

***Case No COMP/M.2498 –  
UPM-Kymmene/Haindl***

Only the English text is available and authentic.

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

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Article 8(2)  
Date: 21/11/2001

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*The official text of the decision will be published in the Official Journal of the European Communities.*



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 21.11.2001

C(2001)3703 final

**PUBLIC VERSION**

**COMMISSION DECISION**

**of 21.11.2001**

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

**(Case No COMP/M. 2498 - UPM-KYMMENE/HAINDL and  
Case No COMP/M. 2499 - NORSKE SKOG/ PARENCO/ WALSUM)**

(Only the English text is authentic)

(Text with EEA relevance)

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 ("EEA Agreement"), 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,<sup>1</sup> as last amended by Regulation (EC) No 1310/97,<sup>2</sup> and in particular Article 8(2) thereof,

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<sup>1</sup> OJ L 395, 30.12.1989, p. 1; corrected version published in OJ L 257, 21.9.1990, p. 13.

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Having regard to the Commission decision of 23 July 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,<sup>3</sup>

Having regard to the final report of the Hearing Officer,<sup>4</sup>

WHEREAS:

1. On 20 June 2000, the Commission received notification of a proposed concentration by which the Finnish firm UPM-Kymmene (hereinafter: "UPM") intends to acquire sole control over the German company Haindl'sche Papierfabriken KGaA ("Haindl") by way of purchase of all shares in Haindl. On the same day, the Commission received notification of a second concentration which concerns the resale of two of the six Haindl mills ("Haindl-2"), Parengo in the Netherlands and the Walsum mill in Germany, by UPM-Kymmene to the Norwegian paper manufacturer Norske Skog.
2. After examination of the notification, the Commission concluded that the notified operation fell within the scope of Regulation (EEC) No 4064/89 (hereinafter: "the Merger Regulation") and raised serious doubts as to its compatibility with the common market and the functioning of the EEA Agreement.
3. Following thorough investigation of the case, the Commission has come to the conclusion that the proposed concentration will not create a collective 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. UPM-Kymmene is the holding company of a corporate group active primarily in the forestry products industry, divided principally into three business areas: printing papers (newsprint, magazine and fine paper divisions), converting (converting materials), and wood products (sawn timber and plywood).
5. Haindl is a family-owned company active in the paper industry. Another activity of the Haindl group is the regional airline Augsburg Airways which will be transferred to the former Haindl shareholders prior to closing of the transaction in question or by 31 December 2001 at the latest.
6. Norske Skog is a company active in the forest products industry. Its core business activity is the production and sale of wood containing printing paper (newsprint and magazine).

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<sup>2</sup> OJ L 180, 9.7.1997, p. 1.

<sup>3</sup> OJ C [...], [...] 2001, p. [...].

<sup>4</sup> OJ C [...], [...] 2001, p. [...].

## **II. THE OPERATION AND THE CONCENTRATION**

7. The proposed take-over of Haindl comprises two steps. In a first step UPM-Kymmene acquires the entire capital of Haindl. The second step concerns the resale by UPM-Kymmene to the Norwegian paper manufacturer Norske Skog of two of the 6 Haindl mills, which takes place at the same moment on which UPM-Kymmene acquires control over Haindl (back-to-back sale). These two mills are Walsum in Germany and Parenco in the Netherlands and are hereinafter referred to as “Haindl-2”, whereas the remaining four mills will be referred to as “Haindl-4”. The way the deal is structured means that the first deal can happen on its own; the second deal, however, is dependent on the first one.
8. UPM-Kymmene will acquire 100% of Haindl’s shares. Norske Skog will acquire all of the shares in Parenco and all assets of Walsum. Consequently, each notified operation constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## **III. COMMUNITY DIMENSION**

9. As to the first transaction, the undertakings concerned have a combined aggregate world-wide turnover<sup>5</sup> of more than EUR 5 billion in 2000 (UPM-Kymmene EUR 9.583 billion; Haindl EUR 1.49 billion). Each of them has a Community-wide turnover in excess of EUR 250 million (UPM-Kymmene EUR 6.9 billion; Haindl EUR [...]\*), but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension, and it constitutes a co-operation case under the EEA Agreement, pursuant to Article 57 of that Agreement.
10. As to the second transaction, the undertakings concerned have a combined aggregate world-wide turnover<sup>6</sup> of more than EUR 2.5 billion in 2000 (Norske Skog EUR 3.284 billion; Haindl-2 [...]\*). The aggregate Community-wide turnover of each party exceeds EUR 100 million (Norske Skog [...]\*; Haindl-2 [...]\*). In each of at least three Member States, namely [...]\*, each of the parties has a turnover in excess of EUR 25 million, and in each of those Member States the parties’ combined aggregate turnover exceeds EUR 100 million, but they do not achieve more than two-thirds of their aggregate Community-wide turnover within one and the same Member State. The notified operation therefore has a Community dimension, and it constitutes a co-operation case under the EEA Agreement, pursuant to Article 57 of that agreement.

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<sup>5</sup> Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ No. C 66, 02.03.1998, p.25).

\* 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.

<sup>6</sup> Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover.

#### **IV. COMPATIBILITY WITH THE COMMON MARKET**

11. The two concentrations concern the economic sectors of pulp and publication papers. The only affected markets are the markets for newsprint and magazine paper. On the basis of a separate market for wood-free coated (WFC) magazine paper the WFC market is not an affected market, because Haindl does not produce this paper category.

##### **RELEVANT PRODUCT MARKETS**

###### **1. Newsprint**

12. Newsprint is primarily used for publication of newspapers. The manufacturing of newsprint requires mechanical pulp or recycled pulp of at least 65% by weight. There are different grades of newsprint, depending for example on whether the paper is finished or calendered, white or coloured, and brightness differs between grades. Paper weight (grammage) and brightness are the key variables. Standard newsprint is typically in the grammage range of 40-52g/m<sup>2</sup> and brightness range of ISO 57-60. Improved newsprint is in the grammage range of 42-56g/m<sup>2</sup> and brightness range of ISO 61 and higher. Speciality newsprint includes low grammage (28-40g/m<sup>2</sup>), high brightness (ISO 63-80) directory paper and book paper.
13. In a decision of 30 October 1995<sup>7</sup> the Commission considered newsprint a single product market, finding *inter alia* that there was a high degree of demand-side and supply-side<sup>8</sup> substitutability among different recognised newsprint grades and that the price differences were not significant. This approach was also followed in Commission Decision 1999/641/EC in Case IV/M.1225 – *Enso/Stora*.<sup>9</sup> UPM-Kymmene claims that this is still valid. This was broadly confirmed by the market investigation. The Commission therefore considers for the purposes of this case that there is a single product market for newsprint.

###### **2. Magazine Paper**

14. Magazine paper is produced from mechanical, chemical and recycled pulp as well as chemicals fillers and pigments. It is primarily used for publication of consumer magazines, catalogues and advertising material using mainly gravure or offset printing. There are three different grades: uncoated grades (supercalendered known as SC-A or SC-B), coated mechanical reels grades (known as CMR) and wood-free coated reels (known as WFC). Coated mechanical reels consist predominantly of the lightweight coated grade known as LWC. Other coated mechanical grades include medium weight and heavy weight coated (MWC and HWC respectively) as well as machine-finished coated (MFC) magazine paper.
15. The lowest quality is the SC-B grade and the highest quality is the WFC grade, which costs between 30% and 40% more than SC-B; coated mechanical grades (LWC) are in between both in quality and price. As with newsprint grammage and brightness are the

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<sup>7</sup> Case IV/M.646 - Repola/Kymmene, OJ C 318, 29.11.1995, p. 3.

<sup>8</sup> Most suppliers are able to handle different grades without costly adjustments to their printing machines.

<sup>9</sup> Decision of 25 November 1998, OJ No L 254, 29.9.1999, p.9

key variables for each grade. By way of indication, SC-B has a grammage of 50-55g/m<sup>2</sup> and ISO 65-69%, SC-A grade has a slightly higher grammage and a higher brightness of ISO 70-80%. LWC has usually grammages between 55g/m<sup>2</sup> and 65g/m<sup>2</sup> and a brightness of up to ISO 85%, whereas WFC has more than 80g/m<sup>2</sup> and a brightness of beyond ISO 90%.

16. The parties consider that the different grades belong to the same magazine paper market because of a high degree of both supply- and demand-side substitutability. Moreover, the parties point to the fact that the Commission has in two previous cases based its assessment on a single market for magazine paper.<sup>10</sup> However, in both of these two cases the Commission did so because the assessment would not have been different even on the basis of a separate relevant product market for WFC.
17. The Commission's investigation, however, has revealed that WFC is not part of the overall market for magazine paper. First of all, prices for SC-grades and LWC tend to move in parallel whereas this seems not to be the case for WFC. This is an indication that WFC is not part of the overall magazine paper market. The parties strongly disagreed with that analysis mentioning that price movements between SC/CMR and WFC were largely similar. A correlation analysis between the different prices supports the Commission's analysis that WFC does not belong to the same market as SC/CMR.<sup>11</sup>
18. On the demand side there is very little substitution possible. WFC has a grammage of at least 80g/m<sup>2</sup>, which makes it bulky compared to LWC. It is considerably more resistant than mechanical grades and unlike them does not "yellow" over time, since it does not contain lignin. Therefore, WFC is mainly used for covers of publications and for expensive, high-end traveller, lifestyle and fashion magazines where the price per copy allows to pay for the higher purchase price as well as for the higher transport costs, since each copy carries a higher weight due to the higher grammage. In their reply to the Statement of Objections, the parties mentioned that the Commission failed to take into account overlaps that may occur between medium-weight coated (MWC) and WFC. While it is true that there is some substitution between the two grades possible such substitution takes place at the margins and is not pertinent in terms of volume.
19. From a supply side-perspective there is practically no substitution between WFC and wood-containing grades. All paper machines producing WFC are dedicated machines.<sup>12</sup> Moreover the production of WFC requires chemical pulp only as input whereas SC and LWC are based on wood-containing mechanical pulp. Chemical pulp is to a large extent produced by independent suppliers and traded on the open market whereas mechanical pulp is usually produced internally. The price for chemical pulp, sometimes referred to

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<sup>10</sup> Cases IV/M.646 Repola/Kymmene, at para.20; IV/M.1225 Enso/Stora, at para.17

<sup>11</sup> A price correlation analysis is designed to measure the sensitivity of the price of one product to the price of an alleged substitute. The higher the degree of correlation is for two products (that is to say, the closer the coefficient is to 1), the more likely is the existence of a combined product market including both of them. The coefficient of correlation between LWC and SC is 0.85 whereas it is in the range of [0.45; 0.55] between SC/LWC and WFC. A correlation coefficient of less than 0.55 is not conclusive to support that WFC is in the same market than SC/CMR.

<sup>12</sup> This has already been recognised by the Commission in its decision IV/M.646 Repola/Kymmene, at para.16.

as market pulp, varies considerably over time. For example, the market price for chemical pulp of the NSBK type varied in 2000 between 630\$/tonne and 710\$/tonne.<sup>13</sup> This explains in part why the price for WFC does not move in parallel with the other grades.

