those occurring at a 10 % price increase although several customers replies (pp. 630 to 638; 723 to 733; 758 to 768; 4788 to 4800) distinguish between these two hypothetical types of price increases.
- Two replies are interpreted as representing a switch of more than 5 % although the reply does not state any extent of the switch (pp. 676 to 684; 485 to 494).
- The parties' analysis includes another reply which in fact gives only a general answer and does not specifically state when this customer would switch and to what extent (pp. 668 to 675).

([53]) The examples stated by the parties in their reply (Appendices 6 and 7) represent clearly less than 10 % of their total customer base.

(67) Furthermore, based on the anonymised summary of customers' expected switching behaviour in the event of a small but permanent price increase of 10 % ([54]), the Commission has weighted the customers' responses to its market investigation by each customer's individual quantity of fibre purchases in the year 2000. The result of this analysis is that the effect of a 10 % lyocell price increase on fibre sales by the parties to these customers would be around 15 % (for customers in the EEA) or below 10 % (for customers both inside and outside the EEA) in terms of loss of sales due to customer switching ([55]). Such a loss of 10 to 15 % of sales due to switching cannot be considered sufficient to make price increases unprofitable.

(68) This is true even if the current situation of overcapacity is taken into account as the parties could adopt a strategy of closing or 'mothballing' entire plants (or just individual production lines) thereby reducing their fixed costs. In any event, variable costs would be saved by production cuts. These cost savings and the increased revenues due to higher prices would more than compensate for the loss of revenues due to switching ([56]). Production cuts of well above than 10 % may therefore be profitable in case prices are raised by 10 %.

(b) ***Supply-side substitutability***

(69) There is no supply-side substitutability between synthetic fibres and man-made cellulosic fibres; both are made from entirely different raw materials and in entirely different production processes and plants.

(70) Likewise, there is no supply-side substitutability between lyocell and VSF. Although both viscose and lyocell staple fibres are man-made cellulosic fibres, lyocell is produced in separate plants by an entirely different production process, a solvent spinning process in which the fibre is formed by directly dissolving wood pulp in organic solvents (whereas viscose has to undergo a different chemical process of slurrying and xanthation, which in contrast to the lyocell process involves the

([54]) The information was made available to the parties on 11 September 2001 (see paragraph 10).

([55]) The figure indicates the volume of sales lost due to customer switching on total volume of sales to customers responding to this question. The sample of customers responding is representative, constituting some 50 % of the parties' total sales in the EEA. The Commission has also asked a similar question in phase I of the investigation which, as it explicitly includes an estimation on the reactions of downstream customers, will be discussed in the assessment of competitive constraints in recitals 239-242.

([56]) A hypothetical post-merger situation referring to production figures for the year 2000 can be used for illustration:
Had Acordis decided to cut the production of Mobile and Grimsby by 15 % and to operate only from one plant, average manufacturing cost at this plant would have sunk considerably. This resulting average manufacturing cost reduction would then be added to any calculation offsetting Acordis' increased profits per tonne of sales, due to a 10 % price increase, by its lost profits, due to a reduction in sales volume of 15 %.
As it can be assumed that Acordis' profit margins would have grown by much more than 10 % following a 10 % price increase, such a 10 % price increase could consequently have been highly profitable for Acordis under post-merger conditions in which effective competition is no longer being provided by Lenzing. (Other than not explicitly considering Lenzing, a second simplifying assumption in this consideration is that closing costs are assumed to be zero.)
An observation on the disproportionate rise of profit margins following a 10 % rise in net sales price can be made. For this it has to be considered that: the Commission is not in a position to give a precise estimation of Acordis' lyocell profit margins in 2000 as the fixed manufacturing cost and variable cost of production provided by Acordis apparently do not include marketing, distribution or R & D costs. Margins between average manufacturing costs and sales price were about [...]* of sales price. A price increase of 10 % would have increased these margins on manufacturing costs by more than [...]* and profit margins in all likelihood even more than that. (Similar profit maximisation via capacity reduction through plant closure and higher capacity utilisation of the remaining plants could also be achieved by closing Heiligenkreuz.)
Note that the Commission's example is not meant to provide an exact calculation nor a specific projection. Its purpose is no more than to illustrate that a hypothetical monopolist in lyocell is not necessarily dependent on sales losses smaller than 10 % for its profit maximisation. Depending on the demand curve, even much larger sales losses can still be profitable for a hypothetical monopolist.

formation of a derivative, then dissolving the xanthate in dilute caustic soda before it can be extruded through spinnerettes). Special equipment and machinery are required to produce lyocell. The production technology is highly capital-intensive, resulting in lyocell currently being the man-made cellulosic staple fibre with the highest cost of production by far ([57]). On the other hand, the production of lyocell is environmentally benign, in particular when compared to the production of viscose, as the solvent used for dissolving cellulose (NMMO) and the water used in the lyocell production process can be recycled to a very large extent.

(71) In the view of competitors, which has not been contested by the notifying party, switching production between VSF and lyocell amounts to building an entirely new plant and is therefore only feasible at a significant cost and with considerable delay.

(c) ***Price correlation analysis, cross-price elasticities***

(72) When defining the relevant product markets, the Commission takes into account the available quantitative evidence capable of withstanding rigorous scrutiny for the purposes of establishing patterns of substitution in the past ([58]). In the present case, the Commission has carried out an analysis of price correlations and cross-price elasticities between VSF and its potential substitutes, based on monthly sales data supplied by the parties to the notified concentration. The data examined cover a 10 year period between January 1991 and May 2001. The results of the Commission's analysis support the above findings of separate product markets.

Price correlation analysis: VSF and other types of fibres

(73) A price correlation analysis is designed to measure the sensitivity of the price of one product to the price of an alleged substitute. In the present case, the aim of the analysis was to measure the degree of competitive pressure existing between VSF and other types of fibres. Its results reveal that VSF is, neither in its textile nor in its non-woven applications, sufficiently correlated with cotton, polyester or polypropylene for these products to be included in the same relevant market.

(74) The measure which quantifies the overall dependence of two time-series of prices and thereby the degree of substitutability between two products is called the correlation coefficient. By definition, the positive correlation coefficient lies between 0 and + 1: the higher the degree of correlation is for two products (that is to say, the closer the correlation coefficient is to + 1), the more likely is the existence of a combined product market including both of them. The data in Table 1 below show that there is no significant price correlation between VSF and cotton, nor between VSF and polyester, nor between VSF and polypropylene. Even the highest coefficient (σ = 0,44), which expresses the correlation of VSF and polyester, is not high enough to justify the assumption of a combined product market ([59]).

([57]) Both competitors and customers assume, however, that these production costs might fall significantly once the considerable investment in research and development for this comparatively new technology will have paid off, given that the lyocell production process is in fact a process involving fewer production steps than the viscose process.

([58]) Commission Notice on the definition of relevant market for the purposes of Community competition law (OJ C 372, 9.12.1997, p. 5) paragraph 39.

([59]) This conclusion is in line with Commission practice. Correlations higher than those indicated in Table 1 have been considered insufficient in previous decisions, the Commission having regarded correlations of above 0,80 as high and correlations of below 0,65 as low. See for instance Commission decision of 19 July 2000 in Case COMP/M.1939, *Rexam (PLM)/American National Can* (paragraph 12).

Table 1

Results of the VSF price correlation analysis carried out by the Commission

	Cotton ([60])	Polyester LP ([61])	Polyester HP ([61])	Polypropylene LP ([61])	Polypropylene HP ([61])
VSF ([62])	0,04	0,39	0,44	0,06	0,24

([60]) Source: replies of the parties to the Commission's request for information dated 7 June 2001.
([61]) Source: replies of the parties to the Commission's request for information dated 7 June 2001. The parties have indicated that two types of prices of polyester and prolypropylene are usually set to the final consumers: low prices (LP) and high prices (HP). The source of this data is PCI-Fibres & Raw Materials. According to PCI, HP indicates the list price or/and the price paid by a small user, whilst LP indicates the price that will actually be paid by a large user.
([62]) Source: replies of the parties to the Commission's request for information dated 7 June 2001.

Analysis of cross-price elasticities: VSF and other types of fibres

(75) The above findings regarding the definition of the relevant product markets are also supported by an analysis of cross-price elasticities. Cross-price elasticities measure the change in demand for a given product resulting from a change in the price of other products and thus provide information about the degree to which products are substitutes from a demand-side perspective. In the present case, the aim of the analysis was to measure the change in demand for VSF resulting from a change in the prices of cotton, polyester and polypropylene. Its results show that past price fluctuations of cotton, polyester and polypropylene have not led to a significant change in the demand for VSF and are therefore equally indicative of the existence of a separate product market for VSF.

(76) The higher the degree of elasticity is for two products (that is to say, the bigger the coefficient is), the more likely is the existence of a combined product market including both of them. In general terms, a cross-price elasticity of less than + 1 means that products are not effective substitutes. As shown in Table 2, the cross-price elasticities for VSF on the one hand and cotton, polyester and polypropylene on the other hand are close to zero. These products cannot therefore be considered substitutes for VSF.

Table 2

VSF cross-price elasticities, calculated by the Commission

VSF/Cotton	VSF/Polyester	VSF/Polypropylene
[0,05-0,10]	[0,04-0,15]	[0,03-0,10]

Price correlation analysis: VSF and lyocell

(77) Correlation coefficients between VSF and lyocell are low irrespective of whether the lyocell textile or the lyocell non-woven segment (or submarket) are examined. Regardless of the segment (or submarket) of VSF examined, the correlation between lyocell and VSF is low; it only amounts to between 0,08 and 0,47. Similarly, the analysis of correlations between lyocell and polyester and between lyocell and cotton leads to coefficients between 0,23 and 0,6; these values are equally indicative of the existence of separate product markets ([63]).

([63]) The Commission was not able to calculate cross-price elasticities for lyocell due to lack of consistent data.

The parties' reply

(78) In their reply ([64]), the parties argue that the Commission overemphasised the importance and reliability of correlation analysis instead of fully investigating actual examples of switching.

(79) The Commission, having considered these arguments, does not find them convincing. The use of econometric and statistical tests is in line with consistent Commission practice as laid down in the Notice on the definition of the relevant markets ([65]). Moreover, the Commission's product market definition in the present case does not rely primarily on an analysis of price correlations and cross-price elasticities. As explained above (in recital 72), the results of this analysis have merely been found to support the findings of separate product markets which are themselves based on considerations of demand-side and supply-side substitutability and therefore on the lack of sufficient number of examples of switching (see recitals 32 to 71).

(d) ***Conclusion***

(80) For the above reasons, the Commission concludes that VSF and lyocell do not belong to the same product market ([66]), nor do they belong to an overall staple fibre product market including cotton, polyester and polypropylene in addition to VSF and lyocell.

4. THE RELEVANT PRODUCT MARKETS WITHIN THE FIELD OF VISCOSE STAPLE FIBRES: COMMODITY AND SPECIALITIES

(81) The market investigation has also revealed that within the field of VSF, further subdivisions have to be taken into account. Several relevant product markets can be distinguished, due to different fibre properties and applications. In particular, it is necessary to distinguish between commodity VSF and specialities, and amongst the latter between spun-dyed VSF and VSF for tampons.

(a) ***Commodity viscose staple fibres***

Demand side: two main customer groups

(82) Commodity viscose staple fibres (hereinafter 'commodity VSF') are used for both textile applications (spinning) and non-woven applications. Fibres for textile applications are purchased by spinners ([67]), whereas fibres for non-woven applications are in general sold to roll-goods manufacturers ([68]).

([64]) At paragraphs 2.2 (third bullet point), 2.16 et seq, and 3.11.

([65]) Commission Notice on the definition of relevant market for the purposes of Community competition law (OJ C 372, 9.12.1997, p. 5) paragraph 39.

([66]) This conclusion is in line with Commission Decision 2001/102/EC of 19 July 2000 on State aid granted by Austria to Lenzing Lyocell GmbH & Co KG, (OJ L 38, 8.2.2001, p. 33, paragraph 52). The Commission has evidence that Lenzing at that time shared and supported the Commission's view on the separation of the lyocell product market from VSF.

([67]) Note that cotton-type spinners need short staple lengths, whereas woollen-type spinners use longer fibres.

([68]) Roll-goods manufacturers produce rolls of processed fibres which are then sold to converters for transformation into a range of end products such as wipes, medical products (e.g. swabs, surgical gowns) or technical applications (e.g. filters; or coated substrates for shoes, for handbags or for the automotive industry). There are certain differences amongst roll-goods manufacturers, depending on the production technology used and on the intended end-use of their products.

(83) From a demand-side perspective, the Commission's market investigation has revealed certain differences between the needs of these two customer groups. The fibres used for textile applications are physically to some extent different from the fibres for non-woven applications. Due to specific requirements in the downstream production process, textile customers can only under very exceptional circumstances use fibres made for non-woven applications and vice versa. Commodity VSF for textile applications are, for aesthetic reasons, mostly supplied in bright quality, whereas the VSF for non-woven applications are usually sold in dull quality.

Sufficient supply-side substitutability

(84) Nevertheless, the results of the Commission's market investigation point to a sufficient degree of supply-side substitutability for both types of VSF to be included in the same relevant market. Fibres for textile and non-woven applications can be made on the same production lines. The five producers of commodity VSF who are currently active in the EEA ([69]) produce fibres for both types of applications and can easily switch between commodity VSF for textile and for non-woven applications, without significant costs, risks or adaptation time.

Conclusion

(85) Despite the demand-side differences which point to the existence of several market segments, the Commission therefore regards the relevant product market to be no narrower than a market for commodity VSF ([70]).

(b) ***Spun-dyed viscose staple fibres***

(86) Whilst commodity VSF are sold in bleached or raw-white state, the specificity of spun-dyed VSF is that they are already dyed in the dissolving bath, that is to say before the fibres are formed by pressing the dope through spinnerettes.

(87) The notifying party claims that spun-dyed VSF can be substituted by raw-white commodity VSF as the latter may also be dyed at a later stage in the production process. The Commission's market investigation has, however, not confirmed this view. On the contrary, the results of this investigation suggest a distinction between commodity VSF and spun-dyed VSF.

Low level of demand-side substitution

(88) From a demand-side perspective, it should be noted that the vast majority of customers who responded to the Commission's questionnaire and who use spun-dyed fibres have denied that they would switch to raw-white commodity VSF in the event of a small but permanent price-increase of 5 to 10 % for spun-dyed VSF. The reluctance to switch amongst customers purchasing spun-dyed VSF was mainly based on price and quality considerations.

