

## II

(Acts whose publication is not obligatory)

## COMMISSION

## COMMISSION DECISION

of 23 April 1986

relating to a proceeding under Article 85 of the EEC Treaty

(IV/31.149 — Polypropylene)

(Only the German, English, French, Italian and Dutch texts are authentic)

(86/398/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Regulation No 17 of 6 February 1962, first Regulation implementing Articles 85 and 86 of the Treaty <sup>(1)</sup>, as last amended by the Act of Accession of Spain and Portugal, and in particular Article 3 (1) thereof,

Having regard to the Commission Decision of 30 April 1984 to open a proceeding on its own initiative,

Having given the parties concerned the opportunity to make known their views on the objections raised by the Commission, pursuant to Article 19 (1) of Regulation No 17 and Commission Regulation No 99/63/EEC of 25 July 1963 on the hearings provided for in Article 19 (1) and (2) of council Regulation No 17 <sup>(2)</sup>,

After consulting the Advisory Committee on Restrictive Practices and Dominant Positions,

Whereas:

## PART I

## THE FACTS

1. The present Decision arises from investigations made in October 1983 under Article 14 (3) of Council Regulation No 17 with most of the producers of the bulk thermoplastic polypropylene supplying the EEC market. During the investigations the Commission discovered documentary evidence showing that the majority of the suppliers of polypropylene in the EEC had participated on a regular basis since about the end of 1977 in an institutionalized system of meetings between representatives of the producers at both senior and technical managerial levels (the so-called 'bosses' and 'experts' meetings). In these meetings, which came to be held on a twice-monthly basis and

were supplemented by *ad hoc* local meetings for each Member State, the producers developed a system of annual volume control to share out the available market between themselves according to agreed percentage or tonnage targets and regularly set target prices which were implemented in a series of so-called price 'initiatives'. The four major producers, ICI, Hoechst, Montepolimeri and Shell (the last of which did not however attend regular bosses' or experts' meetings) formed an unofficial directorate known as the 'big four', with the perceived task of leading and encouraging the smaller producers in implementing the various schemes.

<sup>(1)</sup> OJ No 13, 21. 2. 1962, p. 204/62.

<sup>(2)</sup> OJ No 127, 20. 8. 1963, p. 2268/63.

## A. The market

## I. The product

2. The product which is the subject of this Decision is polypropylene, one of the principal bulk thermoplastic polymers, invented in 1954. It is derived ultimately from crude oil. Naphtha, the basic raw material for the petrochemical industry, is obtained from oil and then reformed or 'cracked' to produce *inter alia* propylene, the feedstock for polypropylene.

Polypropylene is sold by the producers to processors for conversion into either finished or semi-finished products. A number of producers are vertically integrated into the processing sector. Conversion may be carried out by extrusion, injection moulding or blow moulding according to the particular application.

3. The largest producers of polypropylene have a range of more than a hundred different grades covering a wide range of end uses.

For ease of reference, the major basic grades of polypropylene can be taken to be raffia (or fibre), homopolymer injection moulding, copolymer injection moulding, high impact copolymer and film.

Uses for polypropylene include the manufacture of packaging film and tape, rope, clothing, automotive parts, household goods, and other consumer articles.

Depending upon relative prices, polypropylene can be a substitute for products such as wood, metal, paper, textiles or jute as well as for other plastics like polystyrene or PVC.

In the cheaper grades (such as raffia and fibre) the product is largely homogeneous but in copolymers substitutability as between suppliers may be limited by differentiation in physical or chemical properties as between their products.

## II. The undertakings

4. The undertakings to which the present Decision is addressed are all major petrochemical producers. The majority of them are firms of which the head office and production facilities are located inside the EEC. A small number of other producers involved have their polypropylene marketing headquarters outside the Community, although they supply the EEC market.
5. The undertakings which participated in the infringements were:
  - ANIC SpA Milan, Italy (ANIC),

- ATO Chimie SA, Paris, France (now Atochem) (ATO),
- BASF AG, Ludwigshafen, Germany (BASF),
- DSM NV, Heerlen, Netherlands (DSM),
- Hercules Chemicals NV, Brussels, Belgium (HERCULES),
- Hoechst AG, Frankfurt-am-Main, Germany (HOECHST),
- Chemische Werke Huels, Marl, Germany (HUELS),
- ICI PLC, London, United Kingdom (ICI),
- Chemische Werke LINZ, Linz, Austria (LINZ),
- Montepolimeri SpA, Milan, Italy (now Montedipe) (MONTEPOLIMERI),
- Petrofina SA, Brussels, Belgium (PETROFINA),
- Rhône-Poulenc SA, Paris, France (RHÔNE-POULENC),
- Shell International Chemicals Co. Ltd, London, United Kingdom (SHELL),
- Solvay & CIE, Brussels, Belgium (SOLVAY),
- SAGA Petrokjemi AS & Co. (now part of Statoil), Bamble, Norway (SAGA)

A Statement of objections was addressed to BP Chemicals Ltd, the successor of Rhône-Poulenc, and the Amoco Chemicals Ltd, but these two producers are not the subject of the present Decision.