20. Some customers are of the opinion that also supercalendered (SC) and LWC grades constitute different relevant product markets. From a supply-side point of view there is little to no substitution between CMR and SC grades. There are no machines which produce both SC and LWC (or other grades of coated magazine paper), since this would require replacing a super calender by a coater and vice versa, which is totally uneconomical. Therefore, LWC machines are normally dedicated machines producing coated mechanical reels only. SC machines, however, may be swing machines which can produce both SC-B and newsprint.
21. While prices for the benchmark SC and LWC grades tend to move in parallel the price differential is around 20%. There is, however, a broad spectrum of qualities and prices within both SC and LWC grades, which partly overlap in terms of grammage and brightness. This does not, therefore, suggest a clear break. There are also several examples of publishers switching between the two grades. Therefore, it seems more appropriate to consider the relevant product market for the assessment of this case to be wood-containing paper, namely SC and CMR together.
22. To conclude, the Commission considers that wood-free magazine paper (WFC) and wood-containing magazine paper - that is, supercalendered (SC), coated mechanical reels (CMR), which includes LWC, MWC and HWC and machine-finished coated (MFC) - constitute two different relevant product markets.

## **RELEVANT GEOGRAPHIC MARKETS**

### **1. Newsprint**

23. According to the parties, present market trends point to a significant influence of imports from Canada and the USA into the EEA. Therefore, UPM-Kymmene submits that the market for newsprint is at least EEA-wide, taking into account the emergence of a transatlantic market. In the *Enso/Stora* case of 1998, however, the relevant geographic market for newsprint was found to be no wider than the EEA.
24. Total imports and exports in 2000 accounted for 9.3% and 10% respectively of EEA consumption. Approximately 80% of these imports come from North America, in particular Canada which alone accounts for almost 75% of European imports. Canada is entitled to a duty-free quota of 600.000 tonnes per year. Most of these imports are directed towards the United Kingdom.
25. Imports are liable to a duty, which has been progressively reduced and is currently at 0.5%. The duty will be abolished in 2002. Therefore, UPM-Kymmene claims, imports will increase further. However, the investigation carried out by the Commission in this case show that imports have not increased and remained stable at low levels, which goes against the idea of a market wider than the EEA. In particular, imports of newsprint into

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<sup>13</sup> Rapport Annuel 2000, Matussière & Forest S.A. p16.

the EEA have remained at a low level of below 10% and been relatively stable in the past ten years. Moreover, imports did not significantly increase since 1998, despite a progressive reduction of the tariff from 3.5% to the current rate of 0.5%.

26. There are five independent North American newsprint producers which were named by European customers as their suppliers. The majority of these supplies goes to the British Isles. Of these five companies, three of those ship significant volumes to Europe. These are Abitibi, which is considered to be the world market leader in terms of capacity, Bowater, which is also among the top 10 suppliers world-wide, and Kruger. Abitibi has also established a foothold in the European market by acquiring the Bridgewater newsprint mill in Great Britain. This mill has a capacity of 292.000 tonnes and sells mainly into the British newsprint market. Bowater, however, has only a small service office in Europe. Kruger has no presence in Europe. These three companies account for more than 60% of all imports into the EEA. The quantities shipped by the two smaller Canadian suppliers (Irving and Alliance Forests Products) are insignificant. Alliance Forest Products is in the process of being acquired by Bowater.
27. The parties claim that imports by North American producers can be expected to increase further, when the Canadian producers no longer achieve premiums on deliveries to the United States based on the strong US dollar, and consequently, the exchange rate for the Euro becomes more favourable for exports to the EEA. However, because of the dependency on exchange rates Canadian producers are seen by many European customers as rather sporadic suppliers with no clear long-term strategy and commitment and, therefore not suitable for on-going publishing. This has been confirmed by two of the leading North American importers. Bowater stated that they would like to increase their sales to Europe provided that the exchange rate becomes more favourable. Kruger stated that they are reducing shipments to Europe because of both the exchange rate and transport costs. In addition, the industry association CEPIPRINT forecasts a decline for imports from Canada from 786.000 tonnes in 2000 to 750.000 tonnes in 2001.<sup>14</sup> The forecast by CEPIPRINT for the next two years is a further decline. All these elements together make it rather likely that imports from North America will decrease over the next few years.
28. Furthermore, the qualities used in the EEA are not identical to the qualities produced in North America. The quality of the imports from Canada is perceived as somewhat inferior to the European quality. Moreover, many customers have stated that the quality of European newsprint is constantly improving thereby widening the already existing gap between Canada and Europe in that respect.
29. Another source of imports is Russia. Several mills such as Kondopoga, Wolga and Solikamsk deliver into the EEA, mainly into Germany. However, the quality of the newsprint from these suppliers is seen as low quality compared to those of the European producers and is mostly used for free papers. Moreover, there are logistical problems which put a steady and reliable source of supply into question. Imports from Russia are around 2% of EEA consumption.

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<sup>14</sup> Demand-Supply Report June 2001, p.A.2.



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30. To summarise, it seems that the newsprint market is not wider than the EEA and Switzerland because (i) imports accounted for only 9.3% of the total EEA consumption in 2000 and are going down in 2001; (ii) despite reduced tariffs, exchange rate fluctuations and lagged behind business cycles, trade flows between the EEA and North America do not vary to any significant extent. In other words, even in years of favourable exchange rate, imports from Canada have not grown significantly.

## **2. Magazine Paper**

31. The parties are of the opinion that the market for magazine is at least EEA-wide. There are no significant non-tariff barriers to intra-EEA trade. However, imports to the EEA of some of the magazine paper grades are subject to a duty. While there is no duty for SC-grade, LWC and WFC are subject to a duty of currently 3.6% and 2.4% respectively. Both duties will be reduced to zero in 2004.

32. The EEA is a net exporter of magazine paper. Exports amount to 23% of total EEA deliveries, while imports are only around 1%. The investigation of the Commission has shown that any increase in imports in the foreseeable future is unlikely. Leading North American paper producers have explained that they have no concrete plans to develop their exports to the EEA area.

33. Moreover, Commission's investigations have shown that magazine paper customers consider almost unanimously the EEA as the relevant geographic market for magazine paper. Customers are also of the opinion that neither North American nor Russian or other East European players should be considered as active in the European market. Therefore, the relevant geographic market is considered to be the EEA plus Switzerland.

## **COMPETITIVE ASSESSMENT**

### **1. General : The Pulp and Paper Industry**

#### **Production processes**

34. Since the early eighties, the production value of wood, paper, publishing and printing has increased to account for more than 10% of total European manufacturing. The pulp and paper industry consists of five key business areas: pulp, publication paper (newsprint and magazine), high quality paper, paperboard and tissue. These businesses share parts of their production processes, which explains why some firms active in the publication paper business may also be involved in other areas.

35. The manufacturing process of publication papers (newsprint and magazine paper) starts within the activity of forestry, which includes the initial planting and raising of trees, as well as felling and logging. Some paper producers actually own forests and are involved in the basic manufacture of wood products, such as panels and boards or builders' carpentry. This is for instance the case of UPM-Kymmene, which produces sawn timber, plywood, planed timber and value-added derivatives. The activities that follow within the production process may be seen within a vertically integrated chain. Wood is used as a raw material in the manufacture of pulp, which is then used as one of the raw materials within the printing and publishing paper industry.

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36. Pulp is a watery fibrous substance made of fresh fibres or recycled fibres and is formed into paper sheets. There are different kinds of pulp dependent on the desired characteristics of the paper product like strength, appearance and intended use. Three types of pulp are used for publication papers: mechanical pulp, which is normally groundwood pulp or thermo-mechanical pulp (TMP) -made from wood-, de-inked pulp (DIP) -made from recycled paper- and chemical pulp. Chemical pulp is used only for magazine paper, as it increases the strength of paper: it is used in combination with TMP and DIP to produce SC paper, in combination with TMP to produce LWC paper and on its own to produce WFC paper. TMP or DIP is used for newsprint.
37. TMP and DIP are not sold on the open market in appreciable quantities, since newsprint and magazine paper producers have integrated pulp production facilities. The raw materials (wood or recovered paper) arrive at the mill, which produces the pulp that is then used to make newsprint or magazine paper. By contrast, integration level of to chemical pulp varies. Chemical pulp makes up a relatively small proportion of the pulp used to make magazine paper (except for WFC) and it can be bought externally from a chemical pulp market. Some producers (around 1/3 of WFC suppliers, according to the parties) have integrated their paper production capacity with a chemical pulp mill; the others buy chemical pulp from the market. Other key production factors include chemicals, water and energy. Some companies have developed integrated energy facilities, in order to cover all or part of their own needs.
38. During the nineties there have been a number of changes in the production process of the pulp and paper industry. These have come about through rationalisation of production, changes in national or European environmental policy, as well as new technological advances in the production processes. One result has been a dramatic reduction in the use of water and energy. Other changes to the production process have included the replacement of chlorine bleaching by elemental or totally chlorine-free processes (bleaching is necessary to increase the brightness of the paper). Another important evolution relates to the increasing importance of recovered paper as a raw material.
39. There has been a marked change in waste policy and recycling as environmental awareness has risen. This has led to a well-developed market for used paper and recycled fibres. Some manufacturers of pulp and paper have even fully changed their production processes and their range of products in order to use recycled resources only. Recycled fibres have become an essential raw material for the paper industry, that can be reused up to six times (if mixed with fresh fibres). Recycling is most attractive for mills operating in densely populated areas because of the large supply of paper and short distances for transporting materials (with manufacturers relying on secure supply and an efficient collecting system).
40. An important structural element in the publication paper industry relates to path-dependency in relation to paper grades. It appears that paper mills using recovered fibres cannot easily switch to fresh fibres and vice versa. The decision to use one of the two inputs requires different machinery, namely either a de-inking plant or a grinder. Since the use of mechanical pulp is much more energy intensive the source of energy becomes important and is often generated in house. For example, Haindl in Schongau switched from TMP to DIP which reduced energy consumption by up to 85%. The switch, however, made it necessary to build a de-inking plant.

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41. A similar strategic decision has to be made as concerns the finishing of the paper. Any paper machine that produces a grade higher than newsprint has either a supercalender or a coating machine to finish the paper. A paper machine with a supercalender can, technically, produce either SC or newsprint. A machine with a coating unit can produce CMR and newsprint, although this is a very exceptional combination.<sup>15</sup> However, a paper machine producing calendered paper can not produce coated paper. The reason is that whenever a switch in production is made the calender has to be used instead of a coating unit. Not only are both units expensive (10% and more of the cost of a paper machine) it would also take a lot of time to make the necessary changes. Consequently, and given the fact that investments are high and the useful life of the machines is 20 years and more, the decision to invest in one type of technology has critical implications, both in terms of cost structures and in terms of marketing positioning.

### Investment processes

42. Investment decisions are one of the main strategic choice variables in the publication paper industry. Generally speaking, opportunities to expand are constrained by the suppliers' historic investment choices, technological opportunities or future strategic evolution. Investment processes are similar in the newsprint and in the magazine market. Capacity expansions take usually three forms: i) expansion of capacity of existing plants through minor modifications, so-called creep, ii) expansion of capacity of existing plants (by rebuilding or upgrading plants); iii) building new plants. Capacity creep can be done at each paper machine and usually results in an increase of 1% per year on average. The introduction of a new plant is often combined with the shutdown of an old inefficient one.