(89) Customers interviewed by the Commission stated that, compared to fibres dyed further downstream in the production process, spun-dyed VSF had superior colourfastness, particularly when exposed to sunlight (light-fastness). In addition, customers also mentioned that the investment necessary for dyeing fibres in the downstream production process was considerable ([71]). It was also pointed out that there were applications for which the use of spun-dyed VSF was absolutely necessary, in particular coloured household wipes and certain kinds of fancy yarn (bicolour yarn).

([69]) These are Acordis, Lenzing, Säteri Oy of Finland, Svenska Rayon of Sweden and SNIACE of Spain.

([70]) Even if markets were defined more narrowly than that, however, the Commission's competitive analysis would not fundamentally change.

([71]) An amount of around EUR 1 million was stated as necessary.

(90) A large number of customers responding to the Commission's questionnaire also pointed to price considerations. On the one hand, the average price level of spun-dyed VSF is around [...]* % higher ([72]) than that of non-coloured commodity VSF for textile or non-woven applications as the production of spun-dyed VSF is more labour-intensive and requires specific cleaning when switching between different colours. On the other hand, spun-dyed VSF are still viewed as less costly than commodity VSF dyed further downstream in the production process, even in the event of a hypothetical 5 to 10 % price-increase for spun-dyed VSF.

(91) In their reply ([73]), the parties argue that the post-dye adjusted price differentials between spun-dyed and non-dyed (ecru) fibres are lower than the value referred to by the Commission. The parties claim values between [...]*.

(92) The Commission, having considered this submission, maintains that there is a significant price differential between spun-dyed fibres and ecru commodity fibres. Further to the consideration of dyestuff costs, the discrepancy between the parties' figures in their reply and the Commission's figures in its statement of objections is explained by the fact that the parties also deduct higher wage and waste costs for spun-dyed fibres. The point made by the Commission is, however, not based on the different supply-side cost structure of both products but rather on the demand-side perception of customers that dyeing fibres further downstream is more costly. This has not been questioned by the parties in their reply.

Low level of supply-side substitution

(93) In addition, there are supply-side barriers to switching. Two European suppliers who do not currently produce spun-dyed fibres have indicated that a small but permanent price increase of 5 to 10 % for spun-dyed VSF would not be a sufficient incentive for them to switch production to spun-dyed VSF. Extra investment into special technology for the mixture, testing and injection of dyestuff, after-treatment, and drying is also necessary ([74]). Furthermore, some competitors stated that in their case, the production of spun-dyed VSF, which is characterised by small series, would not be economically feasible even in case of a 5 to 10 % increase in price

Price correlation analysis

(94) Further evidence for the existence of a separate market for spun-dyed VSF is provided by the Commission's price correlation analysis (see recitals 107 to 109 and Table 3).

Conclusion

(95) It can therefore be concluded that commodity VSF and spun-dyed VSF constitute separate product markets.

([72]) On the basis of net sales prices given by Lenzing and Acordis for the year 2000. The Commission thus acknowledges that the value given in the statement of objections [...]* may have been slightly overstated. [...]* The Commission also acknowledges that these figures do not take additional dyestuff costs into account.

([73]) At paragraph 2.29.

([74]) The notifying party estimated that the capital cost of equipping a VSF plant for spun-dyed VSF production is approximately EUR […]* for a capacity of 10 000 tonnes per year.

(c) ***Viscose staple fibres for tampons***

(96) In addition to the distinction between commodity and spun-dyed VSF, viscose staple fibres for tampons have to be treated distinctly. The customer group for these fibres is different since VSF for tampons are directly sold to manufacturers of end products, whereas in general, commodity VSF for both textile and non-woven applications ([75]) are sold to intermediate producers, namely spinners for textile applications and roll-goods manufacturers for non-woven applications ([76]).

Distinctive product characteristics

(97) First, the results of the market investigation have shown that the physical and anti-bacteriological properties of VSF for tampons differ significantly from any other type of VSF, due to higher safety, quality and regulatory requirements. Producers have to guarantee microbiological purity. The fibres must have higher consistency, absorption capacity and liquid retention capacity. Tampon producers unanimously agree that they cannot use any other type of VSF, such as commodity VSF for textile or non-woven applications or spun-dyed VSF (see recitals 82 to 85 and 86 to 95).

Low level of demand-side substitution with cotton

(98) Secondly, whilst the merging parties argue that cotton can be used as a substitute for VSF, either for the production of 100 % cotton tampons or for the production of tampons based on a blend of cotton and viscose, the Commission's market investigation does not support this argument. Tampon producers have unanimously stated that the VSF content in their products can only be reduced to a limited extent without affecting the quality of the product, due to the superior absorption and liquid retention capacities of VSF. The production of one all-cotton tampon product has even been discontinued for quality reasons. In the event of a small but permanent price increase of 5 %, no tampon manufacturer would increase the cotton content in his products; if the price of VSF for tampons were to increase by 10 %, only one customer would marginally reduce the viscose content in his blend by 5 to 10 %, whilst no other customer would modify its blends in the short or medium term. One customer has even indicated that irrespective of price developments he was considering reducing, not increasing, the cotton content in his tampons.

(99) The barriers to switching are considered high by tampon manufacturers as fibres used for tampons must fulfil the abovementioned quality requirements; regulatory authorisation is mandatory in certain cases. Switching time and costs, the production loss to be incurred, and the risk of quality insufficiencies are equally significant. Moreover, it has been stated that buyers of tampons have become increasingly reluctant with regard to genetically modified products, including genetically modified cotton; the scope for replacing VSF for tampons with cotton is thus further reduced. Consequently, it can be concluded from the results of the Commission's market investigation that VSF for tampons does not belong to the same product market as cotton. This conclusion is also confirmed by the Commission's price correlation analysis (see recitals 107 to 109 and Table 3).

([75]) With the possible exception of fibres for cotton wool (wadding) (see recital 104), which may also be sold directly to end manufacturers.

([76]) This is true even in cases in which companies produce both tampons and other viscose products such as personal care products or baby wipes. In such cases, they buy VSF for tampons directly from the VSF producer whereas the input material for their other products is supplied by roll-goods manufacturers (see recital 82 and footnote 68).

Low level of demand-side substitution with VSF fibres used for cotton wool (wadding)

(100) Secondly, one of the parties to the concentration claims that VSF made for tampons are substitutable with VSF used for cotton wool (wadding), giving the example of a tampon producer who allegedly uses the same type of VSF for the manufacture of tampons and of cotton wool ([77]).

(101) Whilst it may be possible to use VSF for tampons in the production of cotton wool (wadding) for personal hygiene products, substitutability in the inverse sense has not proved to be sufficient for the two types of fibres to be included in the same relevant market. On the contrary, the market investigation has revealed that only one tampon producer would use fibres made for cotton wool (wadding) in their production of tampons, which is due to different product characteristics and to the more stringent clinical and microbiological requirements for tampons. Fibres for the production of cotton wool, be they made of cotton or of viscose, do not therefore belong to the same product market as VSF for tampons.

Low level of supply-side substitutability with other types of viscose staple fibres

(102) Thirdly, the parties also argue that there is a sufficient degree of supply-side substitutability with other types of VSF, enabling VSF producers easily to switch production to VSF for tampons. This view has not been confirmed by the market investigation. Whilst switching would be feasible for one of the parties' European competitors who already produces a certain amount of VSF for tampons ([78]), the remaining two European VSF producers who do not currently produce VSF for tampons have clearly indicated that they would not switch production to that type of fibres in the event of a permanent price increase of 5 to 10 %. One producer referred to the substantial investment that such a switch would necessitate ([79]), the other producer pointed to commercial reasons.

Conclusion

(103) The Commission therefore concludes that VSF for tampons constitutes a distinct product market.

(d) ***Viscose staple fibres for cotton wool (wadding) for personal hygiene products***

(104) The terms cotton wool and wadding are sometimes used interchangeably, sometimes distinctly in the sense that 'cotton wool' refers to cotton wool used for personal hygiene products and 'wadding' to fillings for anoraks, sleeping bags, car seats etc. VSF for wadding (in the latter sense) has been included in the figures for (non-woven) commodity VSF, as suggested by the notifying party ([80]) It can be left open whether VSF used for cotton wool for personal hygiene products constitutes a separate product market or belongs to a larger market. Given the small size of this sector, the possible addition of VSF for cotton wool for personal hygiene products to the commodity VSF

([77]) Similarly, one small European producer of VSF for tampons does not make a distinction between the fibres he sells for the production of cotton wool (wadding) and tampons.

([78]) In that company's case, switching would merely represent an increase of production capacity for VSF for tampons rather than to market entry. Nevertheless, even the possibility of such a shift of production capacity has not been confirmed by this producer.

([79]) Similarly, the notifying party states that production of VSF for use in tampons requires the fulfilment of certain criteria concerning quality and purity and that these controls require special equipment and clean storage facilities to avoid contamination of the fibres. They should take into account EDANA's (the European non-wovens trade organisation's) voluntary code of practice (Acordis' reply to the Commission's request for information dated 15 May 2001).

([80]) Wadding for non-hygienic products does not differ significantly from other non-woven products (there is some small difference in additives used but switching is easily possible).

market does not make any substantial difference for the competitive assessment of the commodity VSF market as total sales of cotton wool for personal hygiene products in the EEA represent less than [1 to 5 %]* (in volume) of the commodity VSF market (about [< 10]* kilotonnes). Nor would the notified operation cause any competition concern if a separate product market for VSF for cotton wool for personal hygiene products was defined. As the parties' combined market share on such a market does not exceed 15 % it would not even constitute an affected market.

(e) ***Other viscose staple fibre specialities and viscose tow***

(105) Both Lenzing and Acordis produce other VSF specialities, which are not substitutable with any of the relevant VSF products defined. Lenzing's Modal, a high wet-modulus textile fibre with enhanced performance characteristics in the textile area, belongs to a separate market ([81]), and Acordis' viscose tow (which it produces in three different types as flock, short-cut and wet-laid tow) belongs to at least one distinct product market ([82]). Both demand-side (the products are entirely distinct in their properties and in the customers' perception) and supply-side considerations (the products require special production lines so producers cannot switch between them and other viscose products) support this view. The definition of the product market can be left open for another of Lenzing's speciality fibres, flame-retardant VSF, as the quantity in which it is produced is not significant and its inclusion in the commodity VSF product market (the only product with which it could be supply-side substitutable) would not change the assessment of the notified concentration in any way. The same applies to a number of other specialities produced by Acordis which are sold in even smaller quantities.

(106) If they were defined as separate markets, none of these specialities would constitute an affected market as there is no overlap between the parties' activities in any of them.

(f) ***Price correlation analysis***

(107) The price correlation analysis carried out by the Commission supports the above findings on the relevant product markets within the field of VSF (see Table 3).

Table 3

Results of the price correlation analysis carried out by the Commission for the three product markets within the field of VSF. Coefficients are based on data provided by the parties

	Commodity VSF	Spun-dyed VSF	Cotton	Polyester LP	Polyester HP	Polypropylene LP	Polypropylene HP
Commodity VSF	1	0,72	0,44	0,69	0,76	0,27	0,33
Spun-dyed VSF	0,72	1	0,31	0,30	0,40	0,48	0,52
VSF for tampons	0,36	0,20	0,43	0,43	0,39	0,34	0,01

([81]) Owing to plant closures of competitors, Lenzing has become the only producer of this product worldwide.

([82]) Tow is strictly speaking not a staple fibre as the extruded fibre bundle is not cut into staples; because of similarities in the first phases of the production process it is, however, generally seen as belonging to the same group as VSF.

(108) As regards the correlations amongst the different types of VSF (commodity VSF and spun-dyed VSF), the highest coefficient found is around 0,7. The Commission's analysis has revealed that this coefficient is inflated as it is due to common costs and, to some extent, to a common trend. Indeed, based on the data provided by the parties for the year 2000, [on average > 75 %]* of the cost of spun-dyed VSF was common cost with commodity VSF. The price series of both products are to a large extent predetermined by those common costs as costs amount to above [> 75 %]* of net price for both products. The correlation coefficient found is therefore not due to a competitive interaction between the two products but rather to common influences ([83]).

(109) As far as the correlations between commodity VSF and polyester are concerned (up to 0,76), coefficients remain below the level that has generally been considered indicative of the existence of a wider product market ([84]). However, as explained, there can be a false high correlation if the prices of both products are subject to common influences. In this particular case, the Commission's analysis has shown that these correlation coefficients are inflated as they are due to a common trend and not to a competitive interaction between the two products ([85]).

(110) In their reply ([86]), the parties consider that greater weight should be given to actual evidence of switching rather than to correlation data. Furthermore, the parties point to alleged inconsistencies and weaknesses in the Commission's correlation analysis. In particular, they point out that

— the Commission finds the correlation between viscose and polyester (HP) to be only 0,44 in one part of the statement of objections and 0,76 in another part of the statement of objections ([87]),

— the price correlation analysis should use transactions data ([88]),

— the periodicity of the data was inappropriate ([89]), and

— both transitory and non-transitory price changes have to be examined ([90]).

([83]) The price correlation analysis can overstate the scope of the relevant market when *spurious correlation* occurs. *Spurious correlation* means that high correlation coefficients (for instance, 0,72 between commodity VSF and spun-dyed VSF) are driven by common influences such as common cost or common trends rather than by a competitive interaction between two products.
Common trends: For this purpose, a test of co-integration has been carried out by the Commission. In general terms, a test of co-integration is based on the assumption that two series of data should not diverge in the long run if the products concerned belong to the same market, in which case such series in econometric jargon are called *stationary*. By contrast, if commodity VSF and spun-dyed VSF belong to two different markets, the relative price between the two time-series will have to be *non-stationary*, that is to say a high degree of correlation between the two time-series will be due to a common trend. Indeed, the results of the statistical tests in the present case (see explanations on the unit-root test below) have always remained below the critical values. It is therefore justified to conclude that commodity VSF and spun-dyed VSF do not belong to the same market.
Unit-root test: The Commission has used an ADF test and examined the null hypothesis that the relative prices between commodity VSF and spun-dyed VSF are non-stationary. Specifically, if the test result is lower than the critical value, it fails to reject the null hypothesis, that is to say, relative prices do not revert to some long-run equilibrium and two products do not belong to the same relevant market.