## III. Development of the polypropylene market

6. The EEC polypropylene market is currently supplied by some sixteen Western European producers, including those located in Spain and Portugal which are not parties to the present proceedings <sup>(1)</sup>. Certain structural changes have occurred in the industry since the date of the last known producers' meeting in late 1983, notably the creation by Montepolimeri and Hercules of a jointly-owned subsidiary known as Himont. SAGA Chemicals AS & Co., the Norwegian producer, was absorbed by the state-owned oil company Statoil at the end of 1983 and now constitutes a profit centre in that producer's business having ceased to exist as a separate legal entity.
7. The west European market for polypropylene is supplied almost exclusively from European-based production facilities. Supplies from the United States,

<sup>(1)</sup> The Spanish and Portuguese producers Alcludia and CNP occasionally participated in meetings but limited their sales to Spain and Portugal which at the relevant time were not EEC Member States.

eastern Europe and Japan are relatively insignificant (between 1 % and 2,5 % per annum over the past five years) although no official quantitative import restrictions are in force.

The total demand for polypropylene (all grades) in western Europe in 1983 was estimated at some 1,6 million tonnes. Exports by the western European producers to 'deep sea' markets accounted for around 350 000 tonnes. Estimated 'nameplate' capacity in western Europe in 1983 was some 2 430 000 tonnes, but 'effective' capability was somewhat less (about 2 100 000 tonnes) <sup>(1)</sup>.

8. The four major producers, Montepolimeri, Hoechst, ICI and Shell together account for around 50 % of the EEC polypropylene market (in 1977 their combined share was 64 %). Montepolimeri owned several plants in Italy and was joint owner with Petrofina of a manufacturing facility in Belgium. Hoechst, the leading German producer, owned production units in France and Spain as well as in Germany. Likewise ICI had a plant not only in the United Kingdom but also in the Netherlands, and the Shell group factories were in the United Kingdom, Netherlands and France.

There is a substantial trade in polypropylene between Member States. Production facilities are located in Belgium, France, Germany, Italy, the Netherlands, Spain, Portugal and the United Kingdom, and each of the then EEC producers supplied the product in most if not all Member States.

Montepolimeri, (part of the Montedison group) the largest producer in the EEC, had around 15 % of the market in 1982. After taking over the business of another Italian producer, ANIC, in 1983, it had around 18 % of the European market.

On 1 October 1983 Montepolimeri formed a joint venture known as Himont with Hercules, the leading producer of polypropylene in the United States, of which Hercules Chemicals SA is the European chemical subsidiary. The new Himont company combines the world-wide production facilities of the two groups, although separate marketing facilities have been maintained in Europe. Montepolimeri is now known as Montedipe following an internal reorganization of the Montedison group.

<sup>(1)</sup> 'Nameplate' capacity is the theoretical annual production of a plant as rated by its designers on the assumption it is fully operated throughout the year and produces one standard product. 'Effective' capacity (usually 85 or 90 % of 'nameplate') reflects the optimal production under ideal conditions of a mix of products.

ICI, Shell and Hoechst are of comparable size and each currently holds a market share in western Europe of around 11 %. Prior to the formation of Himont, Hercules had just under 6 % of the west European market. ATO, BASF, DSM, Huels, LINZ, Solvay and SAGA (now Statoil) each had between 3 and 5 % of the market. The last producer to enter the market, Petrofina, is the smallest producer with under 2 % of the market in 1983 (see Table 1).

9. The largest national market in the EEC for polypropylene is Germany, which in 1982 accounted for some 24 % of western European consumption, followed by Italy (23 %), the United Kingdom (19 %) and France with 16 % (see Table 2).

Since 1970 consumption of polypropylene in western Europe has increased five-fold. During the 1970s, average growth in demand was 15 to 20 % per annum. In the 1980s annual growth in demand slowed somewhat but was still on average 9 %. Sales in 1983 of over 1,6 million tonnes in western Europe represented a 15 % increase over 1982, which itself showed growth of 6 % compared with the previous year.

10. Prior to 1977, the polypropylene market in western Europe (amounting in that year to some 960 000 tonnes) was supplied by ten producers. Besides the four majors, the other producers were ANIC in Italy, Rhone-Poulenc in France, Alcudia in Spain, Huels and BASF in Germany and the Austrian state-owned producer LINZ.

The controlling patents held by Montedison expired in most of Europe in 1976 to 1978.