43. The publication paper industry is very capital-intensive. Accordingly, investments can be defined as:

- (a) large, as a new machine has typically a capacity of 250.000 to 300.000 tonnes which cover up to 3% of European demand;
- (b) costly (EUR 300-500 million for building a new plant, between EUR 20 –and 100 million for upgrading and rebuilding);

44. For that reason, investments in new capacities tend to occur in large and infrequent lumps. Decisions about the amount and timing of investments are made taking into account the existing capacity/demand balance, the investments already decided by others, the long term growth trend of the market (which progressively “absorbs” new capacities) and most importantly the aspirations of the investor in terms of rate of return on that investment. Moreover, a certain time lag occurs between the announcement of the investment project, the committed announcement and the effective realisation. The period elapsing between the committed announcement and the effective realisation varies generally between one and two years.

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<sup>15</sup> There seems to be only one machine in operation in Europe, which has been installed by Perlen Papier in 2000 with a capacity of 150.000 tonnes.

The suppliers and the structure of the publication paper industry

45. In the last years, the European pulp and paper industry has been characterised by a high degree of horizontal concentration and vertical integration, in particular through the mergers between UPM and Kymmene in 1995 and Stora and Enso in 1998.
46. Today, the European publication paper industry is fairly concentrated. According to the parties, the top 5 suppliers control almost [70-80%]\* of the market for newsprint and the top 4 suppliers close to [70-80%]\* of the market for wood-containing magazine paper in terms of capacity (respectively, [60-70%]\* and [70-80%]\* in terms of sales). Moreover, the total number of firms involved in the publication paper industry is quite limited.
47. Although CEPIPRINT, the Association of European Publication Paper Producers, officially includes 48 companies, the actual number of members, when considering independent groups of companies, is 14. The Commission investigation identified other paper producers that may provide newsprint or wood-containing magazine paper in small quantities; but they tend to use only one production site and to be very small players. Altogether, the industry comprises about 19 European producers. Among these market players, two firms are actually subsidiaries of non-European groups. Sappi Europe –a subsidiary of the South African group Sappi- is a noticeable producer of coated mechanical papers and a European leader for wood-free coated papers. The Canadian paper producer Abitibi has a subsidiary in Great Britain, Abitibi-Bridgewater Paper, which represents around [ $<5\%$ ]\* of European newsprint capacity.
48. Three elements can be used to classify the suppliers: first, their size, then their degree of horizontal integration and finally their degree of vertical integration. First, there is a great difference in terms of size among market players. The market contains some very small players, accounting each for less than 1% capacity of the total European market capacity in either newsprint or magazine paper; it also encompasses global players and some medium-sized players. Second, the degree of horizontal integration distinguishes market players. There are some overlaps between the publication paper business and some other related activities. It appears that a number of companies have a stake in other paper and board markets, such as high-quality papers, paperboard and tissue. Finally, there are some differences between suppliers regarding their degree of vertical integration. While some paper producers purchase their raw material and energy, some others own forests, chemical pulp factories, firms collecting recovered paper and energy plants. These three elements allow for some distinctions between the suppliers.
49. The Commission has identified, in its investigation, a group of very small market players, which share common characteristics. This group comprises 7 companies: Dresden Papier, Leipa Gruppe, Lenk, Regeno Papier, Robert Cordier, Perlen Papier, and Steinbeis Temming Papier. They usually rely on one or two paper machines and account each for less than 1% of the market. A large proportion of them is based in Germany, the largest national market, and they tend to focus on local customers (even if they also sell across borders). Most of these firms are privately owned, but they tend to be flexible and to be customer-oriented. In majority, they use production processes based on recovered paper and not on wood. Finally, they tend to be horizontally integrated, in the sense that they not only produce publication papers: those producing newsprint tend

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to also produce paperboard and those producing magazine paper tend to also produce fine paper.

50. The other market players offer a contrasted picture, according to their core-business: while some producers focus exclusively or mainly on newsprint and magazine papers, for some others, publication papers are only a secondary business within pulp and paper activities. In the context of increasing specialisation of major producers in the paper and board industry, publication paper represents a core-business for some producers, but not for others.
51. When considering size, one recognises a number of large global players with stakes in the European publication paper industry: Stora-Enso, Norske Skog, UPM-Kymmene, M-Real/Myllykoski, SCA, Abitibi and Sappi. However, these global players have different strategic focuses and should be distinguished, because they do not account for similar market shares. Abitibi and Sappi are European subsidiaries of Canadian and South African international groups with own production sites in Europe. Their market shares in the EEA for newsprint and wood containing magazine papers are limited. Sappi has less than [ $<5\%$ ]\*, Abitibi some [ $0-10\%$ ]\*, if also imports from Canada are included. Then, SCA, even if it has more than 38,000 employees in over 40 countries, is not primarily involved in publication papers: SCA Hygiene Products and SCA Packaging represented respectively 46% and 37% of its total sales in 2000.<sup>16</sup> SCA has around [ $5-10\%$ ]\* European market share for newsprint and less than [ $<5\%$ ]\* for wood-containing magazine paper. Finally, M-real and Myllykoski have various structural links which makes the two firms being recognised as one entity by market participants and presented also as one by the notifying parties in their respective Form COs. M-Real has 35% of the shares in Myllykoski Paper, a subsidiary of the Myllykoski group, and joint-ownership with Myllykoski in the German manufacturer Albrück. These two joint ventures account for approximately [...] tonnes of wood-containing magazine paper, equivalent to [ $5-10\%$ ]\* of the market. Moreover, they have a joint sales and distribution network through M-Real Alliance, a 100% subsidiary of M-Real.<sup>17</sup> M-real in its annual report declares: “Metsä-Serla’s Paper Group, together with Myllykoski, is Europe’s third-largest producer of coated magazine paper.”<sup>18</sup> Myllykoski is also active in the market for newsprint in both Europe and the USA, where its market share is below 5%; M-Real is first and foremost the largest producer of fine papers in Europe and has only limited involvement in magazine paper (around [...] kt in LWC capacity in one mill in Finland and around [...] kt capacity in WFC). For these reasons, the two firms may be treated as one commercial entity for the purpose of this decision.
52. The common feature to these global firms is their degree of vertical integration. This can be seen, for instance, from Stora Enso and Norske Skog. As an integrated company, Stora Enso is able to satisfy a significant part of its raw material needs internally,

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<sup>16</sup> see: [www.sca.se](http://www.sca.se), and *Pulp & Paper International*, June 2001:23

<sup>17</sup> Both the production joint ventures and the sales agreement have been notified to the Commission on 4 March 1996 (Case Nr. IV/35931 Metsä-Serla + Myllykoski). The Commission sent a comfort letter dated 8 May 1996.

<sup>18</sup> M-real, Annual report 2000, p.13.

ensuring continuity of production. The company owns approximately 2.6 million hectares of forest-land in Finland and Sweden and some 0.3 million hectares in the United States as well as significant forest areas in Canada and Portugal. Power plants at Stora Enso's mills provide approximately 40% of the company's power requirements<sup>19</sup>. Norske Skog has set up a subsidiary, Norske Skog supply, in charge of supplying raw materials (wood or recovered paper), energy and other consumables. Finally, Oy Metsä-Botnia AB, in which M-real has a 46 per cent holding and UPM-Kymmene holding share 47% is a strategic resource company whose main task is to assure a disturbance-free supply of pulp on competitive terms to its owner companies, M-real and UPM-Kymmene.

53. The remaining publication paper suppliers represent a group of companies with a European focus. They are capable of serving clients all over the EEA and even to export part of their production, but their production locations are exclusively European. The Commission identified the following companies as having a European focus: Burgo, Haindl, Holmen, Matussière et Forest and Palm. These companies do not appear to constitute a homogeneous group. Burgo, Holmen and Matussière have a large degree of vertical integration, owning power plants procuring the electricity needed for production; they also have some stakes in their supply of raw materials (wood and recycled). They do not rely exclusively on wood and have some mills using de-inked pulp as well. Haindl and Palm, on the contrary, rely primarily or exclusively on recycled paper. While Burgo focuses on magazine paper, Holmen and Palm primarily produce newsprint. Holmen and Burgo are medium-sized firms, active across Europe, whereas both Matussière and Palm are small firms which focus on their respective home country.
54. There are developments which demonstrate Holmen's commitment to the market for newsprint. Its market share steadily increased over the past decade, closing the gap with Norske Skog. Holmen has committed itself to two investment projects which will bring it close to Norske Skog. The first project concerns a new machine at Hallsta which produces super improved newsprint and replaces its old PM 11 newsprint machine (net increase [...] tonnes).<sup>20</sup> The second project concerns a standard newsprint machine to be in production at the end of 2003 or beginning 2004 and will increase Holmen's capacity by another [...] tonnes. With this additional net capacity of [...] tonnes Holmen will achieve a share of European capacity of around [10-15%]\* in 2003.<sup>21</sup>
55. On the basis of the elements outlined above, top suppliers in the newsprint market are UPM-Kymmene, Stora Enso, Norske Skog, Haindl and Holmen; other companies are principally SCA, M-Real/Myllykoski, and Palm. In the market for wood-containing magazine paper, top suppliers are UPM-Kymmene, Stora Enso, Haindl, and M-Real/Myllykoski; the remaining players are comprised of principally SCA, Burgo,

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<sup>19</sup> see: [www.storaenso.com](http://www.storaenso.com)

<sup>20</sup> Jim Kenny: "Searching for Stability", In PPI, June 2001, p. 41.

<sup>21</sup> It is possible to increase capacity by an extra 1% on existing machinery each year by running them slightly faster or making continuous small improvements in the production process in the mills. However, capacity creep is done by all competitors. Therefore, capacity creep should not change market shares and can be ignored for the calculation of future market shares.

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Sappi, and Norske Skog. Note that M-Real/Mylykoski and Norske Skog are considered either top supplier or fringe depending on the considered market.

#### Buyer characteristics

56. Customers for newsprint and wood-containing magazine paper comprise newspaper and magazine publishers, catalogues and retailers, speciality paper buyers, paper merchants, and commercial printers.
57. Whilst these customers use paper for distinct needs, they choose within the same range of paper grades. Different grades of publication papers are distinguished by grammage, brightness and the intended printing process. The different categories cover a range of printing quality that can be achieved and the look and feel of the printed product.
58. The market is characterised by a large number of buyers, of which few are large buyers. Some large publishers like Axel Springer represent a fair amount of the total demand (up to 5%). However, the vast majority of the demand is atomised and consists of regional newspapers and specialised magazines.

#### The bargaining process and the pricing policy

59. Even though it is a commodity product, the dominant market mechanism for publication paper is not based on a public exchange. There is admittedly a spot market where companies can buy their supply but the dominant market mechanism is rather based on agreements between suppliers and customers with specified supply periods of usually one year. According to copies of such agreements provided by the parties, delivery contracts may specify:
  - the quantity of paper to be delivered together with its grade and thickness
  - price and possible rebates
  - delivery conditions, logistics and packaging
  - quality control requirements, environmental specifications
  - payment conditions
60. Contracts are company-specific and relate to individual orders. Their duration varies between 3 months and several years, but is generally of one year while rate of deliveries may vary during the year according to demand. Prices are generally negotiated for the calendar year. It is not uncommon, that contracts are renegotiated during a year if a significant decline in demand occurs.
61. Long-term and stable relationships are used by customers to secure supply in terms of quantity and in terms of product range; they involve the largest suppliers and possibly long-term contract (some examples were given of 3-year contracts). Customers may use short-term contracts (less than one year) to try to obtain better prices for part of their supply; they involve smaller suppliers and possibly extra-EEA producers.
62. Negotiations operate in a particular way between the suppliers of publication paper and their customers. The Commission's inquiry showed that customers systematically adopt

a multi-sourcing strategy. Multi-sourcing strategy allows customers to secure some safety in the regularity of their supply, to make sure they get the whole range of paper grades and qualities that they require and importantly to increase their negotiating power. From the point of view of the customers, it appears indeed that it is only through a confrontation with a number of suppliers that they can increase transparency of the market situation at the time of negotiating.