([84]) Correlations higher than those indicated in Table 1 have been considered insufficient in previous decisions, the Commission having regarded correlations of above 0,80 as high and correlations of below 0,65 as low. See for instance Commission decision of 19 July 2000 in Case COMP/M.1939, *Rexam (PLM)/American National Can* (paragraph 12).

([85]) Co-integration tests have been carried out by the Commission for this purpose (see footnote 83). These tests reveal that a high level of correlation between the two products is due to a common trend and not to competitive interaction between commodity VSF and polyester.

([86]) At paragraphs 2.2 (third bullet point), 2.16 et seq., and 3.11.

([87]) See paragraph 2.19 of the reply.

([88]) See paragraph 2.16 of the reply, referring to Annex 4 ('NERA paper', in particular paragraph 3.1).

([89]) See paragraph 2.16 of the reply, referring to Annex 4 ('NERA paper', in particular paragraph 3.2).

([90]) See paragraph 2.16 of the reply, referring to Annex 4 ('NERA paper', in particular paragraph 3.4).

(111) The Commission, having considered these arguments, finds the analysis of price correlations and cross-price elasticities it has carried out in this case a reliable means to support its findings on the definition of the relevant product markets.

(112) Firstly, as regards the general criticism of the Commission using such analyses in its market definition, the following points need to be made:

— as was explained above (see recital 79), the Commission has never exclusively relied on an analysis of price correlations and cross-price elasticities but has used these analyses as a supplementary element to support the results of its market investigation;

— the Commission has always clearly indicated that a high degree of correlation between two price series is neither a necessary nor a sufficient condition for two products to belong to the same market. The Commission rather regards correlations as an indicator of the degree of competition in given markets. Moreover, the Commission agrees with the parties that a correlation analysis has to be examined cautiously. In particular, it considers that there can be inappropriately high correlations (false positive correlation or spurious correlation) if the prices of two products are subject to a common input (meaning common costs) and/or a common trend. Similarly, correlations can be inappropriately low, for instance due to significant lags in response. Drawbacks of this kind can, however, be avoided by using a co-integration test or a unit-root test. These very tests have been carried out by the Commission in the present case ([91]).

(113) Secondly, the Commission does not find any inconsistencies in the results of its analysis.

— It must be emphasised that the tests were carried out on the basis of data provided by the parties themselves ([92]).

— In general terms, the VSF price, as provided by the parties, is necessarily an artificial price deriving from the aggregation of the prices of the different subsegments of the VSF market.

— Since the results of the market investigation made it clear that the Commission had to separate the market into different subsegments, the VSF price used is the sum of the value of the different VSF subsegments (i.e. the prices of different subsegments multiplied by their respective quantities) divided by the aggregated quantity.

— The Commission has found a non-negligible level of correlation between commodity VSF and polyester but not between spun-dyed VSF, VSF for tampons and polyester. Independently, and based on different price data likewise submitted by the parties, the Commission has verified its view on the fact that VSF constitute at least one separate product market.

— The fact that the Commission has used two sets of price series (both the aggregate price series of VSF and the specific price data of the parties for three different submarkets of VSF), and that it has considered each of them, is in no way inconsistent. Likewise, it is not inconsistent that correlations of aggregated price series are not an arithmetical average of the correlations of individual component price series. Since the comparatively higher level of correlation between polyester (HP) and commodity VSF is due to common trends, the Commission does not find it surprising that these common trends are deflated when other VSF products (which may not be subject to these same common trends) are included in the correlation analysis ([93]).

([91]) See footnote 83.
([92]) See paragraph 76.
([93]) It should also be noted that the three VSF product markets whose correlations with other fibres (and with each other) are analysed are not the only subsegments of VSF (see recitals 104 and 105) and that the prices of these other VSF products can be assumed to have had a certain impact on the aggregate VSF price series given.

(114) Finally, as regards the parties' concerns on transaction data, periodicity and transitory/non-transitory price changes, the following points should be borne in mind:

— It needs to be noted that the parties were not able to provide transaction data for cotton, polyester, and polypropylene, although the Commission had requested them. Nevertheless, the Commission takes the view that the sales data provided by the parties were appropriately reflecting the average value of the transaction prices. In particular for polyester, the data provided reflect both large and small customers and can be considered a significant measure of actual transactions.

— In order to confirm the appropriate periodicity of data, the Commission has tested the correlation analysis through different lags; the variations in the test results were, however, insignificant.

— As regards the parties' concerns about transitory or non-transitory price changes, the unit-root tests carried out by the Commission have duly covered this aspect.

(g) ***Conclusion***

(115) For the above reasons, the Commission concludes that commodity VSF, spun-dyed VSF and VSF for tampons each constitute separate product markets.

5. THE RELEVANT PRODUCT MARKETS WITHIN THE FIELD OF LYOCELL

(116) It can be left open whether the lyocell market itself needs to be further subdivided as the competitive assessment of the notified operation would not change (see recitals 230 to 245).

6. THE RELEVANT PRODUCT MARKET FOR LYOCELL PRODUCTION AND PROCESSING TECHNOLOGY

(117) The production and processing technology for both lyocell staple fibres and lyocell filament yarn is entirely distinct from any other fibre production and processing technology ([94]). Whereas viscose technology (including environmental compatibility) is well established and readily available, the technology for lyocell production is rather young; it has been developed since the 1970s and saw its first commercial application in the 1990s. It is characterised by the existence of a large number of patents. Whilst some of the initial patents have already expired, this is not the case for others, mostly those related to the production process and to the treatment of lyocell (see recitals 246 and 247).

(118) Both Acordis and Lenzing are key players in this market in which some East Asian companies and the German engineering company Zimmer AG are also active, partly in cooperation with research institutions. Whilst some of these undertakings are at the same time involved in lyocell production, others, such as Zimmer AG, are not. Acordis and Lenzing cross-licensed their lyocell technology in 1997. [...]* From this cross-licensing agreement it becomes clear that Lenzing and Acordis are already active as sublicensors and sublicensees on this market and that therefore there is trade in licenses ([95]) The same agreement also substantiates that this market not only includes technology for staple fibre production and processing but also for other lyocell products such as extruded films and membranes and filament. As the technology in these other areas is linked with the technology of lyocell staple fibre production and processing through certain patents common to all areas, these areas of lyocell production and processing technology belong to the same product market. Moreover, lyocell filament technology has not yet entered the stage of commercial production and consequently competition in this area can only take place on the level of production and processing technology. The Commission's market investigation has furthermore revealed that there is demand for lyocell technology licences.

([94]) For details, see recital 70.
([95]) […]*.

(119) In their reply ([96]), the parties argue that there is no market for lyocell technology in the sense that there is currently no significant licensing of lyocell technology and patent rights, and that it is highly unusual to identify a separate market for technology. Secondly, they contend that the parties themselves are currently not active in sublicensing and that Zimmer AG is currently the only significant supplier.

(120) The Commission, having considered these arguments, maintains its definition of a separate product market for the production and processing technology for lyocell (including both staple fibres and filament yarn). Firstly, it should be noted that, contrary to the parties' reply, the definition of a separate market for technologyis in line with consistent Commission practice and cannot therefore be regarded as 'highly unusual' ([97]).

(121) Secondly, the Commission considers the current activity in this area sufficient for it to form a separate market. Indeed, there appears to be a significant degree of demand by potential lyocell producers for lyocell production and processing technology; the parties themselves provide a series of examples in their reply and also point out that Zimmer AG has been marketing its technology for the last two years ([98]). Moreover, a certain number of licences have already been granted by the parties themselves ([99]); the circumstances under which these licenses have been granted ('wholly exceptional') and the purpose for which they are being used ('do not relate to lyocell fibre production') ([100]) cannot be decisive for the definition of product markets. On the contrary, the very fact that licences were granted under exceptional circumstances which were not related to lyocell fibre production proves, in the Commission's view, that lyocell production and processing technology on the one hand and lyocell fibre production on the other hand are not inextricably linked with each other and deserve to be assessed separately ([101]).

(122) Thirdly, not all of the companies and institutes which develop lyocell production and processing technology are at the same time active in lyocell production. As has been stated above (see recital 118) and confirmed by the parties in their reply ([102]), the German undertaking Zimmer AG is active in the development and sale of lyocell technology but not in lyocell production; so is the research institute Thüringisches Institut für Textil- und Kunststoff-Forschung e.V. (TITK) ([103]). The fact that different players are active in the lyocell production area and in the field of lyocell production and processing technology strongly militates in favour of the existence of a separate technology market.

(123) The Commission therefore concludes that there is a technology market for lyocell production and processing which is distinct from the downstream market for the production and sale of lyocell.

7. CONCLUSION

(124) Given the above, the Commission concludes that the following categories constitute the relevant product markets which will have to be taken into account for the competitive assessment of the notified operation:

— commodity viscose staple fibres,

— spun-dyed viscose staple fibres,

([96]) At paragraph 4.2.
([97]) See Commission Decision 94/811/EC of 8 June 1994 in Case IV/M.269, *Shell/Montecatini* (OJ L 332, 22.12.1994, p. 48) paragraph 44; Commission decision of 13 March 1995 in Case IV/M.550, *Union Carbide/Enichem* (OJ C 123, 19.5.1995, p. 3, paragraph 36); Commission decision of 23 October 1997 in Case IV/M.1007, *Shell/Montell* (OJ C 40, 7.2.1998, p. 10, paragraph 7); see also Commission decision of 29 March 2000 in Case COMP/M.1751, *Shell/BASF/JV-Project Nicole* (paragraph 15).
([98]) At paragraph 4.2, third bullet point.
([99]) [references to the reply and internal documents]*
([100]) See the parties' reply, paragraph 4.2, second bullet point.
([101]) [reference to an internal document]*
([102]) At paragraph 4.2, second and third bullet point.
([103]) This has been confirmed by the parties in their reply (at paragraph 4.2).

— viscose staple fibres for tampons,

— lyocell,

— lyocell production and processing technology.

B. *THE RELEVANT GEOGRAPHIC MARKETS*

(125) The parties have argued, on the basis of their own product market definition (see recital 19), that the geographic scope of the market which comprises all of the above product markets is worldwide. This has not, however, been confirmed by the outcome of the Commission's market investigation for the three relevant VSF product markets and for lyocell.

1. VISCOSE STAPLE FIBRES (COMMODITY VSF, SPUN-DYED VSF AND VSF FOR TAMPONS)

(126) As regards VSF, imports have been very low; in 2000, roughly [< 10 %]* of the EEA consumption of VSF were imported from third countries. Import levels have not been rising significantly in the past six years ([104]). The market investigation has shown that a vast majority of the third parties who replied to the Commission's questions did not use any VSF imported from non-EEA countries, mostly for quality reasons. They explained that the quality of products which might be imported from third parties located outside the EEA differed significantly from that of EEA-made fibres, in particular from the quality of the parties' own products ([105]). Many of the respondents felt that they could not satisfy their customers' demands and product requirements if they had to use imported VSF. A significant proportion of the customers who responded to the Commission's questionnaire did not even have any knowledge about non-EEA VSF suppliers. Moreover, most of the respondents questioned the reliability and flexibility of supply by non-EEA producers of viscose. Transport costs of [1 to 10 %]* and tariffs of 5,2 % (due to expire in 2004) also play a certain but secondary role as geographic barriers to entry.

(127) It should be noted that imports have been low despite the fact that prices for VSF made in the EEA are viewed as being higher than prices for fibres made in other geographic areas, in particular in the Far East where the main non-European producers of viscose are located and active. Indeed, even the minority of customers who would be ready to switch to third-country imports stated that prices would have to decrease further, according to most respondents by more than 15 %, and quality would have to be at least equal to European or American standards. This reluctance of European customers to switch to non-EEA suppliers of VSF has also been confirmed by submissions of the parties' competitors who estimate that imports to the EEA would at most increase slightly in the event of a permanent price increase in the EEA of 5 to 10 %.

(128) In their reply ([106]), the parties argue that the Commission's assessment substantially understates the importance of import competition.

(129) The Commission, having considered this argument, does not find it convincing and maintains its analysis for the reasons set out in recitals 149 to 154.

([104]) The draft notification (p. 44), dated 20 March 2001, suggested the following figures for 1995 to 2000: [all < 10 %]*.

([105]) [reference to an internal document]*

([106]) At paragraphs 2.21 et seq.

(130) These considerations, which are fully applicable to commodity VSF, are even more valid for spun-dyed VSF and VSF for tampons. Imports of spun-dyed VSF have been estimated at [< 10 %]* or below. Import barriers are higher than for commodity VSF as the range of preferred colours depends on cultural and qualitative preferences of customers — the quality of colours used in Asian countries, which would be the main source for potential imports, differs from European standards. Moreover, the reliability of supply and quality is more important than in the commodity VSF sector; for instance, successive deliveries of fibres often have to be identical in colour and have to correspond exactly to specifications of the customer. As regards VSF for tampons, the import rate appears to be zero, and all customers interviewed have indicated that quality barriers for Asian imports are high.

(131) The Commission therefore concludes that the relevant product markets for VSF (commodity VSF, spun-dyed VSF, and VSF for tampons) are EEA-wide in scope but not worldwide. The market investigation has not revealed any evidence pointing to the existence of national or regional geographic markets.

2. LYOCELL

(132) As regards lyocell, [...]* but also a comparison of different patterns of demand fluctuation inside and outside the EEA, and the parties' own sales organisation ([107]), suggest that the relevant geographic market could also be EEA-wide and not worldwide in scope. The exact market definition can, however, be left open in this case as the competitive assessment of the notified operation would not change, regardless of the geographic scope of the lyocell market (see recitals 230 to 245).

3. LYOCELL PRODUCTION AND PROCESSINGTECHNOLOGY

(133) The market for lyocell production and processing technology can be considered worldwide in scope. The Commission's market investigation has not revealed any evidence pointing to the existence of national or regional geographic markets.

4. CONCLUSION

(134) For the reasons set out above, the Commission considers that the markets for commodity VSF, spun-dyed VSF, and VSF for tampons are EEA-wide in scope, whereas the market for lyocell production technology is worldwide. As regards lyocell, the market is at least EEA-wide but the exact definition of the relevant geographic market can be left open.

C. *COMPETITIVE ASSESSMENT*

(135) In accordance with Article 2(3) of the Merger Regulation, a concentration which creates or strengthens a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it is to be declared incompatible with the common market.

(136) The Court of Justice ([108]) has defined the concept of dominance as a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition from being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and, ultimately, of consumers. Such a position does not exclude the existence of some competition but enables the undertaking which profits from it, if not to determine, at least to have an appreciable influence on the conditions under which that competition will develop, and in any case to act largely in disregard of it so long as such conduct does not operate to its detriment.