Seven new producers came on stream in western Europe in 1977: Amoco and Hercules in Belgium, ATO and Solvay in France, SIR in Italy, DSM in the Netherlands and Taqsa in Spain. SAGA, the Norwegian producer, began operations in mid-1978. In addition the established producers, Shell and ICI, built new plants in France and the Netherlands which came on stream during 1978. The Montefina plant in Belgium (jointly owned by Petrofina and Montepolimeri) was commissioned in early 1980. At first Montefina acted as a joint selling company on behalf of both shareholders. Since March 1982 Petrofina has itself marketed its share of the output of this plant, the rest being marketed by Montepolimeri.

Since the date of the Commission's investigations a number of producers have expanded the capacity of their existing polypropylene facilities or constructed new plant.

11. The arrival in 1977/78 of the new producers, with nameplate capacity of some 480 000 tonnes, brought

a substantial increase in installed capacity in western Europe which was not for several years matched by the increase in demand in that market.

According to figures supplied by ICI, polypropylene consumption in western Europe in 1977 was sufficient to occupy only 51 % of effective capacity, although by 1983 domestic western European demand filled 72 % of available capacity. Including production for overseas exports, plant utilization rates were 60 % in 1977 and 90 % in 1983.

The industry opinion, as expressed in documentation obtained by the Commission, is that from 1982 onwards supply and demand were roughly in balance, and indeed even on the figures supplied by ICI the average utilization rate of the European producers in 1983 had risen to 90 % occupancy (including exports).

The western European market balance from 1980 to 1983 was as follows:

(in 1 000 tonnes)

|                                   | 1980      | 1981    | 1982    | 1983     |
|-----------------------------------|-----------|---------|---------|----------|
| Sales in EEC                      | 1 068     | 1 189   | 1 230   | 1 400    |
| Sales in rest of Europe           | 153       | 168     | 182     | 200      |
| Sales to rest of World            | 257       | 300     | 358     | 400      |
| Total western European production | 1 478     | 1 657   | 1 770   | 2 000    |
| Total western European market     | 1 251     | 1 367   | 1 425   | 1 620    |
| Imports                           | 30        | 10      | 13      | 20       |
| Import penetration                | (= 2,4 %) | (0,7 %) | (0,9 %) | (1,25 %) |

Source: FIDES data; internal producer documentation; ICI calculations.

#### IV. Costs and profitability

12. Over the majority of the period covered by the investigation the polypropylene market was reported to be characterized by either low profitability or substantial losses.

Fixed costs are substantial, with the result that profitability depends in large measure on obtaining a high level of plant utilization.

As regards variable costs, the cost of the feedstock propylene is one of the major constituents in polypropylene. According to the producers, the propylene price in DM doubled between 1977 and 1983 (and had gone even higher at times in 1981 and

1982). While polypropylene prices in the same period had moved from 1,00 DM/kg to 2,00 or more DM/kg there were fluctuations in price and periods where the margin between the propylene price and the price of raffia grade polypropylene was squeezed to the point where according to the producers they were failing to cover variable costs.

Thus while raw material (propylene) cost accounted for some 30 to 35 % of the price of raffia grade polypropylene in 1977/78, between 1980 and 1982 this rose to some 55 to 60 % and fell to around 50 % at the end of 1983 (For the higher grades, the percentage is less).

According to estimates made by ICI in August 1982, a 'good average producer' of polypropylene required a mark-up of 1 DM/kg over the propylene price to break even ('factory gate' costs, including all overheads and depreciation). The very low cost producers could break even at a lower mark-up (0,80 DM/kg) while the less efficient producers required somewhat more.

Variations in polypropylene prices have not always followed those of propylene: for example the propylene price dropped substantially at the end of 1982 and tended to remain constant during 1983 while polypropylene prices increased significantly during the second part of 1983.

The producers state that polypropylene prices increased slowly in 1982 but it was not until the end of 1983 that margins had recovered sufficiently for some (but not all) of the producers to move into profit for the first time since 1977.

ICI, BASF, DSM, Hoechst, Huels and Montepolimeri have separately submitted their financial results for the five year period 1979 to 1983 to a firm of auditors which calculates the accumulated losses of the six firms at over DM 1 billion (435 million ECU).