63. Customers' negotiation strategies appear to be elaborate. On the one hand, after determining internally their needs in terms of volume and paper grades, they may develop some market intelligence and look at pulp prices, utilisation rates and capacity, in order to have an idea of the constraints on producers and of their cost structures. The main negotiating instrument consists in confronting competing offers from suppliers. Even though customers have declared not to divulge to their bargaining partners which competitor makes them a good offer, they clearly signal when better price levels can be obtained.
64. For customers it is vital to be supplied continuously. Unlike paper producers, publishers cannot shut down production and not publish a daily newspaper or weekly magazine for a certain period. If the required tonnage of paper is not available, publishers have no other choice than to reduce pagination or even circulation, as has happened in the autumn of 2000. Both have detrimental effects on revenues from advertising as it generates adverse reactions from readers and weaken the negotiating position of the publishers further. For these reasons, several customers have complained against the proposed take-over of Haindl.
65. The balance of power has tended to fluctuate in the past, depending on the market cycle. When the demand is high and consequently when capacity surplus is tight, customers are under the pressure to find enough paper for their products. During negotiations, they will have to accept higher price levels corresponding to lower bargaining power.
66. When demand is low, on the contrary, paper producers are under pressure to reach profitable levels of capacity utilisation. Since the pulp and paper industry is very capital intensive and shows high fixed costs of between 45% and 55% according to paper producers, a high utilisation rate of more than 90% is required for the business to be profitable. Consequently, when demand is low or in situations of over-capacity, customers will have a higher countervailing power and would be able to obtain lower prices.
67. However, it has been reported by some customers that the optimal strategy for suppliers to resist to these downward pressures on prices is to take downtimes, that is, idle paper machines temporarily. Downtimes may allow suppliers to maintain prices at a certain level through lower deliveries and may be part of the suppliers' strategic policy.

#### The industry in the past decade

68. The main driver of demand for publication paper is the advertising volume, which in turn affects the volume of the editorial part and eventually pagination. As advertising is closely related to the performance of the economy, the demand for publication paper is typically related to the general economic trend. Traditionally, the paper industry is cyclical. Over the past ten years two peaks occurred, one in 1995, the other one in 2000, followed by a slowdown in demand. These business cycles imply a high volatility of



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prices over the cycle. For instance, in 1995 prices increased by around 25-35% followed by a decrease in 1997 by 15-20%.

69. Since it normally takes two years between identifying the needs for additional capacities and installing new capacity, and since expansion plans tend to occur when business is good, a mis-match of installed capacity and demand often appears. As can be seen in Figure 1, the market oscillates between periods of full capacity utilisation –around or more than 95%- and periods of over-capacity. For instance, in 1991 and in 1996 the industry capacity utilisation ratios were around 85% and 90% respectively. The capacity utilisation rate and the overall level of prices reflect the demand and supply balance. In particular, periods of low demand or over-capacity are associated with a decline in prices. The level of installed capacity relative to demand determines the profitability of the industry in the long-run. As can be seen from Figure 2, prices have remained stable since 1998. Prices have not been depressed by the introduction of new capacity as had been the case previously, in particular in the early nineties. New capacity has been in line with increased demand.

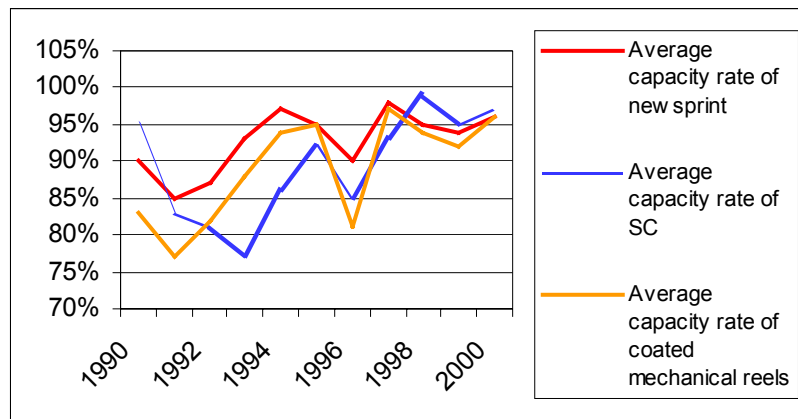


Figure 1: Capacity utilisation rate  
Source: CEPIPRINT

70. Figure 2 describes the cyclical pattern of the newsprint market over the past 10 years. These observations are also valid for the wood-containing magazine paper market.

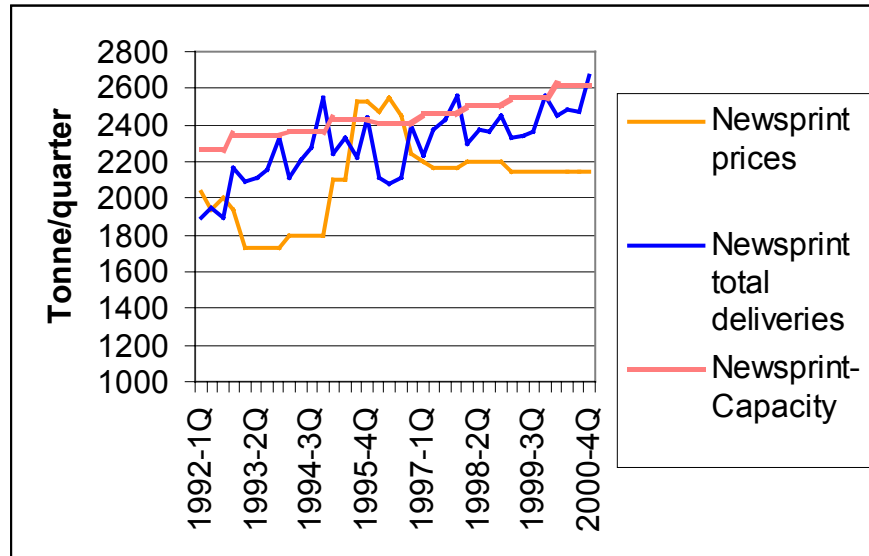


Figure 2: Newsprint cyclical pattern at EEA level  
Source: CEPIPRINT

71. Regarding the development of the long-run capacity level in the market for newsprint until 2003, it seemed until spring of 2001 that new capacities coming on stream, namely the new machines by Myllykoski, Stora Enso and Holmen, as well as rebuilds and creep continued to be matching forecast demand thus stabilising the supply and demand balance. At EEA level, the long-term increase in demand for newsprint is estimated to be approximately 2% per year. The same figure was also the estimation of CEPIPRINT until March 2001 for the period until 2003.<sup>22</sup> However, the recent developments of the general economic climate have lead to a substantial revision of forecasts for demand of publication papers, and, therefore, might well lead to a situation in the short term, where more new capacity is built than needed.
72. Several customers have suggested that suppliers may stabilise prices by reducing their production on the margins – so that production increases at a lower rate than the growth in demand, in particular through market-related downtime. This would keep supply tight and raise prices. Jukka Härmälä, CEO of Stora Enso, was quoted as saying that “*Stora Enso is committed to taking market related downtime. We took 205 000 tonnes of downtime in the first quarter this year and we intend to continue this if needed throughout the year*”<sup>23</sup> In a similar fashion Juha Niemelä, CEO of UPM-Kymmene, said “*We shouldn’t aim at running machines full all the time*”<sup>24</sup> (that is to say, taking downtime).

<sup>22</sup> CEPIPRINT Demand – Supply Report Newsprint and Magazine Paper Grades 2001-2003, March 2001, p.4.

<sup>23</sup> R. James: Stora Enso aims to be leader of the pack. PPI June 2001, p.29.

<sup>24</sup> R. James: UPM-Kymmene stays cool when the heat is on. PPI June 2001, p.16.

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73. To support their assertion, customers pointed at the fact that in 2000 publishers could not get the volume of newsprint they needed and were in some cases denied the volume they had actually ordered. Moreover, while prices have been stable between 1997 and 2000, newsprint prices for 2001 rose by almost 20% as compared to 2000<sup>25</sup>. A similar observation could be made for wood-containing magazine paper where prices have risen by 10-20% at the end of 2000. While the year 2000 may have been an exceptional year which cannot be taken as a reference it nevertheless demonstrates what can occur when supply is tight.

## **2. Collective Dominance**

### **Introduction**

74. Collective dominance is usually associated with the joint exercise of market power through the tacit co-ordination of market behaviour of a group of firms.

75. The Commission investigated whether the two proposed concentrations would result in the creation of a collective dominant position<sup>26</sup> in the markets for newsprint and wood-containing magazine paper by a subset of large firms called top-suppliers.

76. In its investigation the Commission has carried out the same type of analysis as in past decisions in collective dominance cases such as Decision 92/553/EEC (IV/M.190 - *Nestlé/Perrier*)<sup>27</sup>, Decision Decision 97/26/EC (IV/M.619 - *Gencor/Lonrho*)<sup>28</sup> and Decision 2000/276/EC (IV/M.1524 - *Airtours/First Choice*)<sup>29</sup>. In particular, the Commission has analysed:

- (a) The impact of the merger on competition;
- (b) Whether the characteristics of the market makes the market conducive to tacit co-ordination;
- (c) The sustainability of the co-ordination, that is to say:
  - (i) whether any one of the top-suppliers has the ability and incentive to deviate from the co-ordinated outcome, considering the ability and incentives of non-deviators to retaliate;
  - (ii) whether buyers/fringe players/new entrants have the ability and incentive to challenge the top-suppliers' anti-competitive behaviour.

In addition, the Commission has examined the nature of past competition.

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<sup>25</sup> See PPI This Week, Vol.23, Nr.23, of 11 June 2001.

<sup>26</sup> The terms collective, joint and oligopolistic dominance are used as synonyms in this decision.

<sup>27</sup> OJ L 356, 5.12.1992, p. 1.

<sup>28</sup> OJ L 11, 14.1.1997, p. 30.

<sup>29</sup> OJ L 93, 13.4.2000, p. 1.

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77. The examination of collective dominance requires therefore examining a series of elements. In particular, in order to establish whether a market is conducive to collective dominance, it is necessary to consider a number of characteristics of the market. While these characteristics are often presented in the form of a list, it is necessary to examine all of them and to make an overall assessment rather than mechanistically applying a “check-list”. Depending on the circumstances, the fact that one or another of the structural features usually associated with collective dominance may not be clearly established is not in itself decisive to exclude the likelihood of a co-ordinated outcome.

### **Market characteristics**

78. The publication paper industry is characterised by long-run competition in capacity and short-run competition on prices under capacity constraints. That is to say that in these markets, the level of capacity and average demand determines the long-run average price level whereas short-run demand determines the short-run price at a given capacity level. These characteristics are very similar in the market for newsprint and in the market for wood-containing magazine paper and can be summarised as follows:

79. Product homogeneity. Both newsprint and the main grades of wood-containing magazine paper can be considered as homogeneous products, although some variations within the different paper grades exist. The homogeneous nature of the products is confirmed by a tendency for a certain standardisation of the pricing policy among the different qualities. For both newsprint and wood-containing magazine papers, there exist well-defined standard qualities to which all suppliers adhere. For instance, the reference quality in newsprint is 45 g/m<sup>2</sup>. This quality is taken as a benchmark to calculate the prices for other qualities.