([107]) [reference to an internal document]*

([108]) Case 85/76, *Hoffmann-La Roche*, [1979] ECR 461, paragraphs 38 and 39; see also Court of First Instance, Case T-102/96, *Gencor*, [1999] ECR 753, paragraph 200.

(137) The existence of a dominant position may derive from several factors which, taken separately, are not necessarily determinative; amongst these factors, a highly important one is the existence of large market shares. In addition, the relationship between the market shares of the undertakings involved in the concentration and their competitors, especially those of the next largest, is relevant evidence of the existence of a dominant position ([109]).

(138) The factors which are taken into account for concluding that the notified concentration will create or strengthen dominant positions in the markets for commodity VSF, spun-dyed VSF, VSF for tampons, lyocell and lyocell production technology, are as follows.

1. THE MARKETS FOR VISCOSE STAPLE FIBRES

(a) ***General market conditions***

(139) The notified operation would result in the creation of the global leader in viscose staple fibres with a market share of approximately [25 to 35 %]* in the overall VSF sector worldwide. As regards that same sector in the EEA, the new entity's combined market share would amount to some [60 to 70 %]* (Lenzing [35 to 45 %]*; Acordis [20 to 30 %]*), with its European competitors far smaller (Säteri of Finland, [10 to 20 %]*; Svenska Rayon of Sweden and SNIACE of Spain [0 to 10 %]* each).

European capacity: a history of plant closures

(140) In Europe, the industrial history in this sector in the past 25 years has been characterised by capacity reductions and plant closures. Whilst plants in Western Europe were closed in the 1980s, closures in the 1990s affected mainly plants in eastern Europe. Capacity reductions in the EEA in the 1990s were almost exclusively confined to eastern Germany. At the same time, Lenzing substantially increased its capacity by more than 20 %. However, plant closures by East German producers exceeded Lenzing's capacity increase more than threefold, so that the overall capacity reduction in the EEA during the 1990s amounted to some 19 %.

(141) In the year 2000, the production capacities of the five European VSF producers, who operate six plants in the EEA, were as follows (see Table 4):

Table 4

VSF production capacity in the EEA in kilotonnes (2000)

Lenzing (Austria)	Acordis Kelheim (Germany)	Acordis Grimsby (UK)	Säteri (Finland)	SNIACE (Spain)	Svenska Rayon (Sweden)	Total EEA
[...]*	[...]*	[...]*	[...]*	[...]*	[...]*	[350-400]*

Source: Notifying party.

(142) Acordis has recently reduced its capacity by closing down its plant in Grimsby (UK) with a hypothetical capacity of [15 to 35]* kilotonnes but actual annual production of [15 to 30]* kilotonnes last year, thereby lessening its VSF production capacity by [15 to 35]* kilotonnes. At Lenzing, by contrast, plans for a further capacity increase from [130 to 160]* to [140 to 180]* kilotonnes were put into effect in July 2001. By 2004, Lenzing intends to further increase its

([109]) Case 85/76, *Hoffmann-La Roche*, (reference given above), paragraph 39; see also Case T-102/96, *Gencor*, (reference given above), paragraphs 201 and 202.

capacity to some [150 to 200]* kilotonnes ([110]). The notified concentration would therefore eliminate the one player in the VSF market that has significantly increased its capacity in recent years. No third-party has informed the Commission that it would substantially build up capacity in Europe in the foreseeable future ([111]). Competitors may, however, consider capacity increases through 'de-bottlenecking' programmes ([112]). A total amount of 15 to 20 kilotonnes has been mentioned as achievable within a time period of two years ([113]).

(143) Market participants have taken the view that plants with a capacity of 30 kilotonnes might be built in two Middle Eastern countries. Apart from possibly affecting some of Lenzing's and Acordis' exports to this region, the Commission considers that such a build-up of capacity in third countries, not located close to the EEA territory, will have little effect on the supply situation in the EEA, given the reluctance of European customers to buy products from non-EEA producers (see recitals 126 to 127). It can therefore be concluded that the supply situation in the EEA is likely to remain tight, in particular in situations of cyclical upswings of demand, as was the case in 2000.

Demand

(144) Since 1990, the demand for VSF in western Europe has been rather stable (see Table 5):

Table 5

VSF demand in western Europe in kilotonnes

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
[240-300]*	[240-300]*	[240-300]*	[240-300]*	[240-300]*	[240-300]*	[240-300]*	[240-300]*	[240-300]*	[240-300]*

Source: Notifying party.

(145) In the same period demand has been characterised by a considerable shift from textile towards non-woven applications in the EEA. Whilst the percentage of VSF consumption for textile applications had been [60 to 70 %]* in 1991, it fell to [50 to 60 %]* by last year when non-woven applications accounted for [40 to 50 %]* of the demand.

(146) The VSF demand for textile applications, as well as declining since the 1970s, has been subject to considerable and irregular cyclical movements which entailed variations of up to [20 to 30 %]* in one year ([114]). Whilst the upswing of such a cycle lasted [...]* the whole cycle took between […]* (peaks in [...]*) ([115]). Moreover, it is important to note that demand is not declining in all segments of VSF for textile applications. [...]* ([116])

([110]) [reference to an internal document]*
([111]) See also the notifying party's own view, as expressed in the notification (p. 60): 'The only companies which are likely to build new viscose staple operations are located in China and the Far East.'
([112]) *De-bottlenecking* means replacing only those parts of existing production lines that prevent production from being increased.
([113]) [...]*.
([114]) [...]*.
([115]) [reference to an internal document]* A reason for the longer downturns is the general VSF textile downward trend during that period.
([116]) [reference to an internal document]*

(147) The non-woven VSF demand curve, on the other hand, is not cyclical. After a certain decline in the early 1990s, demand has been rising continuously since 1993, at annual growth rates of between [1 to 5 %]* and [10 to 20 %]*. Within the non-woven sector, this rise has not been homogeneous. Whilst some applications, such as shoes and leather ([117]), have stagnated, others have boomed. For medical applications ([118]), VSF consumption in the EEA grew by [> 100 %]* from 1986 to 1997 and its use in wipes ([119]) increased by [> 70 %]* in that period; the total growth of VSF demand for non-woven applications during this period was [30 to 40 %]*.

(148) It is generally expected that current demand trends will persist, i.e. that some reduction in VSF consumption for textile applications will be balanced by an increase in consumption for non-woven applications ([120]) and that textile consumption will remain cyclical ([121]).

Trade with third countries: exports are higher than imports

(149) An estimated [70 to 90]* kilotonnes of VSF were exported to third countries in 2000, the lowest amount for years, whilst only some [15 to 30]* kilotonnes were imported into the EEA in 2000 ([5 to 20]* kilotonnes in 1999) ([122]), despite the fact that the year 2000 was characterised by very high capacity utilisation in Europe and would thus have been well suited to commercially launch imports from third countries to the EEA. A substantial part of imports even stemmed from Lenzing's and Acordis' own subsidiaries in the USA and Indonesia; [...]* ([123]).

(150) As regards the origin of these imports, data in the statistical handbook of the International Rayon and Synthetic Fibres Committee (CIRFS), a trade organisation of European producers of synthetic and man-made cellulosic fibres, provides indications. This data refers to all cellulosic staple and tow and therefore also includes other products than VSF, mainly lyocell and acetate staple and tow. VSF imports will therefore be equal to or below the quantities indicated. According to CIRFS, only a fraction of cellulosic staple and tow imports in 1999 came from East Asian countries (about [< 5]* kilotonnes) ([124]). The largest Asian exporter was Indonesia; it should, however, be noted that Lenzing controls SPV, the Indonesian VSF producer with the highest production capacity. Imports from India, where the Birla-Grasim group, the world's largest viscose producer, is located amounted to a mere [< 2]* kilotonnes; the same insignificant amount came from Taiwan where the world's third largest producer, FCFC is incorporated. East Asian producers do not currently seem in a position to export larger quantities of VSF to the EEA since European customers remain sceptical (see recitals 126 to 127). European competitors do not expect a major increase of imports from East Asia even if prices were to rise by 5 to 10 % ([125]).

([117]) VSF is much used as a substrate material for artificial leather coatings.
([118]) For a broad range of products comprising clinical sheets and drapes, sponges, swab dressings, wound contact pads, face masks, draw sheets, shrouds, hospital gowns, caps, apron, bibs, shoe covers and other medical/surgical garments.
([119]) Personal care wet wipes, e.g. baby wipes, household and industrial wipes.
([120]) This is confirmed by an internal strategy document prepared for CVC: [...]*.
([121]) See, for instance the following passage from an internal strategy document prepared for CVC: [...]*.
([122]) Estimations of the notifying party. One competitor estimates that imports in 2000 had been slightly below 17 kilotonnes. As mentioned above, the draft notification (p. 44), dated 20 March 2001, suggested the following import figures for 1995 to 2000: [all < 10 %]*
([123]) [reference to an internal document]*
([124]) CIRFS: Information on man-made fibres, 37th volume, 2000 (hereinafter 'CIRFS Handbook 2000'), pp. 118 et seq. Note that the CIRFS Handbook 2000 gives figures for all cellulosic staple fibres and tow and therefore also includes lyocell.
([125]) Capacity utilisation in Asia, as indicated in the notification (p. 53), was [...]* % in 2000. Contrary to the notifying party's view, the Commission does not regard this as indicative of substantial spare capacity.

(151) The most important sources of import were the USA (about [< 20]* kilotonnes), where Lenzing and Acordis themselves were the only producers of VSF, and eastern Europe including Russia ([< 10]* kilotonnes) ([126]). It needs to be noted that imports from eastern Europe are not seen as reliable nor as competitive in terms of quality by competitors and customers alike. One company mentioned by customers in the Commission's market investigation as a source of supply in previous years, the Czech company Spolana, closed its VSF operations at the beginning of 2000. In the Commission's market investigation, the only customer who mentioned any non-Lenzing/Acordis imports for the year 2000 had received some quantity from a Serbian producer; it should be noted that this customer did not need first-quality VSF.

(152) In their reply, the parties submit additional information on western European imports of VSF and tow in 1999 and 2000 (therefore excluding other cellulosic fibres and adding more complete information for the year 2000) ([127]).

(153) The Commission, having considered this supplementary information, maintains its previous analysis. Indeed, the information submitted rather complements than contradicts the information cited in recitals 149 to 151 and reaffirms the Commission's conclusion drawn therefrom. Indeed, the additional data submitted shows that imports from eastern Europe into western Europe in 2000 (a year of capacity shortage in western Europe) not only did not rise but even slightly fell from 1999 to 2000, and accounted for no more than [< 5 %]* of western European demand in 2000.

(154) Imports from Asia in 2000 were at about the same level, with more than a third of these Asian imports coming from Indonesia (see the remarks on intra-group trade and on Lenzing's plant in Indonesia in recitals 150 and 164). Imports from the US (with Lenzing and Acordis themselves being the only US producers) were higher than those from Taiwan (FCFC). In the parties' reply, both of these sources of imports are stated as being at about [< 2 %]* of total demand ([128]). Imports from India (Birla) were below [1 %]* of western European demand in 2000 ([129]). The total increase of import volumes (leaving the US and Indonesia aside) in a year of supply shortage constituted, according to the parties, no more than [< 5 %]* of western European demand. This confirms the Commission's conclusion on the low likelihood of a substantial increase in imports of VSF into western Europe.

Capacity utilisation

(155) According to the information provided to the Commission by both the parties and their competitors, capacity utilisation in the VSF industry is high, reaching levels of close to 100 % in 2000 ([130]). Whilst the plants of Acordis and Lenzing were almost running at full capacity, the rate of capacity utilisation of their European competitors' production sites was only slightly lower. Pro forma capacity utilisation rates of between 85 to 95 % as indicated by competitors for 2000 have to be seen in the context of the technical aspects of viscose production. They have to be lower than theoretical maximum capacity due to time necessary for technical maintenance and switching time between the production of different VSF variants and are therefore indicative of a de facto capacity utilisation of close to 100 %. Capacity utilisation for 1999 was lower ([131]) during the first half of that year.

([126]) CIRFS Handbook 2000, pp. 118 et seq.
([127]) At paragraph 2.21.
([128]) The Commission considers that the quantity stated in the parties' reply for US imports is even understated. It does not correspond to previous information submitted by the parties on export figures to western Europe from their US plants (reply to the Commission's request for information, dated 7 June 2001).
([129]) As regards the observation made by the parties in their reply (paragraph 2.25) and by Bank Austria in its reply to the statement of objections concerning the increase of imports from the Indian Birla Grasim group into Turkey in the year 2000, see the Commission's remarks on Birla's and Lenzing's retaliation strategies in recital 175.
([130]) [reference to confidential statement and internal documents]*
([131]) Competitors indicated rates between 74 % and 88 %, CIRFS data submitted with the notification suggest an industry average of [> 80 %]*.

(156) Capacity utilisation is a key factor in terms of profitability as viscose production involves rather complicated chemical processes necessitating a high number of production steps. Since viscose production is also a potentially polluting process, it requires high investment in environmental technology, particularly in regions such as the EEA where environmental protection standards are high, and even more so in case new plants are built or existing plants enlarged ([132]).

Investment and production costs

(157) Investment in plant facilities is high. The notifying party has estimated the cost of a green-field plant in the EEA with a capacity of 20 kilotonnes/30 kilotonnes/40 kilotonnes per year at around EUR [all 80 to 150]* million respectively; this does not yet include the cost of pollution control. Investment in an existing plant to increase production has been estimated at between EUR [< 25]* and [< 40]* million for an additional capacity of 20 kilotonnes per year. Nevertheless, the cost of 'de-bottlenecking', i.e. the cost of replacing only those parts of existing production lines that prevent production from being increased, has been estimated at below EUR [< 15]* million.

(158) Beyond that, the percentages of fixed costs and variable costs depend to a large extent on factors such as depreciation (taking into account the age of a plant and recent investments), labour costs, and the cost of raw materials. Fixed costs amounted to [... %]* to [... %]* of total production costs for Acordis' European plants. Lenzing's percentage of fixed costs (as of total costs) is much higher. Given that Lenzing's plant includes an integrated dissolving wood-pulp plant which makes it independent of the very volatile dissolving wood-pulp prices ([133]), Lenzing's position substantially differs from that of Acordis. Apart from pulp costs, it is the price of caustic soda, expected to rise as it is a by-product of the declining PVC production, which influences variable costs ([134]), as well as the price of carbondisulphide ([135]) and energy ([136]).