13. In July 1982, following informal approaches to the Commission from certain industry leaders, nine of the largest producers of thermoplastics were invited by the Commission to attend a meeting on the problems of restructuring the plastics industry: eight were producers involved in the present case: ATO; BASF; DSM; ICI; Hoechst; Montepolimeri; Shell and Solvay. The first meeting took place on 14 July 1982 and was attended by the chief executives of the producers and three Members of the Commission. The meeting agreed to set up a working group to produce a report for the Commission (the 'Gatti-Grenier' report) which contained proposals on capacity reduction for the thermoplastics LdPE, HdPE and PVC. This report was submitted at a second meeting between the Commission and several of the undertakings. The main conclusions were that a

'crisis cartel' was not warranted and that unilateral action or bilateral agreements to close surplus plants would meet the problems of the industry. None of the producers considered however that any substantial capacity reduction was required in the polypropylene sector. The Commission has always stressed (see for example the Second Report on Competition policy, points 29 to 31; Eighth Report, point 42; Twelfth Report, points 38 to 41; Thirteenth Report, points 56 to 61) that its approval for any joint measures for solving the problem of structural overcapacity depended on there being no unacceptable restrictions on competition such as price or quota fixing. This reservation has always been made abundantly clear to any producers proposing crisis measures.

#### B. Commission investigations

14. On 13 and 14 October 1983, Commission officials acting pursuant to Article 14 (3) of Regulation No 17 carried out simultaneous investigations without prior warning at the premises of ten of the undertakings to which this Decision is addressed: ATO; BASF; DSM; Hercules; Hoechst; Huels; ICI; Montepolimeri; Shell and Solvay. A visit was also carried out at the premises of BP Chimie in Paris.

Following the investigations, requests for information under Article 11 of Regulation No 17 were addressed to the producers supplying the western European market, including LINZ and SAGA. LINZ contested the Commission's jurisdiction and declined to reply to the request.

Further investigations, this time under Article 14 (2), were made to the selling agents of LINZ in Germany and the United Kingdom, to ANIC in Italy and to the United Kingdom subsidiary of SAGA Petrokjemii.

#### C. Evidence

15. The main evidence on which the present Decision is based includes:

- (a) Detailed reports (normally headed 'personal — no copy to file') made by employees of ICI of a considerable number of meetings, (mainly from mid-1982 onwards, but including also some notes of earlier meetings in 1979 and 1981) with in certain cases detailed tables of the agreed 'target' prices for each major grade and in each European currency;
- (b) Reports made by an employee of Hercules which relate to two of the meetings for which ICI reports were also discovered (10 March 1982; 13 May 1982);

- (c) Internal ICI memoranda made by the employees who attended the meetings, dealing with matters which had been, or were to be, discussed in meetings, as well as assessments of the progress of the arrangements and the attitude of the other participants;
- (d) Internal accounting documents, travel orders, etc. which establish or confirm the presence of representatives of the different producers at most or all of the meetings known to have taken place particularly during 1982 and 1983. (It is significant that in the travel orders the real purpose of the visit was concealed, being described usually as a 'visit to customers');
- (e) Notes made by ICI of meetings between its representatives and those of Shell, Montepolimeri and (on occasion), Hoechst (the 'big four');
- (f) Documents found at ICI and Hercules — including some emanating from Italian or German producers — setting out full details of the European quota schemes from 1979 onwards;
- (g) Extensive planning documents made by ICI for the purposes of a new European quota system for 1983 together with notes made by ICI of the proposals of each of the producers and in some cases documents originating from such producers themselves — BASF, SAGA and Solvay — containing their own detailed proposals;
- (h) Documents obtained at ATO relating to the exchange of information on deliveries by the French producers in the EEC and the operation of quotas on the French market in 1979, as well as details of the European quota plan for 1980;
- (i) Documents found at ICI and at SAGA Petrochemicals (UK) Ltd (now Statoil (UK) Ltd) relating to local meetings in the United Kingdom where target prices were set;
- (j) Internal documentation from a number of producers containing references to 'target prices' and 'price initiatives' which correspond with those known to have been agreed in producers' meetings;
- (k) Pricing instructions from the head offices of the various producers to their various national sales offices requiring or requesting them to apply or move towards price levels which correspond with those shown to have been agreed in the relevant producer meetings;

- (1) Replies of the producers to requests for information under Article 11 of Regulation No 17 in which they all admit attending a large number of meetings of the bosses and experts and in many cases 'local' meetings;

The documentary evidence obtained by the Commission in the exercise of its powers under Regulation No 17 is summarized in points 16 to 67.

#### I. The original 'Floor Price Agreement'

16. During 1977, after seven new polypropylene producers came on stream in western Europe, the established producers initiated discussions with a view to avoiding a substantial drop in price levels and attendant losses.

As part of these discussions the major producers, Montepolimeri (then Montedison), Hoechst, ICI and Shell, initiated a 'floor price agreement' which was to be in operation by 1 August 1977. The original arrangement did not involve a volume control but if it proved successful, tonnage restrictions were envisaged for 1978. The floor price agreement was to run for an initial four months. Details of this floor price agreement were communicated to other producers including Hercules.

The 'floor prices' (as noted by the Marketing Director of Hercules) for the major grades for each Member State were based on a raffia grade market price of DM 1,25/kg.