80. Stability of the market shares. As indicated in the following graphs, there has been some degree of fluctuations in the market shares of the top suppliers, in the markets for newsprint and wood-containing magazine paper respectively. These variations in terms of market share are limited for wood-containing magazine and more pronounced for newsprint. Holmen, for instance, notably increased its market shares in the newsprint market over the past four years. However, and as explained by UPM-Kymmene, market shares in the publication paper industry are strongly determined by capacity shares and “strong short-term market share variations are excluded by the character of the industry.”<sup>30</sup> On the basis of the above the Commission recognises some instability in the market shares of especially newsprint producers, but also considers that such variations do not necessarily preclude an overall stability in the respective market shares of the largest suppliers.

[...]\*

Figure 3: Market Shares in the newsprint market  
Source: reply of the parties and the competitors

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<sup>30</sup> Source: UPM-Kymmene, reply to the SO, p58.

[...]\*

Figure 4: Market Shares wood-containing magazine paper  
Source: reply of the parties and the competitors

81. Symmetries of market shares. Furthermore, as the parties have also pointed out, there are some asymmetries in relation to top-suppliers' market shares. Holmen, in particular, had a market share of [10-15%]\* in terms of newsprint sales in 2000 against [20-25%]\* for Stora Enso. In the past, however, the Commission has found collective dominance even where the oligopolists did not have totally symmetric market shares.<sup>31</sup> The main reason is that the existence of asymmetries in market shares in these cases was not in itself an obstacle to tacitly co-ordinated behaviour. Given the outcome of its competitive assessment, the Commission is not taking a position here on whether the relative asymmetry of market shares in this case might provide different incentives for the top suppliers. It will, however, further discuss the likely increase or decrease in symmetry brought about by the proposed concentrations in the section on "impact of the transaction".
82. Transparency on capacities, deliveries, and expansions. The Commission identified two main channels of information for operators on the markets of newsprint and wood containing magazine paper: professional associations and announcements by paper producers.
83. CEPIPRINT is the Association of European Publication Paper Producers, representing the industry sectors of newsprint and magazine papers within the Confederation of European Paper Industries (CEPI). CEPIPRINT is based in Zürich and incorporated under Swiss law. Its members are manufacturers of newsprint and magazine paper grades in Europe. CEPIPRINT is financed by member companies. The CEPIPRINT membership currently includes almost all European producers of newsprint and magazine paper, that is to say, 14 independent companies or group of companies, owning over 60 paper mills and 162 paper machines in 13 European countries. CEPIPRINT members represent more than 98% of supply in the EEA plus Switzerland of both newsprint and magazine paper. CEPIPRINT produces various reports about deliveries, paper orders, capacity, stock situation as well as production and shutdowns, for each paper grade separately. The data is aggregated and does not specify mills or companies; it is generally organised on a country-by-country basis, or even, for utilisation rates and downtime, for all EEA members plus Switzerland. There is also public information on investments (announced and realised) provided by CEPIPRINT and PPI.
84. Paper producers themselves may also make announcements about their investment plans and downtime levels, in particular. For instance, they may indicate their intentions to build a new paper machines at a given location. Such declarations, however, are not to be considered as commitments until they are decided through a board decision, which sometimes comes at a much later stage. Information on downtime is also available through public statements by individual firms about their amount of downtime, which means tonnage taken out of the market. In addition, information on downtime becomes

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<sup>31</sup> See for example IV/M 1313 – Danish Crown/Vestjyske Slagterier; IV/M.1524 – Aitours/First Choice.

also known to customers and suppliers, who need to be informed so that they can take it into account in their planning.

85. Taking these elements into account, although it may be recognised that there is some overall transparency in the market, the Commission finds that there is a lack of transparency in relation to investment decisions to sustain the tacit coordination of investments alleged in the Statement of Objections.
86. Transparency on average prices. There seems to be transparency on average transaction prices, whereas there may not be for individual transaction prices. In the Enso/Stora decision, the Commission noted that, according to Enso and Stora, secret price discounts indicated that the markets lacked transparency.<sup>32</sup> On the other hand, several customers have pointed out that actual price levels in the market appeared to be transparent. Facilitating devices in this respect would be the two publications EUWID<sup>33</sup> and PPI. Both publish prices on a monthly basis per country. Customers have indicated to the Commission that these publications are quite accurate in their indications as to the general level of transaction prices in the market.
87. It is however noteworthy that the final net price in both the markets for newsprint and wood-containing magazine paper is determined through individual contracts which include *inter alia* often retroactive price rebates. The Commission, therefore, considers that individual transaction prices are likely not to be transparent even though a certain degree of transparency exists on the average level of prices charged by the different suppliers.
88. Inelastic and cyclical demand. In both the newsprint and the wood-containing magazine paper market, suppliers face a short-run inelastic demand. This has also been acknowledged by the parties. Short-run demand is driven by the economic activity which is indeed highly pro-cyclical. Short-run demand determines short-run prices for a given level of supply. The Commission has estimated the demand elasticities with regard to publication paper market. Estimated elasticities are in the range of [-0.15;-0.3] for newsprint and [-0.3;-0.6] for wood-containing magazine paper.<sup>34</sup> The economic expert of Norske Skog based his analysis of the market on an even lower elasticity of between -0.1 and 0.3. This means that a small proportionate decrease in the supply of the products will induce a higher price increase.
89. Cost structures. Generally speaking, production costs are likely to vary in relation to the size or the age of the paper machine or in relation to the mix of variable and fixed costs.

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<sup>32</sup> Decision of 25 November 1998, OJ Nr. L 254, 29.09.1999, para.68.

<sup>33</sup> EUWID (Europäischer Wirtschaftsdienst); price quotes are obtained from both customers and suppliers.

<sup>34</sup> The Commission has estimated a simple model of supply and demand. The analysis has been carried out by Bruno Jullien of the University of Toulouse. The model is derived by combining the work of Christensen and Caves (1997) and of Pesendorfer (2000) on the pulp and paper industry. A demand has been estimated using 2 stage least square, accounting for the endogeneity and serial correlation of prices and based on quarterly data starting first quarter 1992 and ending the third quarter 1999. Cost analysis as well as an economic support for the analysis of collective dominance has been also carried out by Prof. Jullien.

The Commission has analysed the cost structure of the top suppliers based on cost details per machine for their corresponding mills.<sup>35</sup> In order to compare their marginal costs, the Commission has examined their respective part of fixed and variable costs.

90. Different measures of costs have been examined and in particular the one measuring the average variable cost<sup>36</sup> of raw material and energy. The analysis shows a certain dispersion of all average variable costs over machines which reflects the mix of various generations of machines. In particular, the average effective age of the newsprint paper machine seems to affect the average variable costs much more than the age of the magazine paper machines does. The age of the machine is therefore a less relevant parameter in latter market. However, it should be noted that the industry operates in such a way that the operating rate of the machines is not linked to their individual costs, suggesting that average variable costs are a useful indication of marginal costs.

<b>Company</b>	<b>Newsprint</b>	<b>SC</b>	<b>LWC</b>
<b>Competitor 1</b>	[...]*	[...]*	[...]*
<b>Competitor 2</b>	[...]*	[...]*	[...]*
<b>Competitor 3</b>	[...]*	[...]*	[...]*
<b>UPM-Kymmene</b>	[...]*	[...]*	[...]*
<b>Norske Skog</b>	[...]*	[...]*	[...]*
<b>Haindl</b>	[...]*	[...]*	[...]*

Figure 5: Average effective age of the machines  
Source: reply of the parties and the competitors

91. For the purpose of the cost analysis, the value of the different average variable cost per firm is analysed in Figures 6-8. Two conclusions emerge from the cost analysis of the newsprint market (Figure 6). First, [...]\* and in particular [...]\* has the lowest variable costs of the sample and thus possibly the lowest marginal costs in the newsprint market. Second, the two transactions would increase the symmetry between [...]\*, although a certain degree of asymmetry would remain

[...]\*

Figure 6: Average variable cost of newsprint per firm  
Source: reply of the parties and the competitors

92. Conclusions for the wood-containing magazine paper market seem to differ from the newsprint market. The top suppliers exhibit more similar cost structures. In addition, the Commission has examined the position of competitor 4, which has not been identified by the Commission as a top-supplier but rather as a fringe player in the wood-containing magazine paper market. A noticeable point is that competitor 4 appears to have [...]\* today competitor 4 has less market power among the top-suppliers in the wood-

<sup>35</sup> Source: the data base have been constructed from the replies to the different Commission's questionnaires of phase I and phase II investigation, OECD data and PPI data base.

<sup>36</sup> Labour has been considered as fixed costs. Results of the analysis do not change when marketing and sales are considered as variable costs along with raw material and energy.

containing magazine paper market. This is confirmed by its declining market share position in the last two years. Competitor 4 has plans to replace its existing machines in the next years, which would make it more efficient in terms of costs.

[...]\*

Figure 7: Average variable cost of SC per firm  
Source: reply of the parties and the competitors

[...]\*

Figure 8: Average variable cost of LWC per firm  
Source: reply of the parties and the competitors

93. The parties did not share the Commission's preliminary conclusion that cost levels were symmetric amongst producers. In particular, they argue that the data and the figures provided demonstrate rather that the alleged top-suppliers have dissimilar cost structures. In addition, it is noted that in such a situation the more cost-efficient players will not have an interest to co-ordinate with the less cost-efficient since they can afford to compete and at the same time make profits. Finally, it would appear that the cost components such as energy, pulp, other raw material, etc. differ between the different top-suppliers. For instance, there is a difference in the cost structure of [...]\* as compared to [...]\*, since the percentages allocated to energy and to the raw material among the total costs are lower. Energy represents [...]\* % of [...]\* total costs whereas it represents [...]\* % of [...]\* total costs; [...]\* raw material represents [...]\* % while it represents [...]\*% for these other two.
94. The Commission considers that, in the wood-containing magazine paper market, top-suppliers do not exhibit wide differences in cost structures, with the exception of competitor 4. This is so already before the proposed concentrations, and that the situation would not change much after they are implemented. In the newsprint market, both transactions – UPM-Kymmene/Haindl-4 and Norske Skog/Haindl-2 will increase the symmetry between all top-suppliers' cost structures. However, although the two transactions will make the cost structures of the remaining top suppliers of newsprint more equal, it is recognised that these suppliers might still react differently to changes in input prices. Therefore, the Commission recognises that the degree of cost symmetry, especially in the newsprint market, is not necessarily conducive to collective dominance.
95. Multi-market contacts and links. Top-suppliers usually operate in more than one pulp and paper product market. For example, all top suppliers, namely Stora Enso, UPM-Kymmene, Haindl, Norske Skog, M-Real/Mylykoski operate in both the newsprint and in the wood-containing magazine paper market.
96. Furthermore, Stora Enso, UPM-Kymmene, Norske Skog, Haindl and M-real/Mylykoski have joint control in a number of firms in relation to inputs and transport:



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- (i) Oy Metsä-Botnia AB: a chemical pulp mill; UPM-Kymmene (47%), M-real/Mylykoski (46.41%)
- (ii) Sunila Oy: a chemical pulp mill; Stora Enso and M-real/Mylykoski 50% each
- (iii) Paperinkeräys Oy: procurement, processing and supply of recovered paper; UPM-Kymmene (23%) - M-real/Mylykoski (30.3%)- Stora Enso (30.4%)
- (iv) Austria Papier Recycling Ges.m.b.H. (procurement of waste paper): Haindl, SCA and Norske Skog 33.3% each
- (v) Pressretur AB (Sweden): waste paper collecting company; Stora Enso, Holmen, and SCA
- (vi) Keräyskuitu (Finland): DIP plant; Stora Enso (68.1%) and M-real/Mylykoski (31.8%)

97. Other joint logistics services and distribution facilities can be mentioned:

- (i) Oy Transfennica AB: a shipping company; UPM-Kymmene (49.91%) - M-real/Mylykoski (36.65%)
- (ii) Corenso United Oy Ltd: a coreboard, cores and tubes; UPM-Kymmene (29%) – Stora Enso (71%)
- (iii) Distribution agreement between UPM-Kymmene and M-real/Mylykoski at Hull Harbour, UK, Tilbury, UK, and Antwerp harbour, Belgium;
- (iv) Holmen, M-real/Mylykoski, and SCA long-term arrangement regarding sea carriage
- (v) Steveco (Finland): a stevedoring company between Stora Enso, UPM-Kymmene, and M-real/Mylykoski.