(b) ***Commodity VSF***

Market shares

(159) As regards the commodity VSF market, which accounts for about [70 to 75 %]* of total VSF demand in the EEA (estimated size of commodity VSF market in 2000: [between 205 and 215]* kilotonnes) the parties' combined estimated market shares in the EEA are [50 to 60 %]* (Lenzing, between [35 to 45 %]*; Acordis, between [15 to 25 %]*), with their only three competitors' market shares far behind at [between 19 and 21]* % (Säteri of Finland), [between 8 and 10]* % (SNIACE of Spain) and [between 5 and 7]* % (Svenska Rayon of Sweden) respectively. Imports were at approximately [5 to 10 %]* in 2000 ([137]).

([132]) Environmental concerns are, however, not limited to Europe. PT Inti Indorayon, the Indonesian mother company of the Finnish undertaking Säteri Oy, had to close down a (recently built) plant in Indonesia in May 2000 on government orders due to unresolved environmental issues. The plant is still closed.
([133]) Pulp prices constituted [...]* % of the total cost of Acordis' production in its European plants in 2000.
([134]) [...]* % according to Acordis.
([135]) [...]* % according to Acordis.
([136]) [...]* % according to Acordis.
([137]) The estimate is based on data on own production and own sales submitted by the parties and competitors, respectively. In order to guard mutual confidentiality, also between the parties to the concentration themselves, the exact percentage derived therefrom is not disclosed.

(160) Despite Lenzing's high market share, the Commission's market investigation has indicated that there is currently competition in the EEA market for commodity VSF. However, a considerable part of that competition takes place between Lenzing and Acordis, the two parties who are the strongest players and closest competitors in the commodity VSF market in the EEA ([138]). If the notified concentration goes ahead, such competition will be eliminated. The new entity will thus be able to act independently, for the following reasons.

The new entity will be able to control production capacity (and ultimately prices)

(161) The notified concentration will eliminate Lenzing, the only European VSF manufacturer who actually raised its production capacity, against the common trend of capacity reductions (see recitals 140 to 143).

(162) Internal strategy papers presented to the board of CVC substantiate that [...]* ([139]).

After the merger, the new entity would control a substantial share of total capacity and have an incentive to create shortage of supply in order to keep prices high. The strategy of cost-cutting through capacity reduction could be complemented with the maintenance of some spare capacity, leaving the parties the ability to counter possible reactions by competitors or new entrants ([140]). A very high percentage of customers have answered that they expect either price increases after the proposed operation or at best a perpetuation of the high price level of the past two years if the merger goes ahead, whereas prices would be expected by a significant number of respondents to fall in the absence of the merger ([141]).

(163) It should, however, be noted that the acquisition of the Lenzing plant opens an alternative strategic option for CVC which can complement the abovementioned strategy if need be. Indeed, as stated before, Lenzing had been the only European VSF manufacturer who actually raised its production capacity, against the common trend of capacity reductions. Especially in times of low demand, Lenzing had acted as a price-breaker and gained market share. This strategy to sacrifice margin for volume reflects the unique cost structure of Lenzing's business. Given that Lenzing is an integrated plant with its own dissolving wood-pulp production, it is not sensitive to variations in the cost of wood-pulp but has in turn a higher fixed cost ratio than other VSF plants. Because of the high fixed cost of the business, volumes are critical, more so than price. Lenzing can increase its sales volume at a lower marginal cost than its competitors ([142]). Under this scenario, it can therefore be expected that plant capacity at Lenzing would be fully utilised and other plants such as Acordis/Kehlheim, which have higher variable cost ratios, would be kept as swing capacity and utilised only as far as necessary.

(164) Furthermore, the new entity will possess a considerable amount of 'swing capacity', that is to say it will be able to import commodity VSF from Lenzing's Indonesian subsidiary and from Lenzing's US plant LFC at Lowland, Tennessee (intra-group sales). This has already occurred in the year 2000, when some substantial quantity was imported by Lenzing from its US plant and from its

([138]) This is true even though Säteri has a higher market share than Acordis in the commodity VSF market as customers have stressed that Lenzing and Acordis are offering the highest quality standards and are equally present in all segments of the commodity VSF market (see recital 171).

([139]) [reference to an internal document]*

([140]) The same effect may be achieved in the short term through output restriction without capacity restriction. Due to persistence of fixed costs, however, such a behaviour may not be sustainable in the medium to long term.

([141]) This may be due to the cyclicality of textile VSF consumption which reached a peak in 2000 (see recitals 144 and 146.)

([142]) [reference to an internal document]*

Indonesian subsidiary, whilst the figures for 1999 had been several times lower ([143]). It should be noted that such intra-group sales will continue to be possible from Indonesia. The new entity will be able to utilise plant capacity to the full at Lenzing and to use Lenzing's Indonesian plant (and at a later stage again also its US plant) ([144]) as primary 'swing capacity'. Whenever this should prove to be insufficient to reduce supply in cycles of low demand, Acordis/Kelheim, with a much higher variable cost ratio than Lenzing, may be used as a secondary 'swing capacity' for the production of commodity VSF. Consequently, the new entity will have the strategic option to increase EEA sales at any time, in order to deter competitors from any non-compliance with its pricing and sales strategy.

(165) The new entity will thus have two strategic options: [...]* reducing capacity can be complemented, if necessary, by a strategy of shifting production to the Lenzing plant, possibly further expanding this plant. This second option can be used to deter competitors or to gain market share. In the event of a downturn of the market, the new entity would thus be best placed to face this downturn. It could decide either to keep its sales volume high, reduce its margins and gain market share (i.e. Lenzing's strategy so far), or to reduce its sales volume and keep prices high. Competitors would not be in the position to match the first, and would be encouraged to support the second.

(166) In their reply ([145]), the parties argue that the Commission's statement of objections mischaracterises the economic incentives of the new entity. The parties state that viscose staple producers need to operate at high capacity utilisation rates to cover fixed costs. CVC's intention, according to the reply, is to increase the capacity of both Lenzing and Acordis-Kelheim and to use it fully.

(167) The Commission, having considered these arguments, does not find them convincing and maintains its analysis. Indeed, the actual intentions of the new entity to reduce or increase its production capacity are not decisive for the competitive assessment of this case. What counts is, in the Commission's view, the mere fact that the new entity will have the economic power to implement different strategic options, thus demonstrating its ability to act independently of its competitors and customers.

(168) As regards the parties' argument that VSF producers have no other choice than to utilise fully the capacities of their plants to cover fixed costs, the Commission notes that VSF demand for textile applications is characterised by strong cyclical variations (see recital 146). In a situation of cyclical demand downturn, overcapacities will arise almost inevitably. Moreover, the parties have repeatedly expressed the opinion that they also expect long-term demand reduction in western Europe which would equally lead to overcapacities. In such a situation, the power to reduce production in order to keep prices high, which may at the same time have a signalling effect on competitors, could in any event not be profitably countered by competitors (see recitals 170 to 172). It therefore constitutes an important element of the parties' ability to act independently of its competitors and customers.

(169) The Commission therefore maintains that under both scenarios described above, the new entity will have the possibility to act independently of its competitors and customers, for the following reasons:

([143]) This is confirmed for 2000 by an internal strategy document prepared for CVC: [...]*.

([144]) As regards the supply situation in the USA: capacity utilisation in both Acordis' and Lenzing's US plants was very low ([...]* % overall in 1999). [...]* The new entity would plan a capacity increase at Lowland, Tennessee, by [...]* % (from about [...]* kilotonnes). Therefore Lenzing's plant at Lowland would be able to meet US demand to the full in 2002, with just a very slight increase of imports. Consequently, despite the recent close-down of Acordis' plant at Mobile, Alabama, even US swing capacity from Lenzing's US plant could again be available from 2003 onwards, in case of a further decrease of US consumption, or of an increase of imports into the US [...]*.

([145]) At paragraphs 2.31 et seq.

Competitors are likely to act as 'price takers'

(170) The market investigation has revealed that competitors have at best very limited possibilities for increasing their capacity in the next two years, the total of which roughly equals Lenzing's capacity increase of this year (see recitals 140 to 143 and Table 4). Even if such plans were put into effect, the total capacity increase would roughly match, or only slightly overcompensate, the capacity reduction brought about by Acordis' closure of its Grimsby (UK) plant. One competitor has also indicated that it hopes to export more intensively to the NAFTA area now that Acordis has closed its US plant ([146]). Therefore some of this extra capacity will be absorbed by the capacity vacuum created by Acordis in the USA and will thus not become effective in Europe.

(171) In addition, on the basis of the results of the market investigation, it does not appear to be the intention of Acordis' and Lenzing's European competitors to focus on the commodity market. Smaller competitors, for instance, are not capable of providing the whole range of commodity VSF products. One of them only very marginally serves the woollen spinning segment (see footnote 67), another is unable to serve the hygienic and medical applications end of the non-wovens; the third one only has very small sales in the textile segment and has acknowledged that it cannot compete with Acordis and Lenzing in this field. Customers in the cotton-spinning segment of the commodity VSF market have expressed concerns about the quality of competitors' products ([147]).

(172) In the event of capacity reductions by the new entity, competitors will therefore tend to gain some 'windfall' market share initially and then support rather than challenge any high-price strategy of the new entity, thereby acting as 'price takers'. Their limited amount of spare capacity will not permit them to compete profitably for market share; by contrast, it will be an incentive for them to benefit from higher prices.

No new market entry

(173) For reasons outlined above (see recital 157) new entry in the market for commodity VSF would be capital-intensive and cannot be expected to happen in the EEA in the short to medium term. This opinion was expressed by all competitors and the notifying party alike.

A substantial increase of imports is unlikely

(174) Estimated imports of commodity VSF from third countries amounted to some [< 10]* %. Since part of these imports came from Lenzing's and Acordis' own subsidiaries in the USA and Indonesia, the actual third-party import rate is even lower (see recitals 140 to 143). A substantial increase of imports from third parties is unlikely. Indeed, the Commission's market investigation has revealed a strong reluctance on the part of EEA customers to buy viscose from non-EEA producers (see recitals 126 and 127). Nor do any of the parties' competitors expect significantly higher imports.

(175) By contrast, the parties are in a position to deter third-country competitors from entering the EEA market [...]* ([148]). In addition, Asian capacity is forecast to remain flat and even to decrease in the longer run ([149]).

(176) The competitive constraints deriving from imports cannot therefore be considered sufficient to outweigh the strength of the new entity.

([146]) See footnote 144.
([147]) For example, 'OE spinners' (spinners using 'open end' spinning technology) have indicated that they need a fibre quality with a high degree of tenacity which cannot be supplied by all producers active in the market.
([148]) [reference to an internal document]*
([149]) This is confirmed by an internal strategy document prepared for CVC: [...]*.

Insufficient competitive constraint by inter-fibre competition

(177) Despite the fact that it is appropriate to identify distinct product markets, there can be a certain degree of substitutability between fibres belonging to neighbouring product markets. In the event that the new entity were to impose significant price increases for commodity VSF, it could be expected that purchasers would at least to some extent switch to other fibres, despite their different performance and aesthetic characteristics ([150]). It has therefore been argued by the notifying party that the competitive strength of the new entity would be sufficiently constrained by this effect of 'inter-fibre competition'.

(178) There are various fields of application in which the uses of VSF and other fibres, although they are not substitutable, overlap. Overlaps occur mainly with regard to polyester but also to other fibres and are more significant in the textile than in the non-woven area. Also, it should be noted that commodity VSF, both in the textile and in the non-woven area, are often not used in pure form but in blends.

(179) The market investigation has, however, shown that, in the event of a 5 to 10 % price increase for VSF, only very few customers would actually reduce VSF consumption in their applications or sectors of activity by more than 10 %, whilst the majority replied that they would not reduce their VSF consumption or reduce it by less than 10 %. This view, indicating an insufficient constraint on fibre sales by relative price changes, is confirmed from a different angle by a paper presented to the European trade organisation CIRFS, entitled 'Myths and realities of interfibre competition'. This document comes to the conclusion that '(i)t is unlikely that such competition will be based upon relative prices unless there are very significant changes (at leastinexcess of 20 per cent) in the price of a particular fibre vis-à-vis a competitive fibre.' ([151]). The Commission therefore does not consider this limited potential for switching indicated by customers sufficient to conclude that the new entity's ability to act independently would be significantly constrained.

(180) Moreover, as was explained above (recitals 161 to 165), the new entity would be in a position to adjust its EEA production and sales of commodity VSF more effectively and profitably than its competitors. It would therefore be less affected by the foreseeable loss of sales volume in the event of a price increase for commodity VSF. First, its competitors would have difficulties competing for market share in a shrinking market, in particular given that economies of scale are important in the commodity VSF market. Secondly, the new entity would be the only market player capable of controlling this process via its pricing power. It could therefore decide on whatever would be the most beneficial moment for its own business to adapt to a shrinkage of market volume.

(181) Finally, the notifying party, being in a position to serve all segments of the commodity VSF market, will be able to price-discriminate against customers in individual, easily identifiable segments (such as cotton-type spinners, woollen-type spinners, roll-goods manufacturers specialising in products for medical and hygienic applications and others not serving this segment of the market) or against individual customers. [...]* ([152]). Competitors who challenge the new entity's pricing strategy could be deterred by the threat of retaliation, either in specific segments within the commodities market or in higher-margin speciality markets. As stated before, retaliation is possible because the new entity would dispose of an unrivalled range of products in the various VSF markets, and because of its higher technological and product innovation potential ([153]) ([154]).

([150]) See Commission decision of 19 December 1991 in Case IV/M.113, *Courtaulds/Snia* (reference given above), paragraphs 14, 26.

([151]) D. Morris, Comité International de la Rayonne et des Fibres Synthétiques: Myths and Realities of Interfibre Competition, paper presented at: International Wool Textile Organisation, 65th International Wool Conference, Cape Town, Republic of South Africa, April 1996. As regards factors that are decisive for interfibre competition, this paper states: 'In fact it would appear that changing end uses, product innovation and consumer preference are the main reasons for switching fibre and not price relativities.'

([152]) [...]*.

([153]) Note that Lenzing is currently the company spending the highest amount of money on research and development (R & D) in the VSF area [...]*.

([154]) For the reasons stated in this recital and in recital 171, the competitive strength of the combined entity would not diminish if product markets were defined more narrowly than commodity VSF.