The participants in the agreement were named as the four majors but provision was also made in the scheme for unnamed 'importers' to apply somewhat lower prices.

ICI and Shell admit that there were contacts with other producers as to how the price slide could be checked. According to ICI a price level may have been suggested below which prices should not be permitted to fall. It is confirmed by ICI and Shell that discussions were not limited to the 'big four'. A document dated 6 September 1977 found at Solvay shows that a meeting took place on 30 August 1977 between that company and Shell SA, the Shell Belgian company, in order to discuss the price of polypropylene. Hercules was also at least very well informed of the outcome of the price discussions. The identity of other producers involved in discussions at this time could not however be established.

Precise details of the operation of the floor price agreement could not be ascertained. However by November 1977 when the raffia price was reported as

having fallen to around 1,00 DM/kg, Montedison announced an increase to 1,30 DM/kg due to take effect on 1 December and on 25 November the trade press quoted the other three majors as expressing their support for the move with similar increases planned from the same date or later in December.

17. It was at about this time that the system of regular meetings of the polypropylene producers began. ICI claims that meetings were not held until December 1977 (i.e. after the Montedison announcement) but admitted that contact was occurring between producers before that date probably by telephone and on an *ad hoc* basis.

Shell says that its executives 'may have had discussions concerning price with Montepolimeri in or about November 1977 and Montepolimeri may have suggested the possibility of increasing prices and may have sought (Shell's) views on its reactions to any increase' (reply of Shell to Statement of Objections).

While there is no direct evidence of any group meetings being held to fix prices before December 1977, the producers were already informing meetings of a trade association of customers (EATP: European Association for Textile Polyolefins) held in May and November of 1977, of the perceived need for common action to be taken to improve price levels. Hercules in May 1977 had stressed that the 'traditional industry leaders' should take the initiative while Hoechst had indicated its belief that prices needed to rise by 30 to 40 % (source: EATP minutes).

The Montedison initiative (aiming at a price of 1,30 DM/kg from 1 December) was announced in the trade press only a few days before the EATP meeting of 22 November 1977, in which Hercules, Hoechst, ICI, LINZ, Rhône-Poulenc, SAGA and Solvay — which attended as 'associate members' — all stated that they would be 'supporting' the move. Their speeches as recorded in the minutes show that the 1,30 DM/kg level set by Montedison had been accepted by the other producers as a general industry 'target'.

Despite some discounting this price initiative was effective and by April 1978 European polypropylene prices were reported as having increased by 25 to 30 % since November 1977.

#### II. The system of regular meetings

18. During 1978 at least six meetings were held between senior managers responsible for the overall direction

of the polypropylene business of some of the producers. This system soon evolved to include a lower tier of meetings attended by managers possessing more detailed marketing knowledge (reply of ICI to request for information under Article 11 of Regulation No 17). By the beginning of 1981, separate sessions were being held each month of bosses (the senior managers or directors) and of experts (the marketing specialists).

Each month the dates and venue of the next bosses' and experts' sessions were agreed and one of the producers was named to organize the arrangements. A list of known meetings is shown in Table 3.

The regular participants at these meetings were ANIC, ATO, BASF, DSM, Huels, Hoechst, ICI, LINZ, Montepolimeri, Petrofina, Rhône-Poulenc, SAGA and Solvay (source: their replies under Article 11 of Regulation No 17 and references in meeting reports). Before mid-1982 Hercules claims to have attended only irregularly but from May of that year admits taking part in meetings more frequently than before.

Although all producers were requested under Article 11 of Regulation No 17 to provide a list of the meetings each had attended since 1979, the majority only provided details from mid-1982 onwards, i.e. for the period during which the travel records already in the Commission's possession demonstrated their presence at individual meetings. With the exception of Huels however, the producers named admitted participating in meetings from an earlier date. Details of individual attendance at meetings since May 1982 are shown in Table 4.

19. Rhône-Poulenc transferred its polypropylene interests to BP at the end of 1980 and ceased to attend meetings. Likewise ANIC did not attend after about the middle or end of 1982, its interests being taken over by Montepolimeri under an arrangement finalized in March 1983. The Commission accepts that both BP and Amoco, a subsidiary of a United States oil producer, did not attend meetings, but there was some communication between these two producers and the others on matters such as price initiatives and quotas which had been discussed in meetings.

Until August 1982, the bosses' and experts' sessions were chaired by a representative of Montepolimeri. In mid-1982 it was decided that ICI would take over the presidency, a responsibility which it accepted on condition that more determined efforts were made by the producers to increase prices before the end of the year (see point 58).

Shell did not attend plenary sessions, but on occasions it met the other major producers in *ad hoc* meetings to discuss particular problems connected with pricing and/or volume limitation and from late 1982 onwards was a regular participant in 'big four' meetings held the day before the normal bosses' meetings (replies of Shell and ICI under Article 11).