98. Top-suppliers also interact with the fringe, in particular:

- (i) Metsä-Tissue Oyj: a tissue paper company: M-real/Mylykoski (65.6%), and SCA (19.2%)
- (ii) Sodipel SA (Portugal): distribution facilities, Norske Skog has a share participation with SCA
- (iii) Sappin S.A (Belgium): purchasing of roundwood and wood chips; Haindl (that is, the Parenco mill) (50%) – Sappi (50%)
- (iv) Laakirchen (Austria): local co-operation for the procurement of certain raw materials for specific mills; SCA - Steyermühl owned by Haindl.

99. In the context of collective dominance, multi-market contacts may influence strategic behaviours and may tend to substantially increase the sustainability of co-ordination on the markets.

100. Buyer power. The industry is characterised by few large customers and a large number of small customers. Both categories usually multi-source. Consequently, top suppliers serve a very large number of customers, and these do not weight much in percentage of their total sales. Deliveries to their respective Top-10 newsprint customers represent [...] % of Norske Skog, UPM-Kymmene and Haindl's total sales respectively; deliveries to their top-5 customers is [15-20%]\* and [15-20%]\* of Stora Enso and Holmen's respective total sales. Percentages are of the same magnitude in the wood-containing magazine paper market.
101. The largest customers in the newsprint market such as News Corp, UK (<5%)\* of the total newsprint deliveries), Associated (<5%)\*, Mirror News/Trinity Mirror, UK (<5%)\*, SPPP, France (<5%)\*, -source from UPM-Kymmene, Stora Enso, Norske Skog, Holmen, and Haindl, meaning all top suppliers. The same phenomenon applies to the wood-containing magazine paper market where the largest customers – Axel Springer Verlag (<5%)\*, Burda (<5%)\*, Gruner + Jahr (<5%)\*, IPC Magazines (<5%)\* multi-source from UPM-Kymmene, M-real/Mylykoski, Stora Enso, and Haindl. Even the smallest customers multi-source, although with less suppliers. However, given the smaller quantities purchased, they traditionally multi-source from one or two top-suppliers and from the fringe.
102. Beyond this imbalance in importance on both sides there are two more reasons why buyer power may not be enough to neutralise possible parallel oligopolistic behaviour. First, switching to a new supplier takes time and involves costs. It might be for this reason that some customers rank continuing business relationships higher than price. Customers are willing to accept higher prices in order to continue with existing supply to avoid some switching costs in changing to new suppliers. One reason is related to the cost of starting a new long-term business relationship. It seems also to be that although standard newsprint is a commodity in the very short-run it is not fully interchangeable across suppliers. In fact, output from various suppliers needs to be matched to each pressroom, and in some cases each press, to obtain optimum runability and printability. Parameters which have to be optimised include paper machine direction tensile and cores direction tensile as well as elongation, calliper, stiffness, surface smoothness and oil and water absorbitivity of the paper. Once a customer has optimised the paper quality from a particular machine to the pressrooms where that quality is to be run he is very sensitive to any changes of supplier. Therefore, switching to new suppliers is time consuming and may increase risks.
103. The parties describe the rather cumbersome procedure of changing suppliers which has to follow several steps:<sup>37</sup> i) laboratory tests to confirm the physical properties of the paper; ii) preliminary trial run to assess the paper's runnability and press behaviour; iii) extended trial run to confirm runnability; iv) gradual volume build-up to accommodate logistic system, warehousing, order handling, etc. The process will generally take several months. Furthermore, it is common that the introduction of new suppliers and the rejection of established suppliers will be phased over a suitable time period, rather than through sudden switches.

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<sup>37</sup> Form CO UPM-Kymmene/Haindl, page 85

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104. The fact that customers are not only concerned about price is best illustrated by the fact that in order to win new business suppliers normally have to offer significant discounts. Norske Skog described in its submission dated 24 August how new customers were won by offering an introduction rebate of [...%]\*.<sup>38</sup> This example suggests that customers are rather reluctant to switch to new suppliers.
105. The second factor limiting buyer power is that large customers requiring high volumes face difficulties in switching significant volumes from one player to another. If a large buyer such as Axel Springer or Associated Newspapers tried to switch 10% of their needs this would be equal to 40-50 kt. This would become in normal business times in which paper machines run at 90% or more, extremely difficult if not impossible.
106. Technological development. Paper making is a process industry. Innovation normally takes place more in the paper production process and less in the products itself. Indeed, most of the *R&D* spending is targeted to improve the production process through improvement in process technology and process control. This kind of *R&D* is to a large extent undertaken by and in co-operation with the manufacturers of paper machines<sup>39</sup> and benefit all clients (that is to say, the paper suppliers). For that reason, up-to date technology is easily available. This development has helped to bring down costs.
107. Innovations in the product itself have been made through the improvement of existing qualities with regard to brightness and surface. These improvements also have been brought about by process developments. The aim is principally to enable products to be used in higher priced end-uses, therefore repositioning the paper higher in the market.
108. Barriers to entry and expansion. The pulp and paper industry has the characteristics of a sunk cost industry. As mentioned by the parties, there have been no new entrants into the market for newsprint or wood-containing magazine since the last five years and entry in the next years is less likely for the following reasons: entry is costly so that entry involves high risks and procedures for changing to new suppliers are usually long.
109. Fixed costs which are largely sunk costs in this industry, represent on average 45-55% and 35-50% respectively of the total costs of the newsprint and wood-containing magazine paper industry. New entry cannot be done stepwise. It requires the installation of a new machine, which has usually a capacity of between 250.000 and 400 000 tonnes. This is equal to 2-4% of demand. A newcomer can not fine-tune by closing down obsolete machines. Most of the costs incurred are sunk, and according to historical evidence, it is likely that profits are made only if the new machine runs at 90% of its capacity.
110. The parties claim, however, that there are no barriers to expansion for existing players. A considerable percentage of around 50% of all new capacity between 1999

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<sup>38</sup> Reply to Article 6(1)c decision, 24 August 2001, p.17

<sup>39</sup> There exist two remaining paper machine manufacturers world-wide: Valmet and Voith Sulzer.

and 2002 came from small and medium sized firms. During this period there are five projects: One each by Palm, Norske Skog, Myllykoski, Enso Stora and Holmen. One of the two projects of the smaller firms is Myllykoski's new mill in Germany. This project has been supported by a firm commitment of Axel Springer to purchase a significant part of its production for a number of years. This comes close to creating some vertical integration. Only very few customers can afford to buy 50.000 tonnes or more from one supplier without becoming dependent from that supplier. Similar attempts by Burda and the WAZ-Gruppe to vertically integrate failed. Therefore, it is rather unlikely that this kind of co-operation will be replicated.

111. The other project by a small supplier, Palm, would account for around 20% of new capacity. Differences however exist with regard to expansion of wood-containing magazine capacities. In the period until 2003, a larger share of new capacity for SC and LWC grades is to be built by smaller players as compared to newsprint.

### **Assessment**

#### **A. Impact of the proposed operation on the structure of the newsprint market**

112. The market shares of the major suppliers of newsprint in the EEA can be seen in the following table (on the basis of the figures for the year 2000)<sup>40</sup>:

<b>Company</b>	<b>Capacity in '000 to</b>	<b>Market share</b>	<b>Sales in '000 to</b>	<b>Market share</b>
<b>Stora Enso</b>	[...]*	[20-25%]*	[...]*	[20-25%]*
<b>UPM-Kymmene</b>	[...]*	[10-15%]*	[...]*	[10-15%]*
<b>Norske Skog</b>	[...]*	[15-20%]*	[...]*	[10-15%]*
<b>Holmen</b>	[...]*	[10-15%]*	[...]*	[10-15%]*
<b>Haindl</b>	[...]*	[10-15%]*	[...]*	[5-10%]*
<b>UPM-Kymmene/Haindl</b>	[...]*	[25-30%]*	[...]*	[20-25%]*
<b>UPM-Kymmene/Haindl – 4</b>	[...]*	[20-25%]*	[...]*	[20-25%]*
<b>Norske Skog/Haindl – 2</b>	[...]*	[15-20%]*	[...]*	[15-20%]*
<b>Top 4 suppliers post- merger After both transactions</b>		[70-80%]*		[60-70%]*
<b>SCA</b>	[...]*	[5-10%]*	[...]*	[5-10%]*
<b>Myllykoski</b>	[...]*	[<5%]*	[...]*	[<5%]*
<b>Palm</b>	[...]*	[<5%]*	[...]*	[<5%]*
<b>Abitibi/Bridgewater</b>	[...]*	[<5%]*	[...]*	[<5%]*
<b>Matussiere &amp; Forest</b>	[...]*	[<5%]*	[...]*	[<5%]*
<b>Perlen</b>	[...]*	[<5%]*	[...]*	[<5%]*
<b>Other</b>	[...]*	[<5%]*	[...]*	[<5%]*
<b>Imports</b>	-----	-----	[...]*	[5-10%]*
<b>Total</b>	12045	100%	11.720	100%

Table 2: Market shares in the newsprint market; Source is based upon UPM-Kymmene figures and estimates

113. After the first merger, UPM-Kymmene/Haindl would have a market share of [25-30%]\* in terms of capacity and [20-25%]\* in terms of sales. Stora Enso will be a close second with [20-25%]\* and [20-25%]\* respectively. If the second transaction were to

<sup>40</sup> Capacity figures are given for capacities installed in western Europe. About 10% of the production is exported.

go ahead, UPM-Kymmene's market share would be [20-25%]\* and [20-25%]\* respectively, making it number two in the market. Therefore, single firm dominance as a consequence of either the first or both of the proposed transactions can be excluded.