Insufficient competitive constraint by downstream imports of finished VSF products

(182) The notifying party has furthermore argued that the threat of increased downstream imports of finished VSF products (such as yarn, fabric, garments) would effectively constrain the new entity's competitive behaviour ([155]).

(183) First of all, it needs to be noted that as far as fabric made of viscose or viscose blends is concerned, the EEA enjoys a trade surplus ([156]), despite its considerable negative trade balance on garments (net imports of garments are 44 % of EEA consumption), and notwithstanding a negative trade balance on viscose pure and blended spun yarn (net imports amounted to 16 % of EEA yarn consumption) ([157]). It can be concluded from these figures that VSF (and VSF fabric) are of particular importance for the European textile industry in its process of restructuring and are not necessarily following an alleged trend of decline of the European textile industry as a whole ([158]). Even assuming that there is, in continuation of the ongoing shift from textile to non-woven applications referred to in recital 145, a likelihood of reduced demand for textile commodity VSF in the EEA, this shift would only have the effect of further reducing the parties' exposure to risks of downstream imports of textile products whereas the same risk exists to a much lesser extent in non-woven goods ([159]).

(184) In their reply ([160]), the parties argue that the Commission overstates the significance of the EEA trade surplus at the viscose fibre and fabric level.

(185) The Commission, having considered this argument, maintains its conclusion that VSF and VSF products play an important role for the European textile industry. It notes that the parties' reply does not disprove this conclusion as such. Even though the parties' own calculation omits trade in VSF with third countries, it does not disprove the underlying fact that the EEA net trade deficit in finished VSF products is significantly lower than its net trade deficit in products made of cotton and polyester.

(186) Secondly, a similar observation as on inter-fibre competition can be made in this context. As has been explained above (recital 180), a loss of sales volume in commodity VSF would affect the new entity to a lesser extent than other producers and would thus not endanger its leading position in the market for commodity VSF. A further reason for its competitive advantage can be inferred from the new entity's presence in several geographic markets; its subsidiaries in third countries, in particular in the Far East (Lenzing's subsidiary in Indonesia) and the NAFTA countries (Lenzing's plant in the USA) could thus, at least to some extent, financially benefit from an exit of downstream industries from the EEA in other markets whilst the new entity could at the same time maintain its dominance (and profits), even in a shrinking commodity VSF market in the EEA ([161]).

([155]) See also Decision 93/9/EEC in Case IV/M.214, *DuPont/ICI*, (reference given above), paragraphs 45 et seq.

([156]) The notifying party reports a net trade surplus in viscose pure or blended fabric of 5 % in 2000.

([157]) These figures are confirmed by the CIRFS handbook where the trade balance in viscose staple and tow in textiles is reported as being [< 20]* kilotonnes in 1999 whereas the same balance for all fibres shows a negative value of [600 to 700]* kilotonnes for all man-made fibres.

([158]) A CIRFS paper even points to the possibility of overall demand growth for textile products in the EEA offsetting the negative effect of rising net imports of textiles and clothing on EEA mill consumption of fibres. (D. Morris, Comité International de la Rayonne et des Fibres Synthétiques: Myths and Realities of Interfibre Competition, April 1996, Table 4)

([159]) In 1999, no less than 33,8 % of world production of non-woven goods originated in western Europe, while only less than 30 % originated outside the USA (where Lenzing is now the only producer of VSF) and western Europe (source: EDANA, http://www.vliesstoffe.org/nonwovens/statistics.html).

([160]) At paragraph 2.23.

([161]) To some extent such an exit would also happen to areas such as eastern Europe, Turkey and other Mediterranean countries outside the EEA, to which Acordis and Lenzing are the main suppliers of commodity VSF through exports from their EEA plants.

Insufficient competitive constraint by downstream inter-fibre competition

(187) In their reply ([162]), the parties argue that the statement of objections consistently fails to give any weight to the competitive constraint from downstream competition (both from other fibres and from suppliers outside western Europe) and find it crucial to note that very few downstream customers have replied, suggesting that they have no major concerns or even interest in this transaction. In its letter, the notifying party claims that this failure on the part of the Commission to give due weight to the effects of downstream competition on the parties' behaviour also manifests itself in the failure to include in the switching effect those customers who replied that they would reduce or stop production in the event of a 5 to 10 % increase in the price for VSF. Such reductions in volume purchased have, according to the notifying party, a direct effect on the parties' profitability and thus on their incentive to raise prices, in the same way as does switching by customers of volume to other fibres.

(188) The Commission, having considered these arguments, does not find them convincing. First, the Commission recalls that it considers competitive constraints from suppliers located outside western Europe to be insignificant (see recitals 174 to 176).

(189) Secondly, downstream inter-fibre competition cannot be taken into account as a relevant competitive constraint as neither competitors nor direct customers were in a position to estimate this effect. Even downstream customers themselves were not able to give an indication of the size of this effect. Moreover, the Commission's analysis of cross-price elasticities (recitals 75 and 76) implicitly takes into account historical downstream inter-fibre competition. Furthermore, the Commission's phase I questionnaire explicitly asked the parties' customers whether they or their customers would switch to other fibres in the event of a small but non-transitory price increase of 5 to 10 %. The replies indicated that only some 6 to 13 % ([163]) of VSF sales volume would be affected by switching in such an event.

(190) Thirdly, as regards the evaluation of the responses of those customers who stated that they would stop or reduce production of VSF-based products in the event of a small but significant non-transitory increase in prices, the Commission does not deny that such behaviour of customers can be seen as a competitive constraint on a hypothetical dominant player in that market. Customers stopping (or reducing) production of VSF-based products will also take some account of anticipated downstream demand reduction due to these price increases. The Commission has therefore asked customers (in its phase II questionnaire) whether they would stop production ([164]). The results of this survey was that merely some 7 % of the parties' commodity VSF sales volume would be affected in the event of a price increase of 10 %. The Commission considers this impact to be by far insufficient effectively to constrain the future behaviour of a dominant player in commodity VSF ([165]).

(191) Finally, the lower reply rate by downstream customers to the Commission's questionnaire does not necessarily permit the conclusion that those who did not respond had no major concerns about the notified operation and assumed that the parties' competitive position would be effectively constrained by downstream interfibre competition. Indeed, it needs to be noted that these downstream customers are to a lesser degree affected than the parties' direct customers by possible price increases for cellulosic staple fibres. The effect of such price increases is diluted further downstream

([162]) At paragraph 2.13.

([163]) 6,6 % in the event of a 5 % price increase, 12,7 % in the event of a 10 % price increase. It should be noted that the reply rate to this questionnaire was particularly high and that customers representing more than two thirds of the parties sales volumes in the EEA responded to it.

([164]) Even if not asked for it explicitly, customers who felt that they would only partly stop production have not hesitated to indicate this and have been considered as customers reducing volume.

([165]) Customers indicating that their hypothetical behaviour 'depends on the market conditions', however, cannot be considered a competitive constraint. Their reaction depends on unspecified conditions which may just as well be conducive to a volume reducing effect as to an effect of maintaining current sales volume.

as the fibre value in a piece of apparel is estimated at below 5 % ([166]). Consequently, the hypothetical price increase necessary for competitive constraints to be effective is only likely to result from large changes in price relativities (in the order of 20 per cent) ([167]).

Insufficient competitive constraint by countervailing buying power

(192) Finally, the parties argue that the market power of the new entity will be effectively constrained by countervailing buying power.

(193) Based on the results of its market investigation, the Commission does not share this point of view. First of all, the commodity VSF market is characterised by a significant number of small and medium-sized customers ([168]) (spinners and roll-goods manufacturers) who are unable to exercise significant buying power. Secondly, it should be borne in mind that quality, certain product requirements and reliability of supply are of particular importance to most customers (see also recital 36). Under such circumstances, the disappearance of one of the leading independent suppliers of high quality VSF in the EEA significantly limits customers' choice as switching to 'unknown' suppliers may entail significant commercial risks due to production losses. Thirdly, long-term business relationships are common in this sector, thereby raising barriers to customers' potential wish to switch to other suppliers ([169]). And finally, in a situation of potential shortage of supply (see recitals 161 to 165), the fact that customers generally operate with short lead times and hold only limited stocks can limit them in the exercise of their buying power.

(194) The responses of third parties to the Commission's questionnaires confirm this conclusion. Indeed, the parties' customers themselves stated that their buying position would significantly deteriorate after the merger. Whilst roughly two thirds regard their current bargaining power as balanced, most customers expect it to be rather weak if the notified operation goes ahead.

Conclusion on commodity VSF

(195) The notified operation would eliminate Acordis' strongest competitor in the EEA and leave only three smaller, less performing competitors behind. The new entity would thus be able to act independently of its competitors and customers.

(196) For the reasons set out above, the Commission has therefore reached the conclusion that the proposed operation would create a dominant position of the new entity in the market for commodity VSF in the EEA as a result of which effective competition would be significantly impeded in the common market and the EEA.

([166]) See D. Morris, Comité International de la Rayonne et des Fibres Synthétiques: Myths and Realities of Interfibre Competition, paper presented at: International Wool Textile Organisation, 65th International Wool Conference, Cape Town, Republic of South Africa, April 1996. 'Price is not as significant a factor in interfibre competition as is often believed due to the length of the textile pipeline, the conservative nature of the textile industry and the component of raw material prices in the final cost of the product. (…) (A) well known example can be given for a pair of tights. The cost of polyamide partially oriented yarn used in tights is less than 2 % of the sales price in a retail outlet. Taking another example, the cost of the fibre in a cotton shirt at the retail level is about 3 percent.'

([167]) See D. Morris, Comité International de la Rayonne et des Fibres Synthétiques: Myths and Realities of Interfibre Competition, paper presented at: International Wool Textile Organisation, 65th International Wool Conference, Cape Town, Republic of South Africa, April 1996. '(…)However, to state that price competitiveness is non-existent is not valid per se would be too extreme, it is merely only appropriate with respect to very large price movements, and large changes in price relativities in the order of 20 per cent.'

([168]) This is confirmed by an internal document prepared for CVC: [...]*.

([169]) [reference to an internal document]*

(c) ***Spun-dyed VSF***

Market size and market shares

(197) Spun-dyed VSF represents some [< 20 %]* of the total VSF sales volume. The combined EEA market share of Acordis and Lenzing would be even higher in this product market, amounting to [80 to 90 %]* (Lenzing [50 to 60 %]*; Acordis: [25 to 35 %]*), with SNIACE far behind at [0 to 10 %]*.

(198) Despite Lenzing's high market share, there is evidence that there is currently a certain degree of competition in the EEA market for spun-dyed VSF as profit margins are low and customers regard their current purchasing power as balanced. However, such competition takes place primarily between the two parties and will no longer exist if the notified concentration goes ahead. The new entity will thus be able to act independently, for the following reasons:

Competitors and market entry

(199) SNIACE, the only remaining European competitor in the spun-dyed sector, accounts for [0 to 10 %]* of the market and can only offer a very limited range of colours, which cannot be expanded for economic reasons as this would require substantial investment and would limit output due to the time loss for switching.

(200) The two remaining European VSF producers who do not currently produce spun-dyed VSF have indicated that they are not interested in entering that market for reasons of economies of scale, even in the event of price increases in the range of 5 to 10 %.

(201) The market investigation has shown that imports (currently below [< 10 %]*) are even less likely to rise in this market than in the commodity VSF market. The Czech producer Spolana closed down at the beginning of 2000. One Russian producer is not seen as reliable by customers, and the Indian Birla-Grasim group is currently not producing the quality and full range of colours necessary to satisfy EEA customers; its products are designed to serve the Indian market. There is only one other producer worldwide, FCFC of Taiwan, who likewise is not expected to export to the EEA.

(202) In their reply ([170]), the parties state that Birla offers an exact duplicate of Acordis' colour card produced at Kelheim.

(203) The Commission, having considered this argument, maintains its initial view. As has been confirmed by Birla ([171]), the shades and tones of the colour range and the lustre preferred in European markets are different from the ones in Birla's domestic market. For the production of spun-dyed VSF in India, Birla relies on domestic pulp and domestic pigments. These domestic pigments meet the specifications of colour range and lustre set by its domestic market. To meet the requirements of the EEA market, Birla would have to use the appropriate pigments, which are, according to that company, not available in India. From a technical point of view, Birla thinks that it could produce spun-dyed VSF similar to what is required in European markets by using imported pigments. However, Birla reemphasises that the production of small lots and the necessity of a quick delivery as desired by European customers to enable them to meet the requirements of a fashion-driven, fluctuating market is not practical for Birla. Birla's statements are in line with customer responses in the Commission's market investigation. The Commission cannot therefore consider Birla an effective actual or potential competitor on the EEA market for spun-dyed VSF.

([170]) At paragraph 2.30.

([171]) The legal advisors of the Birla Grasim group have commented on this issue in a letter dated 10 September 2001 (pages 7232 to 7234 of the Commission's file), a copy of which has been made accessible to the notifying party. In that letter, an earlier submission made on behalf of the Birla Grasim group (pages 4862 and 4863 of the Commission's file) has been repeated.

Inflexibility of demand

(204) The market investigation has shown that switching to other products (or to commodity VSF dyed further downstream in the production process) is not likely to occur to any significant extent. First of all, spun-dyed fibres are perceived to be cheaper and of superior quality (with regard to colourfastness) than VSF dyed further downstream. Secondly, the use of spun-dyed fibres is, according to customers, a functional requirement for certain applications (such as bicolour yarns or coloured wipes).

(205) Also, the combined effect of switching and reducing or stopping production ([172]) — the result of the Commission's phase II market investigation indicates that this effect is around 13 to 14 % — cannot be considered high enough to put a sufficient constraint on parties. A dominant firm in this market may decide to raise prices, thereby incurring losses of sales but at the same time increasing the profitability of its remaining production.

Conclusion on spun-dyed VSF

(206) The notified operation would eliminate Acordis' strongest competitor in the EEA and leave only one smaller and less performing competitor behind. The new entity would thus be able to act independently of its competitors and customers.

(207) For the reasons set out above, the Commission has therefore reached the conclusion that the proposed operation would create a dominant position of the new entity in the EEA market for spun-dyed VSF as a result of which effective competition would be significantly impeded in the common market and the EEA.