A list of known 'big four' meetings is shown in Table 5.

20. The bosses' and experts' meetings were complemented by frequent meetings to discuss implementation on a national level of arrangements agreed in the full sessions: these are known to have been held for Belgium, the Netherlands, France, the United Kingdom, Italy and Scandinavia (source: replies under Article 11; meeting reports). There is no record of a local meeting for Germany, but the three German producers BASF, Hoechst and Huels had close contacts between themselves and adopted a common position in some matters such as quotas (see point 59).

ATO, DSM, Hercules, Huels, Hoechst, ICI, Montepolimeri, Petrofina, Shell, Solvay and SAGA all admit attending local meetings or are shown from reports of such meetings to have been present.

A list of known local meetings is set out in Table 6.

### III. *The purpose of the meetings*

21. The purposes of the meetings (source: ICI reply under Article 11; meeting reports) were as follows:
  - (a) The setting of the price levels which the producers would seek to achieve during some future period ('target prices'), by means of a concerted price 'initiative', sometimes lasting over a period of several months and consisting of several separate 'step' increases;
  - (b) The agreement of a table or list of target prices for each principal grade in the relevant currency, not only for each local market in the EEC but also for other countries in western Europe;
  - (c) The agreement and/or recommendation of measures to be taken by the producers with a view to ensuring the implementation of any planned



price initiative, such as the timing of proposed increases and the announcement thereof to customers, the restriction of production or sales, the control of stocks or diversion of supplies to overseas markets and other measures intended to secure a favourable climate for price increases;

- (d) A review of the price levels generally being obtained in the EEC or in a particular national market, the degree of success of a particular price initiative, and the prospects for further price increases;
- (e) The reporting by each producer of the respective tonnages which it had contracted to supply in the following month at or below the agreed 'target' prices (from about mid-1982);
- (f) The negotiation of an agreement on an annual basis of sales 'targets' or 'quotas' for each producer having regard to expected total market demand and to the aspirations and the past performance of each producer;
- (g) The monitoring of the achieved market shares of each producer against the 'target' volume on both a monthly and an annual basis, and for those periods where no definitive annual quota agreement had been agreed, the monitoring of 'achieved' sales against those of some previous reference period;
- (h) Deciding on possible approaches to the few producers who did not attend meetings (BP and Amoco) in order to ascertain their views or obtain their cooperation on specific matters connected with price 'initiatives';
- (i) In local meetings in particular, the discussion of pricing 'anomalies' and the giving of explanations by any producers considered by the others to have committed pricing 'transgressions' (i.e. undercutting the agreed prices).

#### IV. Target prices

- 22. One of the main tasks of the meetings of producers which began at the end of 1977 was to set so-called 'target prices' for each principal grade of polypropylene.

For ease of reference, the agreed targets were usually referred to in terms of the raffia grade price in DM for Germany (West German prices tend to determine the general European level). It was however the practice

to draw up a detailed table of targets in each national currency for several grades — raffia, fine fibre, homopolymer injection moulding, copolymer, battery grade and film grade. Examples of such tables were attached to the ICI reports of meetings of January 1981, 13 May 1982 and 2 September 1982, as well as the Hercules report of a meeting of 10 March 1982.

- 23. A date was set when such a target price was to be implemented. Sometimes the modalities of the 'price initiative' by which the target level was to be established by concerted action were already planned several months in advance. Target prices might be implemented in several separate stages over the period of the price initiative (for example, 1,50 DM/kg one month, 1,75 the next, and 2,00 in the third). Price initiatives were sometimes postponed or were implemented in part in one month so as to create the climate for a determined effort the next month ('going firm'). Exceptions for a particular country might also be agreed to take account of local market conditions, price controls, exchange rate fluctuations and other factors.

With the aim of implementing the agreed price initiative, various forms of concerted action were devised by the producers (see point 27). The objective was to effect an increase in one or more decisive 'steps' rather than by a general upward drift.

Achieved prices tended however to lag behind the targets (see points 73 and 74) and different areas of 'weakness' might be identified in respect of either a particular national market or a particular product where the plan had to be modified or implementation delayed.

The producers monitored the progress of each price initiative and in meetings exchanged information on the steps they had taken and on how price levels were developing in each market (source: reply of ICI under Article 11; meeting reports).

#### V. Price initiatives: general

- 24. Price 'initiatives', once agreed, had to be translated into concerted action in the market place to implement the price rise. (In this connection it should be noted that almost all the producers argued during the administrative procedure in this case that there was no 'conduct in the market place' since the giving of price instructions was a transaction purely internal to each undertaking.)



The specialist trade press regularly reported each price initiative in advance, giving an indication of the new 'target' prices (usually in DM) and the intentions of the producers regarding possible further increases.