114. The Commission has examined whether the operation may lead to the creation of a collective dominant position by the four companies UPM-Kymmene/Haindl ([20-25%]\*), Stora Enso ([20-25%]\*), Norske Skog ([10-15%]\*) and Holmen ([10-15%]\*), resulting in a four-firm concentration ratio of [60-70%]\* in terms of sales. In terms of capacities the four-firm concentration ratio would be [70-80%]\*. The fringe would include SCA with [5-10%]\*, Myllykoski with [ $<5\%$ ]\* and Palm with [ $<5\%$ ]\* in terms of sales. If also the second transaction were to be closed the market share of the top four players would become [20-25%]\* for UPM-Kymmene/Haindl-4, [20-25%]\* for Stora Enso, [15-20%]\* for Norske Skog/Haindl-2 and [10-15%]\* for Holmen.
115. Increase in concentration. The proposed transaction reduces the number of the leading firms in this industry from 5 to 4. At the EEA level the four firm concentration ratio will increase from about [50-60%]\* to about [60-70%]\* in terms of sales, and from about [60-70%]\* to about [70-80%]\* in terms of capacities. If it is assumed that the independents contribute zero to the Herfindahl-Hirschman-Index (*HHI*), then the *HHI* would have increased from [...] to [...] after the first operation or an increase of [...] points in 2000, to [...] after the second operation ( $\Delta HHI = [\dots]$ ). Both these estimates of the level of the *HHI* are conservative estimates, because none of them include the market share of the smallest. However, the *HHI* would still be below the threshold of 1800 often regarded as a highly concentrated market.
116. Elimination of a competitor. Haindl has been a pioneer in using very high levels of recycled paper in newsprint production. Haindl is perceived by a certain number of customers as a very innovative and customer orientated producer. Its cost structure is somewhat different from the other top suppliers, especially in the newsprint market. [Indeed, Haindl is ...]\*. Low marginal costs increase Haindl's market power. The take-over of Haindl would, therefore, remove a significant independent competitor from the newsprint market.

#### B. Impact of the operation on the market structure of the market for wood-containing magazine paper

117. After the two concentrations, the market shares of the major suppliers of wood-containing magazine paper in the EEA will be as follows (on the basis for the figures for the year 2000)<sup>41</sup>:

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<sup>41</sup> Capacity figures are given for capacities installed in western Europe. About 23% of the production is exported.

Company	Capacity in '000 to	Market share	Sales in '000 to	Market share
UPM-Kymmene	[...]*	[25-30%]*	[...]*	[20-25%]*
Stora Enso	[...]*	[20-25%]*	[...]*	[20-25%]*
M-Real/Mylykoski	[...]*	[10-15%]*	[...]*	[15-20%]*
Haindl	[...]*	[5-10%]*	[...]*	[5-10%]*
UPM-Kymmene/Haindl	[...]*	[35-40%]*	[...]*	[30-35%]*
UPM-Kymmene/Haindl – 4	[...]*	[30-35%]*	[...]*	[25-30%]*
Top 3 suppliers post- merger After the first transaction	[...]*	[70-80%]*	[...]*	[70-80%]*
Top 3 suppliers post- merger After the second transaction	[...]*	[60-70%]*	[...]*	[60-70%]*
Burgo	[...]*	[5-10%]*	[...]*	[5-10%]*
Norske Skog	[...]*	[5-10%]*	[...]*	[5-10%]*
Norske Skog/Haindl – 2	[...]*	[10-15%]*	[...]*	[10-15%]*
SCA	[...]*	[5-10%]*	[...]*	[5-10%]*
Sappi	[...]*	[<5%]*	[...]*	[<5%]*
Other	[...]*	[5-10%]*	[...]*	[<5%]*
Imports	-----	-----	[...]*	[<5%]*
<b>Total</b>	12689	100%	9677	100%

Source: Notifying Parties

118. Increase in concentration and reduction of the number of players. As a result of the first operation, the top three suppliers would have [70-80%]\* of such a market in terms of capacity (UPM-Kymmene [30-35%]\*, Stora Enso [20-25%]\*, M-real/Mylykoski [15-20%]\*) and [70-80%]\* in terms of sales (UPM-Kymmene [30-35%]\*, Stora Enso [20-25%]\*, M-Real/Mylykoski [15-20%]\*). If the second concentration takes place, [5-10%]\* market share would be shifted from UPM-Kymmene to Norske Skog, and the top three suppliers would account for [60-70%]\* of the market in terms of capacity and [60-70%]\* in terms of sales. If it is assumed that the independents contribute zero to the Herfindahl-Hirschman-Index (*HHI*), then the *HHI* would have increased from [...]\* to [...]\* after the first operation or an increase of [...]\* points. The second operation will decrease the *HHI* down to [...] thereby reducing the increase in concentration to [...]\*.
119. Although the transaction increases the concentration in the market it diminishes symmetry between the three top players. After both transactions the symmetry between these market players will decrease. UPM, which prior to the operations has a market share similar to that of Enso Stora, will increase its market share to emerge as the market leader. Moreover, if the second transaction takes place, Norske Skog will become stronger with a market share slightly higher than that of Haindl prior to the operations.
120. It should also be noted that the smallest of the three top suppliers, M-real/Mylykoski, consists of two firms linked by production and sales agreements (see above). Of the total capacity of [...]\* kt attributed to M-real and Mylykoski [...]\* kt belong to production joint ventures between the two companies. It needs to be considered therefore whether both companies would act as one with regard to capacity investment decisions in any form of co-ordination.

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121. Elimination of a competitor. As in the newsprint market, Haindl, in the wood-containing magazine paper market, is perceived by a certain number of customers as a very innovative and customer orientated producer. In the wood-containing magazine paper market, Haindl has been particularly active in the last five years as it accounts for [...%]\* of the total increase in capacity. The take-over of Haindl could, therefore, remove a significant independent competitor from the wood-containing magazine paper market.
122. In light of the above elements it is considered that the proposed operation would lead to changes to the market structure which make it necessary to examine further whether they may lead to the creation of a collective dominant position in the newsprint and wood-containing magazine paper markets respectively.

### C. The characteristics of the markets and their conduciveness to collective dominance

123. The merger will result in a relatively more transparent and less uncertain market, which is reflected in the reduction from respectively five to four top suppliers for the newsprint market, from four to three top suppliers for the wood-containing magazine paper market. When examining market characteristics, the Commission has found some elements that may conduce to collective dominance and some others that do not.
124. In its Statement of Objections, the Commission had considered that market characteristics were conducive to collective dominance. The Commission remains of the opinion that products are sufficiently homogeneous, demand is highly inelastic, buyer power is limited and barriers to entry are high.
125. However, and after carefully considering the parties' reply to the Statement of Objections, the Commission recognises that some elements would not be conducive to the creation of a collective dominant position. In particular, the limited stability of market shares, the lack of transparency on capacity expansion projects prior to a committed announcement and the lack of symmetry in cost structures with regard to the various components point in another direction.
126. For the sake of completeness, it is also appropriate to examine the possible co-ordination mechanisms analysed in the statement of objections, and their sustainability, before reaching a definite conclusion.

### D. Possibility of co-ordination

127. The possibility of parallel behaviour resulting in a co-ordinated outcome will depend on the transparency of investment decisions and the availability of a device that would allow firms to co-ordinate. The Commission, in its Statement of Objections, believed that it had identified two co-ordination mechanisms (one in the short-run and another in the long-run) that would allow top suppliers to restrict unilaterally their levels of capacity in order to obtain or maintain artificially high prices. The same mechanisms were regarded applicable for the two relevant markets: newsprint and wood-containing magazine paper. The following paragraphs will outline these mechanisms and explain

why they were not ultimately considered satisfactory to guarantee that co-ordination would operate in these markets.

*Co-ordination mechanisms identified in the Statement of Objections*

128. As expressed in the Statement of Objections, co-ordination would occur through two mechanisms:

- first, through the co-ordination of investment in new capacities, in order to limit capacity in the market place raising thus the level of average prices in the long-run;
- secondly, through co-ordination of output downtimes to support short-run prices during a slowdown of demand (there is no need to co-ordinate in the short-run in a period of a high level of demand).

129. Co-ordination of investment in new capacities was considered to operate along a process of announcements and counter-announcements. All market players have a series of potential investment projects, that is to say prospective sites where they could build new paper machines. Investment decision-making usually involves a number of parameters, and is ultimately related to return on investment. The Commission argued in its Statement of Objections, that a signalling game, by which the top players would announce their investment projects, was the possible tool to facilitate a co-ordinated outcome. The members of the oligopoly would refrain from investing –or delay their investments- on the basis of the announcements made by other oligopolists (see paragraphs 83 and 84), so that new investments would not damage the common objective, discerned by each of the producers independently, of reaching lower level of capacity in the market, and consequently a higher return on investment (ROI).

130. Co-ordination of output downtimes was considered in the Statement of Objections as an additional mechanism which might sustain tight capacity levels during the periods of the economic cycle when demand is low. During these periods, it is indeed possible that market capacity becomes notably superior to the demand, with the possible consequence of a large price decrease. Co-ordination of downtimes – temporary closure of paper machines - would temporarily reduce supply in the market. Whether through announcements, or through the array of information about down-time available in the market, each of the oligopolists in newsprint and wood-containing magazine paper would determine that they ought to stop their machines instead of producing paper that would run the risk of lowering market prices.

131. In the Statement of Objections, the Commission considered that co-ordinated outcome would be sustained in particular because of the availability of retaliation mechanisms. Regarding co-ordination on investments in new capacities, the retaliation mechanism would lie in the very threat that other oligopolists would engage in an investment race, which would result in over-capacity, in prices collapsing and ultimately in low profitability for the whole industry. Such a threat would be a sufficient deterrent for firms to refrain from deviating. The Commission had also considered whether co-ordination could also be supported by the retaliation mechanism explained in the next paragraph.



132. Regarding co-ordination on downtimes, the retaliation mechanism would lie in the other oligopolist firms targeting the deviator's customers. The oligopolists would offer lowered prices on an individual basis to the customers of the deviator, in order to destroy the profit margins of the latter. This would be feasible because top players would have sufficient information about who the customers of the deviator are and because they would have the spare capacity to increase their deliveries to these customers, for three main reasons: (i) since such a situation would occur in period of low demand, all the oligopolists would have sufficient spare capacity (ii) they could use swing machines<sup>42</sup> to increase production in the desired grade (iii) if this is not sufficient, they could repatriate some of the amounts devoted to exports back to Europe<sup>43</sup>.

*Reply to the Statement of Objections and conclusions of the Commission*

133. In their reply to the Statement of Objections, the parties explored the issues regarding the feasibility and the sustainability of co-ordination either of investments in new capacity or of output down-time. They provided extensive arguments against the possibility for the mechanisms outlined above to result in tacit co-ordination. They essentially argued that co-ordination was not feasible and that it was not sustainable either, both as regards investment in new capacity and downtime. After carefully reviewing their arguments, the Commission concludes that co-ordination on investments would not likely be achieved. However, it finds that co-ordination on downtime might be a possibility in the markets for newsprint and wood-containing paper.

134. Regarding co-ordination on investment in new capacity, the parties expressed the view that this mechanism was not feasible for three main reasons. First, the parties consider that reaching a co-ordinated outcome would be impossible, especially in a tacit manner. The parties mentioned the difficulty in defining investment -since there exist rebuilds and creep-, in forming an investment rotation schedule, and in agreeing on the capacity division between themselves. Secondly, the parties argued that announced investments are irreversible, and consequently that there is no room for a signalling game. Finally, they argued that there is not sufficient transparency in the market before the moment of a committed investment for any tacit agreement to be reached. The parties also developed the argument that co-ordination of investments in new capacity would not be sustainable, for two main reasons: the incentives to cheat and the lack of credible punishment.

135. The Commission, after examining the elements brought forward by the parties, concludes that it is highly improbable that oligopolists would be able to use

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<sup>42</sup> Three of the top suppliers have swing machines (Stora Enso, Haindl and Myllykoski). After the two mergers both UPM-Kymmene and Norske Skog would also have swing machines. Swing machines are paper machines which are able to produce either newsprint or magazine paper (in most cases SC-B). The time needed to implement a swing is limited (from a couple of hours to 1-2 weeks) and costs not great. The advantage is to have more flexibility to shift capacities from one paper grade to another. As mentioned by the parties, the impact of swing machine on existing capacity may be significant. Such swing capacities may provide a possibility for short-run retaliation measures among the top-suppliers.