(d) ***Viscose staple fibres for tampons***

Market size and market shares; dominance of Acordis

(208) The EEA market for VSF for tampons represents some [< 15 %]* of the overall sales of VSF. The parties' combined market share in the EEA would amount to [80 to 90 %]* (Acordis: [70 to 80 %]*, Lenzing: [10 to 20 %]*). There is only one competitor, Svenska Rayon, who accounts for the remaining [< 20 %]*. The other two European VSF producers (Säteri and SNIACE) do not produce VSF for tampons, either for technical or for economic reasons, and do not intend to do so in the future. There is no realistic probability of imports.

(209) Given the market structure described, Acordis can already be considered dominant in the VSF market for tampons as it not only achieves by far the highest market share ([70 to 80 %]*) but is also manufacturing and marketing the highest-quality fibre for tampons, called 'Galaxy', which is protected by patent rights.

(210) The notified concentration will eliminate Lenzing, one of Acordis' only two current competitors, and will strengthen the new entity's ability to act independently, for the following reasons:

Insufficient competitive constraint by potential market entry or by the remaining competitor

(211) Svenska Rayon, the only remaining producer of VSF for tampons in the EEA, is a small company with limited capacity. Although Svenska Rayon concentrates on specialities ([173]) and may be capable of a limited capacity increase, it cannot effectively compete with Acordis and Lenzing as it is too small to be regarded as a viable alternative to the new entity for a majority of customers. Some concern has also been raised by customers as to the economic stability of Svenska Rayon. The company is not known as an innovative company.

([172]) On this distinction, see recital 42.
([173]) Svenska Rayon also produces viscose tow (see recital 105).

(212) Foreign entry into this market by imports from the Far East is highly unlikely. Far Eastern producers generally produce mainly commodity VSF for textile applications and have little expertise in non-woven applications and even less so in hygienically sensitive applications such as VSF for tampons. None of the customers of VSF for tampons has indicated that it currently sources fibres with non-EEA suppliers located outside the EEA, nor do customers consider switching to such suppliers ([174]).

Insufficient competitive constraint by countervailing buying power

(213) The parties have argued that their competitive behaviour would be sufficiently constrained by the high buying power of their few customers and the ability of these customers to pursue a dual sourcing strategy. Indeed, a high percentage of the parties' turnover with VSF for tampons is generated by a few big customers such as [...]*. It should, however, be noted that only some of these customers currently pursue a dual-sourcing strategy. Moreover, the notified operation would significantly reduce customers' possibilities to pursue such a strategy as the merger would make Lenzing, Acordis' strongest competitor, disappear; as explained before, Svenska Rayon alone cannot be considered a sufficient alternative source of supply (see recital 211). Finally, switching suppliers in the short run is not possible for customers because of the adaptation of machines that might become necessary and because of the rigorous qualification process that suppliers and their products have to undergo.

(214) These findings are confirmed by the views of customers themselves, the vast majority of whom have expressed strong concerns with regard to the proposed takeover of Lenzing. Whilst most of them regard their current bargaining power as balanced, the vast majority expect it to be rather weak if the notified operation goes ahead.

(215) Moreover, the price level of VSF for tampons (particularly of Acordis' speciality fibre Galaxy, but also of standard fibres for tampons) is above the price level for commodity VSF [...]*. Such a price differential would not be likely if customers actually had sufficient countervailing buyer power.

(216) In their reply ([175]), the parties argue that the statement of objections wholly ignores comments made by tampon manufacturers which tend to support the scope for inter-fibre substitution and the exercise of countervailing power in the tampon segment and that the Commission therefore underplays the extent of this countervailing power. Furthermore, they point out that the process of moving tampon customers from Acordis' plant in Mobile, Alabama, to Kelheim in Germany has only taken four months and that this shows that the Commission's view on the impossibility of switching suppliers in the short run is incorrect. Finally, the parties refer to the ability of tampon manufacturers to 'discipline' their viscose suppliers across a range of products.

(217) The Commission, having considered these arguments, maintains its analysis. First, the passages from third-party submissions cited by the parties in their reply are not conclusive. One reply explicitly refers to its remark only being relevant 'in the longer term'. Another customer reply cited by the parties ([176]), whilst referring to the possibility of a 10 % reduction of VSF consumption in two months, also points out that such a change would entail production inefficiencies. It refers to product characteristics of the fibres used, technical difficulties in adapting the production process, and the time and cost of adapting the production process as reasons why such switching is not possible to a sufficient degree to offset VSF price increases. Finally, this producer regards its own position after the merger as rather weak.

([174]) [reference to an internal document]*
([175]) At paragraphs 2.8 et seq.
([176]) Pages 3089 to 3098, identical to 4124 to 4134 of the Commission's file.

(218) As regards the two tampon manufacturers' responses to the Commission's questionnaire in phase I, cited in the reply, it needs to be noted that one of these customers views switching as being possible only with high switching costs and does not therefore consider it economically feasible. This customer would not switch from VSF to other fibres in case of a small but non-transitory increase in VSF price of 5 to 10 %. Whilst it is correct that this customer also mentions that he could substitute 50 % of his VSF consumption with lyocell, this can hardly be seen as a competitive constraint on the parties who are the only producers of lyocell worldwide. Moreover, this customer mentions that a switch would take at least 12 months due to health regulatory and safety requirements. The other customer quoted by the parties in their reply mentions that whilst it could 'theoretically' switch to other fibres and blends at 100 %, his company had decided to move away from these alternatives as VSF provided the best performance. None of these two customers views the position of its company after the merger as being strong (one customers sees it as 'weaker' and the other one, who sees it as strong before the merger, considers it 'balanced' afterwards). The opinions expressed in these replies therefore fully support the Commission's analysis.

(219) Other passages cited from tampon manufacturers' replies in phase II are equally inconclusive. Whilst in the event of a permanent price increase of 5 to 10 % for VSF, one manufacturer would switch to other fibres between 25 % to 75 % and 25 % to 100 % respectively, the same producer added that the development time required was at least 24 months and that the switch would cost very significant resources, due to capital investment, trials and qualifications and loss of production, which makes it highly unlikely that this possibility of switching would exert sufficient competitive pressure on the parties.

(220) Similarly, the fact that one customer expected only a limited price increase after the proposed operation and the expectation expressed by another customer that the combined entity would be economically more sound does not counter the Commission's analysis. Neither the expectation of only limited price increases nor the expectation of an economically sound entity resulting from the merger rule out the parties' ability to behave independently of its customers and competitors after the merger..

(221) Equally, the Commission does not regard the transfer of customers from one Acordis site (Mobile, Alabama) to another (Kelheim, Germany) as sufficient evidence to conclude that the barrier to switching between different VSF suppliers is insignificant (see recital 213). Whether these customers receive their viscose fibres from Acordis' US plant or from its German production site, their supply is provided by one and the same producer and not by different ones.

(222) Whilst it may be surprising to note that even big tampons manufacturers only have insufficient buying power effectively to constrain the independence of competitive behaviour of the merged entity, it should be considered that these companies are to a large extent 'locked in' by high switching costs. Even though the big tampons manufacturers belong to industrial groups many times bigger than the viscose producers, they will have no other choice than to source their supplies with the merged entity whose biggest textile and non-woven commodity customers source quantities comparable to or even bigger than those purchased by tampons manufacturers and who are, in effect, less dependent on tampons manufacturers than tampons manufacturers are on them ([177]). This argument is even more valid for smaller, private label tampons manufacturers.

(223) Finally, the tampon manufacturers' 'disciplining power across a range of products' cannot be accepted as a sufficient competitive constraint as tampon manufacturers normally do not buy VSF for products other than tampons (for baby wipes, for example) themselves; for these products, they buy VSF roll goods from roll-goods manufacturers. It is these roll-goods manufacturers who buy (commodity) VSF from VSF producers. Tampons manufacturers have therefore only limited possibilities to influence the roll-goods manufacturer's buying decision vis-à-vis the parties.

([177]) Note the comparatively small size of the tampons VSF market, stated in recital 208. Also note that the only other European producer of VSF is considered too small to be a fully viable competitor.

Insufficient competitive constraint by inter-fibre competition

(224) Competitive constraints from neighbouring product markets (inter-fibre competition) could only come from cotton and cannot be considered sufficient to outweigh the strong position which the new entity will enjoy. Indeed, the use of cotton has been excluded by one of the biggest tampon manufacturers and has been viewed as causing extremely high switching costs by another.

(225) The constraining effect exercised by both customers switching and customers stopping production or reducing their volume of tampon VSF consumption is similarly low (below 6 % in the event of a 10 % sustained price increase).

Conclusion on VSF for tampons

(226) The notified operation would eliminate Acordis' strongest competitor in the EEA and leave no sufficient alternative for customers, thus enhancing Acordis' already existing ability to act independently of competitors and customers.

(227) For the reasons set out above, the Commission has therefore reached the conclusion that the proposed operation would strengthen Acordis' dominant position in the VSF market for tampons in the EEA as a result of which effective competition would be significantly impeded in the common market and the EEA

(e) ***Conclusion on VSF***

(228) For the reasons set out above, the Commission has therefore reached the conclusion that the proposed operation would create a dominant position of the new entity in the EEA markets for commodity VSF and for spun-dyed VSF and would strengthen Acordis' dominant position in the VSF market for tampons in the EEA, as a result of which effective competition would be significantly impeded in the common market and the EEA.

(229) The Commission notes that even if the relevant product market, contrary to the Commission's market definition (see recitals 82 to 115), were to include all viscose staple fibres, the notified operation would eliminate Acordis' strongest competitor in the EEA, create a company with EEA-wide market shares of [60 to 70 %]* (see recital 139) and leave only three smaller, less performing competitors behind. The market conditions on an overall VSF market would be comparable to the general market conditions in the VSF sector (see recitals 140 to 158) and to those on the commodity VSF market (see recitals 159 to 194) which constitute some [70 to 75 %]* of total VSF sales in the EEA. The same reasoning as described above for the commodity VSF market would thus have to apply. The concentration would therefore be such as to create a dominant position of the new entity as a result of which effective competition would be significantly impeded in the common market and the EEA.

2. LYOCELL

Market shares

(230) Lenzing and Acordis are currently the only producers of lyocell worldwide. Lenzing's market share is about [< 25 %]*, whereas Acordis' branded lyocell product 'Tencel' accounts for some [> 75 %]* of total lyocell sales. In the EEA, the difference between the parties' market shares is smaller.

Elimination of Acordis' only competitor

(231) To date, Acordis and Lenzing have been competing against each other in the lyocell market, in particular in the EEA, with Lenzing charging significantly lower lyocell prices than Acordis. The notified operation will create a worldwide monopoly on the lyocell market and thus eliminate any existing competition between the parties. The new entity will be able to act independently for the following reasons.

Market entry may not be expected in the near future

(232) Whilst the parties have predicted the market entry of one Chinese and one Korean producer for around 2003, as well as the market entry of other producers at a later stage, the market investigation conducted by the Commission has revealed that no market entry by third parties may be expected in the short run. On the contrary, those amongst the potential market entrants who responded to the Commission's questionnaire stated that it would take them several years before they could become operational and could effectively compete against the parties in the lyocell market.

(233) Lenzing and Acordis argue that their technology patents do not constitute an obstacle for market entry and that such intellectual property rights might be difficult to enforce. This opinion has been strongly contested by third parties interested in entering the market. The Commission's investigation has revealed the existence of a considerable technological barrier to market entry as the parties hold a significant number of patent rights for lyocell production technology (see recitals 246 to 247).

(234) In their reply, the parties argue that the Commission's statement of objections underestimates the likelihood of new entry ([178]). They put forward a list of potential market entrants, based on the replies of competitors to the Commission's questionnaires.

(235) The Commission, having considered these arguments, does not find them convincing. Indeed, several of the potential market entrants named by the parties are in reality research institutions involved in the development of lyocell production and processing technology; they can under no circumstances be regarded as potential producers of lyocell fibres.

(236) Furthermore, the parties' reply does not indicate at what time it realistically expects most of these third parties to enter the market. As regards the market entry of the Indian Birla Grasim group, which is foreseen 'within the next two years', the reply omits that this time-frame is put into question by the 'nonavailability of certain critical equipments on account of patent restrictions on design by Lenzing/Acordis and hence may require more efforts and longer time' ([179]). Furthermore, any potential market entry faces the threat of patent litigation by Acordis and Lenzing (see recital 248). As regards the reference made to market entry by a Chinese company whose name the reply fails to reveal, it has not been confirmed by the overall results of the market investigation; in particular, the Commission has not been able to enter into contact with such a company during the market investigation in order to get confirmation from that potential market entrant itself as to its future strategy. Nor has Hanil of Korea confirmed to the Commission to what extent it is already active or planning to become active in the lyocell fibres market ([180]). Based exclusively on vague submissions regarding third parties, the probability of market entry in the near future is not sufficiently great for the Commission to conclude that significant competitive constraints will be exercised on the parties in the short run ([181]).

([178]) At paragraphs 3.18 et seq.
([179]) See Birla's submission, page 2077 of the Commission's file.
([180]) This lack of factual information concerning potential market entry cannot be replaced or sufficiently compensated for by the reference to mere announcements on websites which have been brought to the Commission's attention.
([181]) [reference to an internal strategy document]*

(237) Under these circumstances, potential competition cannot be considered a source of sufficient competitive constraint on the parties, capable of outweighing the effects of the notified operation ([182]).

Incentive to raise prices

(238) The market investigation has furthermore revealed that the lyocell market is currently characterised by overcapacity. Consequently, there will be an incentive for the new entity to reduce its lyocell production in order to achieve higher prices (integrating Lenzing into Acordis' strategy based on its high-priced branded product Tencel), in particular given the high investment in lyocell technology to be recouped. It should be noted that a majority of customers expect lyocell prices to rise or at least to remain stable in the event of a merger between Acordis and Lenzing, whereas they would expect prices to fall in the absence of the merger. Whilst most customers regard their current bargaining power as balanced, the overwhelming majority expects it to be rather weak if the notified operation goes ahead.

Further arguments in the parties' reply

(239) In their reply, the parties argue, as far as competitive assessment is concerned, that the Commission's assessment of lyocell ignores the wider market context and underestimates the extent to which lyocell is in jeopardy ([183]). In particular, they put forward that the statement of objections fails to take into account the competitive constraint resulting from downstream customers' ability to switch between different fibres ([184]). According to the parties, products made from different fibres are almost completely interchangeable for downstream customers. In its letter, the notifying party furthermore states that the Commission's own data show that in the event of a 5 to 10 % increase in the price of lyocell, 15 % of lyocell sales volume would be lost as a result of customers' switching to other fibres ([185]), and if the volumes lost as a result of customers' reducing or switching were included, the switching effect would increase to 30 %.