These initiatives were not specifically stated to be the result of systematic agreement, generally being reported as a 'price push' or a 'price offensive' by the producers to take price levels to a particular target.

From the time producers had begun to set target prices in meetings, one or other of the major producers was frequently reported in the trade press as 'leading' a price initiative to move to a particular target price while the others were said to be 'supporting' the increase. An ICI note of a meeting as late as 20 May 1983 recorded that a particular price increase was to be led 'publicly' by Shell and shortly thereafter a report to this effect appeared in the relevant publication.

Whatever the dangers of such reports, documentation found at ICI indicates that announcements were seen as a useful way of preparing the market for a price rise and of indicating to customers that it would be 'supported' by all the producers.

25. Besides reports in the specialist press of proposed price initiatives, the ground was prepared for the implementation of new targets by the producers themselves sometimes warning their customers well in advance of impending increases. In this way the customers were prepared for the increases when they were formally announced. Sales offices were sometimes warned not to give a commitment to a customer to supply at the new price beyond a certain date so as to facilitate further increases. On occasions, during an initiative involving a rise in several steps, a producer might instruct sales offices to delay quoting the new prices until the last moment in order to get the maximum benefit from the increasing price 'momentum'.

The head offices sometimes also told their sales force to adopt a 'hard line' towards customers and suggested arguments designed to overcome possible customer resistance and persuade the customers to accept a proposed increase.

On other occasions, when it was considered necessary or appropriate to make some concessions to individual customers to persuade them to accept a price rise, the sales offices were allowed a margin of flexibility in their negotiations but generally had to clear in advance with head office any special arrangement with large customers.

Price changes were usually notified officially to customers in circular letters sent out by the national sales offices. These sometimes took the form of a brief announcement to the effect that as from a particular date the price would be increased by a particular amount. On other occasions, explanations were given for the price rise. Price lists if drawn up were apparently kept for internal use only.

26. The Commission has obtained from each of the producers instructions given by the head office to the different national sales offices over the last few years. These sets of price instructions are not complete, particularly before 1982, and for some producers cover only a few of the known price initiatives. The general pattern which is demonstrated however is that shortly after meetings in which particular 'targets' were set for each major grade and in each major currency, each producer gave instructions to its national sales subsidiaries or selling agents to apply those target prices.

If a particular price initiative was to be sustained, conditions favourable to an increase had to be created and various measures to assist the implementation of a planned initiative were recommended or agreed from time to time in meetings.

27. Measures intended to assist in the achievement of target levels which were agreed in meetings at various times included:
- instructing sales offices to forgo volume rather than concede on price,
  - a cutback of sales by each producer to the levels prevailing in some previous reference period: thus in late 1979 the scheme agreed was for each producer to restrict its monthly sales over the last quarter of the year to one twelfth of 80 % of the tonnage sold in a previous year,
  - the diversion of supplies as far as possible to deep sea markets so as to create a shortage in western Europe conducive to a price increase,
  - the exchange of information on planned temporary plant closures which might be helpful in reducing overall supply,
  - the quoting by producers other than the regular suppliers of a particular customer, if approached, of prices somewhat higher than the target, so as to avoid the danger of 'customer tourism' (the

customer going to a new supplier in the hope of obtaining a more favourable price than the one quoted by the traditional supplier),

- informing the few producers which did not attend meetings of the outcome of a meeting in the hope of persuading them to align their prices more closely on those of the 'club' or otherwise attempting to enlist their support for a price initiative,
- from about September 1982, a system known as 'account management' or in a later more refined form 'account leadership' (by 'account' is meant 'customer') to ensure the effective implementation of an agreed rise by nominating one supplier to coordinate (secretly) their dealings with a particular customer.

The system, which was suggested by the Hercules representative, requires some explanation. 'Key' customers were identified in Belgium, Italy, Germany and the United Kingdom and a 'coordinator' nominated for each one. In December 1982 a more general adoption of the system was proposed, with an account leader named for each major customer who would 'guide, discuss and organize price moves'. Other producers which had regular dealings with the customer were known as 'contenders' and would cooperate with the account leader in quoting prices to the customer in question. To 'protect' the account leader and contenders, any other producers approached by the customer were to quote prices higher than the desired target. These producers were called 'non-contenders'.

All the producers which participated in meetings at this time (including Shell) were named as coordinators or leaders for at least one major customer. ICI claims that the scheme collapsed after only a few months of partial and ineffective operation. However, a full note of the experts' meeting held on 3 May 1983 shows that at that time detailed discussions took place on individual customers, the prices offered or to be offered to them by each producer, and the volumes supplied or on order.