<sup>43</sup> In the EEA, 10% of newsprint production is exported; more than 20% of wood-containing magazine paper production is exported

announcements to co-ordinate tacitly on investments in new capacity. Because of a lack of transparency, it is unlikely that co-ordination would be achieved nor sustained. First, to achieve co-ordination – that is, to be able to make meaningful announcements, and announcements that would have an impact on the behaviour of other competitors - the Commission considers that the oligopolists would require sufficient transparency in order to judge whether a project would have the required rate of return. Otherwise, announcements would not be taken seriously by the other firms and would not have any impact on their investment decision-making. This does not seem to be the case. Moreover, relatively few announcements are made in Europe and most announcements are carried out, as opposed to the situation in the US. Secondly, to sustain co-ordination, - that is, to prevent any member of the oligopoly from investing too much or too soon - the oligopolists would need to pre-empt any deviation from the tacitly agreed objective. In other words, they would need to be able to detect any potential deviator and to restrain deviation through some credible punishment threat. However, the investigation showed that it is very unlikely that the oligopolists could become aware of an investment project by a firm deviating from the tacit co-ordination objective, before the investment is made irreversible. Without sufficient transparency, this means that any announcement made by the oligopolists would not succeed in putting off unwanted investments. And once investment is committed, any punishment threat would lose its credibility, because it would be too costly to pursue.

136. Regarding co-ordination on down-times, the parties first argued that this mechanism had no impact on prices<sup>44</sup>. They then claimed that it is not possible to either define or detect down-time, because of a lack of transparency. They sustained that down-time may take so many forms that it would not be possible for firms to recognise when to co-ordinate; it would also be very difficult to define an optimal operating rate at a given time. They also said that it is not possible to detect a deviator. Consequently, there would be high incentives for the oligopolists to cheat, as soon as they have an opportunity to do so. Finally, they argued that the punishment of a deviator from an agreement on downtime would be extremely costly and not credible.

137. However, the Commission does not share the view of the parties that parallel strategies involving decisions on downtime are not possible in the newsprint and wood-containing magazine paper markets respectively. First, the Commission does not agree that downtime has no impact on prices. In fact UPM-Kymmene admits it when it says that “downtime may slow the decline of prices in a market of falling demand”<sup>45</sup>. Then, it is difficult to argue that down-time can be hidden from market players, since there is transparency on downtime through various channels. Suppliers normally tell their customers about forthcoming downtime on machines which supply such a particular customer. This has been confirmed by a submission of one of the major competitors. Owing to customers’ multi-sourcing policies, the oligopolists very often deliver to the same clients. Moreover, there are statistics available in the market about stock levels and downtime levels.

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<sup>44</sup> Norske Skog-Lexecon (p.31) stated that “*As far as yearly contracts are concerned, there is no possibility of downtime affecting prices*”

<sup>45</sup> UPM-Kymmene, response to the SO, p. 11

138. Secondly, the Commission considers that the available retaliation tools are credible. When a competitor deviates, the remaining top-suppliers can take aggressive actions without having to change prices for all their remaining customers. This may induce some customers to switch all or part of their demand away from the deviator and to substitute supply from the other top-suppliers, and may drive down the price paid by important customers of the deviator. Moreover, and as explained in the Statement of Objections, in a period of low demand, capacities are available if needed to support retaliation. These capacities may be used to target important customers of a deviator without affecting the whole market. This is credible as the main customers of the top-suppliers are usually well-known by the other ones. This can be seen from the Form CO by UPM-Kymmene where the main customers of the UPM-Kymmene and their corresponding suppliers -other than the UPM-Kymmene- are listed. Moreover, the number of swing machines and their corresponding capacities are not marginal and export sales are not mainly based on long-term contracts. Both can be used as potential sources of capacities and therefore as a credible punishment device. Finally, the parties failed to explain why the CEOs of several major paper producers tell the public in various fora that they are prepared to take downtime if needed to maintain the balance between supply and demand.

139. The Commission concludes that the mechanism identified above for the co-ordination of investments would not sustain the creation of a tacit co-ordination in the markets for newsprint and wood-containing magazine paper respectively. However, it maintains that tacit co-ordination of downtime cannot be excluded as a possible co-ordination mechanism, which could support the creation of a collective dominant position of the top suppliers in newsprint and wood-containing magazine paper. However, as explained in the following paragraphs, any such co-ordination would likely be undermined by the action of fringe players.

*The fringe players' ability to challenge the top-suppliers' anti-competitive behaviour*

140. The Commission argued in the Statement of Objections that the fringe players could have little incentive to challenge the top-suppliers, especially since they would benefit from a higher level of average prices. It also argued that Norske Skog would be reluctant to break the discipline in the wood-containing magazine paper market because of its possible negative repercussion in the newsprint market. Conversely, M-Real/Mylykoski would be reluctant to break the co-ordination in the newsprint market. However, after a careful examination of these various competitors, it appears unlikely that the top suppliers would be in a position of simply disciplining a series of firms that can not reasonably be qualified as fringe players because of their actual market position.

141. First of all, the position of Norske Skog and M-Real/Mylykoski ought to be re-examined in the light of some elements brought forward during the hearing. First, it appears that Norske Skog is itself an example of how a relatively small paper producer can increase its market shares and become a leading world-wide player. This is what this company achieved within 15 years, from being a medium player in Norway to becoming one of the global leaders in newsprint. Such an example contradicts the description given by customers that small paper producers do not have the means to compete in the newsprint or wood-containing magazine paper markets. Moreover, the past history of Norske Skog's aggressive growth questions the proposition that this company would radically change its strategy after the merger and stop investing or

acquiring new business. Secondly, it appears that M-Real/Myllykoski may not operate as a single entity with regard to investment decision-making. These companies provided some documents indicating that they had separate investment policies. If they were to be considered separately, their respective capacity in wood-containing magazine paper would be closer to the one of Burgo and SCA than to the one of top players like UPM-Kymmene. Consequently, the Commission considers that it would not be appropriate not to treat Norske Skog as genuine competitor to the merged entity for the wood-containing magazine paper market, where it is not part of the identified group of oligopolists. Seemingly, it would not be appropriate not to treat M-Real/Myllykoski as genuine competitors to the merged entity for the newsprint market, where they are not part of the identified group of oligopolists. These elements, combined with the limited symmetries of market shares identified in the market characteristics, could limit the incentives for these firms to co-ordinate their behaviour with other oligopolists.

142. In any case, the Commission believes that the remaining fringe players can play an active role in their respective markets and make tacit co-ordination unsustainable. The most important fringe players are SCA, Myllykoski, Palm and Abitibi/Bridgewater in the market for newsprint and Norske Skog, Burgo and SCA in the market for wood-containing magazine paper. These players could break the major players' tacitly co-ordinated behaviour by increasing production when each of the oligopolists, individually perceiving their common interest in doing so, would try to shut down their machines temporarily – the definition of downtime. As can be briefly illustrated, these firms would have the means to take advantage of the tacit co-ordination among top players, to improve their competitive position- and increase their market shares.
143. SCA is a medium-size player with [5-10%]\* of market share in both markets focusing on higher margin markets such as tissue. The Commission argued in the Statement of Objections that it is not committed to newsprint and wood-containing magazine the same way and, because of SCA's links with the top-suppliers that it may have limited incentives to challenge the top-suppliers. However, SCA argued at the hearing that it remained committed to the newsprint markets and was considering new investment. Indeed, SCA has been rumoured to be considering building a new newsprint machine at its Aylesford, UK, mill. Therefore, the Commission recognises that SCA may be able to challenge the top-suppliers' anti-competitive behaviours in particular in the newsprint market.
144. Palm is an active regional player supplying mostly southern Germany. It has invested in a new newsprint machine which came on stream in 1999 expanding its capacity from 150 to [...] kt increasing thus substantially its market position up to [<5%]\* of the newsprint market. In their reply to the Statement of Objections, the parties confirm that such new newsprint machine was unexpected by the industry. Therefore, the Commission considers that it is likely that Palm would be able to challenge the top-suppliers especially at its regional level.
145. Burgo exhibited high costs and therefore was unlikely to effectively challenge any collective dominant position in the recent past. This is indeed confirmed by the declining of its market shares in the last two year from [5-10%]\* to [5-10%]\*. However, in the next two years, Burgo will invest in new machines and indeed would be able to bring substantial new capacities (400 kt) in the wood-containing magazine

market. Investment in new machines would lead to lower marginal costs and raise its ability to challenge the top-suppliers.

146. The Commission thus recognises that several medium players are non negligible in terms of market positions and that their investment policy in new machines has been important in the recent past and may be also substantial in the next years.

147. The fringe players in the two markets would be able to make a parallel strategy of co-ordination on downtime unsustainable. If for instance, the top suppliers in the market for newsprint were to co-ordinate on downtime by curtailing production in times of low demand, the fringe would be able to counter such a move by increasing its production. Looking at historic data the utilisation rates of the fringe players is not significantly different from the industry average. In the past, when demand was at a low, capacity utilisation rates in the industry have been, according to Cepiprint, of 90% or less. Applying this rate for the current installed capacity would mean that at least around 260.000 tonnes of spare capacity would be in the hands of the fringe players in a period of low demand. As explained earlier, the parties' and the Commission's economic experts have estimated the elasticity levels of the two markets to be between 0.1 and 0.3. For an elasticity of demand of 0.1 this tonnage would be sufficient to offset a price increase of 22%. The figures for an elasticity of 0.2 and 0.3 would be 11% and 7% respectively. Therefore, curtailing production by taking downtime would not be a viable strategy in view of the possibilities for the fringe to increase production almost immediately through higher capacity utilisation rates. Moreover, within a year, the fringe would be able to increase production through capacity creep and rebuilds. And over a two year period, some fringe players could have introduced a new paper machine in the market.

148. Therefore, the Commission can conclude that these small and medium players cannot be considered as marginal players. Indeed, they would be able to bring new capacities in the newsprint and in the wood-containing magazine markets as well as to take advantage of an artificially created short term shortage by increasing their production. Therefore, the fringe would be able to challenge the top-suppliers.

## **V. CONCLUSION**

149. In particular in the light of the arguments presented by the parties in response to the Statement of Objections, relating in particular to the degree of concentration of market shares attained, the size and competitiveness of the medium sized players and the problems identified above in relation to possible co-ordination on capacity, the Commission considers that the notified concentrations will not create collective dominant positions in the market for newsprint and wood-containing magazine paper in the EEA.

150. In conclusion, the notified operations will not create or strengthen a dominant position in any market as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it. The operations are, therefore, compatible with the common market and the functioning of the EEA Agreement.

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**HAS ADOPTED THIS DECISION:**

*Article 1*

The concentrations notified by the parties on 20 June 2001 relating to the takeover of Haindl'sche Papierfabriken KGaA by UPM-Kymmene and the subsequent sale of two of the Haindl mills, Parenco and Walsum, to Norske Skogindustrier ASA are compatible with the common market and the functioning of the EEA Agreement.

*Article 2*

This Decision is addressed to:

**The notifying parties**

Done at Brussels, 21.11.2001

For the Commission

Mario MONTI  
Member of the Commission