(240) The Commission, having considered these arguments, finds the parties' reasoning contradictory. On the one hand, their reply points out that the lyocell industry faces major difficulties in finding a market, that sales have decreased and that both Acordis and Lenzing face major financial problems in their respective lyocell businesses ([186]). On the other hand, market entry by third parties is expected by the parties for the near future, suggesting that lyocell is an attractive market in which profits can be made ([187]). [...]* ([188]).

(241) As regards the distinction between switching to other fibres on the one hand and stopping production or reducing the volume of lyocell consumption on the other hand, the Commission points to the arguments set forth in recitals 42 and 190. It furthermore points to the discussion in recitals 67 and 68 concerning the comparative lack of significance of production losses going beyond the percentage of price increase in lyocell. As outlined there, even larger production losses following price increases may be profitable if accompanied by a plant closure. This can equally apply to a 15 % sales loss as to a sales loss of up to 30 %.

(242) As regards the issue of downstream customers' switching, the Commission finally notes that its phase I questionnaire explicitly asked customers whether they or their customers would switch to other fibres in the event of a small but non-transitory price increase of 5 to 10 %. The replies

([182]) [reference to an internal strategy document]*
([183]) At paragraphs 3.1, 3.7 et seq., 3.16 and 3.17.
([184]) At paragraphs 3.7 et seq.
([185]) On switching alone, see recitals 67 and 68.
([186]) At paragraph 3.16.
([187]) See the parties' reply, paragraphs 3.18 et seq.
([188]) [references to internal documents]*

indicated that only some 4 to 5 % ([189]) of lyocell sales volume would be affected by switching in such a case. Whilst this result of the phase I questionnaire may at first sight seem to be in contradiction with the questionnaire in phase II (whose results are discussed in recitals 67 and 68, for switching, and in recital 241, for switching and stopping/reducing production), it must be noted that in phase I customers representing a higher number of sales in the EEA replied than in phase II which makes the phase I result more reliable.

(243) Furthermore, the Commission refers to its argument on downstream interfibre competition put forth in recital 190, first and second sentences, which is equally valid for lyocell.

Conclusion

(244) The notified operation will create a worldwide monopoly on the lyocell market and thus eliminate any existing competition in that sector, enabling the parties to act independently of potential competitors and of their customers.

(245) For the reasons set out above, the Commission has therefore reached the conclusion that the proposed operation would create a dominant position of the new entity in the lyocell market, both on a worldwide basis and in the EEA, as a result of which effective competition would be significantly impeded in the common market and the EEA.

3. LYOCELL PRODUCTION AND PROCESSING TECHNOLOGY

Combination of patent rights

(246) Acordis and Lenzing are the only two players currently active in the market for packages of 'ready-to-operate' lyocell production and processing technology. Each of them produces lyocell based on own technology. With a view to settling an intellectual property dispute between them, both entered into a cross-licence agreement on 22 December 1997 whereby each party granted the other a non-exclusive, royalty-free worldwide licence to manufacture, use and sell lyocell and lyocell products for the lifetime of the respective patents. As a consequence, each of the parties has had full access to the other party's lyocell production technology since December 1997.

(247) Together, the parties hold the vast majority of all existing patents for lyocell production and treatment.

Ability effectively to block market entry

(248) On the basis of their respective patent rights, Acordis and Lenzing are in a position to block or significantly delay the entry of third parties to the lyocell production market. Third parties who might consider marketing lyocell production and processing technology or selling lyocell production lines to potential producers of lyocell are consistently confronted with a danger of violating these patents and of subsequent litigation with the parties. For the same reasons, third parties who could be seen as potential producers of lyocell are reluctant to purchase lyocell production and processing technology or production lines developed by suppliers other than Acordis or Lenzing.

([189]) 3,9 % in the event of a 5 % price increase, 5,3 % in the event of a 10 % price increase.

(249) The notified operation will render it more difficult for third parties to obtain packages of licences for Acordis' and Lenzing's lyocell production and processing technologies. First, the number of potential licensors will be reduced from two to one; whilst there are currently two potential licensors — [...]* — there will be only one potential licensor left after the merger. Secondly, the incentive to grant packages of 'ready-to-operate' licences to third parties will be significantly reduced after the merger; as set out above (see recitals 230 to 245), the new entity will hold a monopoly in the downstream market for lyocell staple fibres and will thus have no interest in seeing this monopoly challenged by a potential market entrant on the basis of a licence for their own technology. In view of these effects competition in the development of individual production and processing patents in this market will also be stifled as the number of potential buyers will be reduced.

Market entry is improbable in the foreseeable future

(250) The market investigation conducted by the Commission has revealed that under the circumstances described above, no market entry by third parties offering packages of 'ready-to-operate' licenses may be expected within the foreseeable future (i.e. within a maximum of two years). Whilst East Asian companies and the German engineering company Zimmer AG have started to develop their own lyocell production and processing technology, short-term market entry by any of them would, at this stage, require the granting of licences for at least part of Acordis' and Lenzing's lyocell production and processing technology, in order to rule out the danger of intellectual property litigation. The parties' dominance could therefore not be challenged in the short to medium term.

The parties' reply

(251) In their reply, the parties do not address these issues ([190]). They merely argue that one of the third parties interviewed by the Commission had made 'entirely self-serving' comments and was trying to 'free-ride on the substantial investments' of the parties. Moreover, they emphasise that, absent the parties' cross-licence agreement, lyocell probably would never have been produced by either party, and they find it 'clearly disproportionate to require that major investments and R & D should be substantially undermined to avoid what is at worst a remote and putative reduction of competition between the parties as regards the supply of technology services'.

(252) The Commission, having considered these submissions, notes that its assessment of the competitive situation in the lyocell production and processing technology market has never been solely based on the submissions of one third-party but has taken into account a series of factual elements, including information provided by the parties themselves (see recitals 246 to 250). Furthermore, the alleged danger of 'free-riding' and the parties' interest in protecting their investment and research and development efforts made in this sector does not change the fact that the parties currently hold the vast majority of all existing patents for lyocell production and treatment, that they are in a position to block or significantly delay the entry of third parties to the lyocell production market and that market entry is improbable in the foreseeable future. These facts on which the Commission's assessment of the lyocell production and processing technology market is based have not been contested by the parties, and they remain valid as a basis for the Commission's conclusion.

Conclusion

(253) The notified operation will create a worldwide near monopoly on the lyocell production and processing technology market and thus eliminate or severely restrict any remaining competition in that sector, enabling the parties to act independently of potential competitors and of their customers. For the above reasons, the Commission has therefore reached the conclusion that the notified operation would create a dominant position of the parties in the market for lyocell production and processing technology as a result of which effective competition would be significantly impeded in the common market and the EEA.

([190]) At paragraphs 4.1 et seq.

D. *UNDERTAKINGS*

(254) On 25 September 2001, CVC submitted phase II undertakings aimed at removing the competition concerns identified by the Commission in its statement of objections. These proposals essentially restate the ones submitted to the Commission on 30 May during phase I of the procedure.

1. DESCRIPTION OF THE UNDERTAKINGS

(a) ***Viscose staple fibres***

(255) Acordis offers to grant a non-exclusive licence of the Galaxy patents to produce, use and/or sell Galaxy ([191]) viscose fibres for tampons throughout the EEA and NAFTA ([192]) to an independent third-party.

(b) ***Lyocell***

(256) A non-exclusive licence under Lenzing' and Acordis' lyocell patents is to be given to an independent third-party licensee approved by the Commission. This licensing will not include the right to sublicense. It will include the provision of any necessary technical assistance and support (including production and processing technology). The geographical scope for the licence is to encompass at least the whole of the EEA area.

(257) The remedy proposals also provide for subcontract manufacturing arrangements for a period of up to five years, up to in aggregate [...]* tonnes per annum of lyocell, giving the third-party licensee access to the merged group's production infrastructure.

2. ASSESSMENT OF THE UNDERTAKINGS

(a) ***Commodity viscose staple fibres***

(258) The proposed undertakings do not address the competition concerns raised on the market of commodity VSF. Indeed, the licence for Galaxy fibres which the parties offer to grant only concerns the market for VSF for tampons.

(b) ***Spun-dyed viscose staple fibres***

(259) The undertakings do not address the competition concerns raised on the market of spun-dyed VSF either. Again, it needs to be noted that the proposed licence for Galaxy fibres only concerns the market for VSF for tampons.

(c) ***Viscose staple fibres for tampons***

(260) The undertakings do not fully address the competition concerns relating to the market for viscose staple fibres for tampons. The proposed licensing of the Galaxy patents would not sufficiently offset the strengthening of a dominant position that would result from removing Lenzing, the only fully

([191]) Galaxy, the highest quality viscose staple fibre for tampons, is protected by patents in some key jurisdictions (notably the UK and the USA).

([192]) North American Free Trade Agreement.

credible challenger of Acordis' dominance, as a competitor ([193]). In view of the high switching costs, also to other VSF suppliers who may still have to undergo the tampon producers' rigorous internal qualification processes and the health regulatory clearance processes (see also recitals 213 and 221) ([194]), customers can be expected to be reluctant to source supplies with this Galaxy licensee. This reluctance would be increased with tampon manufacturers active in both the USA and the EEA as the new entity would be the only company that could provide supplies in both the EEA and the USA, without deep sea shipments.

(d) ***Lyocell***

(261) The Commission, for the following reasons, does not regard the proposed undertakings as sufficient to address the competition concerns raised in its statement of objections with respect to lyocell.

(262) The licensee could not provide effective competition from a production site unrelated to the parties' in the short term. Whether such an independent production site could be operative in the medium term of two to three years depends, *inter alia*, upon the new entity's technical support for the licensee and upon the perceived economic viability of such an investment. The parties could effectively deter quick entry by pursuing a high-price strategy with less than full utilisation of capacity. The maintenance of some excess capacity and the continuation of a branding strategy such as has been pursued by Acordis in the past would raise entry barriers.

(263) The parties' monopoly power in the short to medium term would not be sufficiently constrained by the proposed toll-manufacturing agreement. By the terms and indeed the very nature of this toll-manufacturing agreement, the licensee and toll-manufacturing contractor (hereinafter 'licensee/contractor') would be in a commercially disadvantaged position as the new entity would have far-reaching transparency as to the licensee's business strategy, its costs, sales and customers.

(264) Considering its lack of technical expertise, the licensee/contractor could not compete with the new entity on the quality of technical service. Considering its likely dependence on the new entity on distribution and technical assistance, it could also not compete on the quality of its distribution service. The licensee/contractor would furthermore not be able to profitably compete on prices as the pricing formula in the toll-manufacturing agreement proposed by the parties (production costs plus manufacturing fee) would ensure that its costs are higher than the ones incurred by the new entity. This would give the new entity the possibility to start a pricing war at any time. Evidently it would not be in the licensee's commercial interest to take this risk and it would either align its pricing strategy to the new entity's or — in the event that the new entity decides to entirely focus on the branded segment — the licensee would align its behaviour in such a way as to set the price of its unbranded (or low-branded) product at a level which does not provide effective competition to the new entity's branded product.

([193]) In fact, there are only two companies who could be considered possible buyers of these licences. The Swedish company Svenska Rayon must be considered too small, even with a Galaxy licence, to provide for the same level of competitive constraint for the dominant firm as is currently exercised by both Lenzing and Svenska Rayon. The other potential buyer, the Finnish-based company Säteri Oy, would have the disadvantage of having to enter this market in which it has not been active before.

([194]) This is true irrespective of the extrusion technology (to which the Galaxy patents relate) used as the qualification process involves the production process as a whole, in particular in terms of hygienic conditions.

(265) Not being able to run and test technological developments during the toll-manufacturing phase, the licensee/contractor would furthermore have lower technological credibility with customers wishing to stay at the forefront of new developments. In addition, customers could not be sure whether the licensee would be committed to supplying them over the long term until he had started building his own plant. Furthermore, the long-term supply credibility of the licensee would necessarily be limited, even after such construction had commenced, until that plant was fully functioning and had demonstrated its ability to ensure long-term regular supplies of the requisite quality.

(266) The licensee/contractor could not therefore effectively constrain the competitive position of the new entity in the short to medium term.

(e) ***Lyocell production and processing technology***

(267) The proposed undertakings are insufficient with regard to lyocell production and processing technology. The new entity would remain the only player worldwide who is able to license this technology as far as ready-to-produce technology is concerned. No other producer could therefore start lyocell production without entering into a licensing agreement with the new entity or running the risk of patent litigation. Competition in the market for lyocell production and processing technology would therefore be eliminated as far as ready-to-produce technology is concerned. The effect of such a situation would not only be the slowing down of technological development ([195]) but also the likely alignment of any new entrant's behaviour in lyocell staple fibre production with the new entity's behaviour, making it likewise impossible for any new entrant effectively to challenge the new entity's dominant position in lyocell staple fibres.

(f) ***Conclusion on the Undertakings***

(268) For the reasons set out above, the Commission has reached the conclusion that the proposed undertakings do not remove the competition concerns identified in its statement of objections and cannot form the basis for an authorisation decision.

VII. **OVERALL CONCLUSION**

(269) For all the reasons set out above, the Commission has come to the conclusion that the concentration would lead to the creation of a dominant position in the EEA markets for commodity viscose staple fibres, spun-dyed viscose staple fibres, lyocell, lyocell production and processing technology, and to the strengthening of a dominant position in the EEA market for viscose staple fibres for tampons, as a result of which effective competition in the common market and the functioning of the EEA Agreement would be significantly impeded,

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Zellulosefaser Beteiligungs-Gesellschaft mbH would acquire sole control of Lenzing AG within the meaning of Article 3(1)(b) of Regulation (EEC) No 4064/89 is hereby declared incompatible with the common market and the functioning of the EEA Agreement.

([195]) This slowing-down of technological development would be due to two factors: firstly, the immediate incentive of the new entity to invest in technological developments, and thus lower barriers to entry, would be reduced by the 'free rider' problem it could face with regard to the licensee. Whilst this free-rider problem also exists in regard to the current competitive situation between Acordis and Lenzing, it is effectively counterbalanced by the technological rivalry between both companies, which provides an incentive to innovate. Post-merger, the incentive to innovate would therefore be reduced.

Article 2

This Decision is addressed to:

Zellulosefaser Beteiligungs-Gesellschaft mbH
Schillerstraße 1
A-4020 Linz
Austria

Done at Brussels, 17 October 2001.

For the Commission
Mario MONTI
Member of the Commission