#### VI. Individual price initiatives

28. The system of price targets and initiatives was in force from late 1977 onwards (ICI says that 'the concept of recommending "target prices" was developed during the early meetings which took place in 1978', but the documentary evidence shows that concertation between the producers on price had already begun during the previous year). Documentation relating to the detailed implementation by each producer of these arrangements in the earlier years is not available, but the Commission has been able from the documentary

evidence to identify at least six price initiatives (some covering several months each) since late 1979 for which the internal price instructions of most producers were also available, namely:

| <i>Period</i>              | <i>Targets for raffia grade (DM/kg)</i>   |
|----------------------------|---|
| July — December 1979:      | 1 July: 1,90, 1 September: 2,05;  |
| January — May 1981:        | 1 January: 1,50, 1 February: 1,75, 1 March: 2,00, 1 May: 2,15;                                |
| August — December 1981:    | 1 August: 2,00, 1 September: 2,20 (postponed to October), 1 December: 2,30 (revised to 2,15); |
| June — July 1982:          | 1 June: 2,00;   |
| September — November 1982: | 1 September: 2,00, 1 October: 2,10 (postponed to 1 October and 1 November);                   |
| July — November 1983:      | 1 July: 1,85, 1 September: 2,00, 1 October: 2,10, 1 November: 2,25.                           |

The six identified price initiatives are described in points 29 to 51 (see also Table 7).

#### (a) July to December 1979

29. During 1979 the price of propylene increased substantially. The price for polypropylene went up in line with the feedstock price increase. The trade press reported 'concerted attempts' by the producers to keep abreast of the escalating propylene price. By mid-1979 the price for raffia grade was about 1,65 DM/kg.

No detailed evidence is available of any meetings held or price initiatives undertaken in the first part of 1979. However, a note of a meeting held on 26 and 27 September 1979 shows that a price initiative had been planned based on a raffia grade price of 1,90 DM/kg applicable from 1 July and 2,05 DM/kg from 1 September. This is confirmed by the minutes of a Shell internal meeting held on 5 July 1979: 'The price target for 1 July 1979 was DM 1,90 per kg but this level was not being achieved particularly in France or Germany.'

30. Montedison (Montepolimeri) was reported in the trade press as planning to increase prices to the 2,05 DM/kg level on 1 September with Shell and ICI supporting the move. Price instructions to the sales

offices from these last two producers as well as ATO, BASF, Hoechst and LINZ were obtained and show that they had given orders to national sales offices to apply this price level or its equivalent in national currencies from 1 September. These instructions were almost all given before the announcement in the trade press of Montedison's planned price increase (no price instructions were available from the other producers).

31. By the end of September 1979 the raffia price had reached 1,70 to 1,75 DM/kg, somewhat short of the target. The minutes of a Shell polypropylene business group meeting held on 12 September 1979 records that: 'The Chairman noted that the price target for September of 2,05 DM/kg had not been achieved and this was particularly damaging to Shell in view of our high level of overheads . . . it was difficult to get further price increases without the push which would be provided by monomer price increases particularly when some competitors were profitable at the current selling price levels.'

The date for implementing the 2,05 DM/kg target was therefore postponed by several months until 1 December, the new plan being to 'hold' the then levels over October with the possibility of an intermediate step increase to (1,90 or 1,95 DM/kg) in November (source: ICI note of meeting of 26 September 1979).

ICI's note of the meeting in which the 2,05 DM/kg target was postponed states that it was 'recognized that a tight quota system (was) essential' and refers to a scheme which had been proposed or agreed in Zurich to limit monthly sales to 80 % of the average achieved during the first eight months of the year.

By the end of 1979 the general level of prices had reached 2,00 DM/kg for raffia grade, close to the agreed target of 2,05 DM/kg.

#### (b) January to May 1981

32. Meeting notes were not obtained for 1980 but at least seven producers' meetings were held in that year (see: Table 3).

Although at the beginning of the year producers were reported in the trade press as favouring a strong price push during 1980, a substantial fall occurred in market prices to a level of 1,20 DM/kg or less before they began to stabilize in about September of that year.

Price instructions issued by a number of producers — DSM, Hoechst, LINZ, Montepolimeri and SAGA

besides ICI — indicate that, in order to re-establish price levels, targets were set for December 1980 — January 1981 based on raffia at 1,50 DM/kg, homopolymer at 1,70 DM/kg and copolymer 1,95 to 2,00 DM/kg. A Solvay internal document includes a table comparing 'achieved prices' for October and November 1980 with what are referred to as 'list prices' for January 1981 of DM 1,50/1,70/2,00. The original plan was to apply these levels from 1 December 1980 (a meeting was held in Zurich on 13 to 15 October) but this initiative was postponed until 1 January 1981.

33. During December 1980 new targets were fixed for implementation on 1 February 1981 based on raffia 1,75 DM/kg, homopolymer 1,85 DM/kg, and copolymer 2,00 DM/kg. In two meetings in January 1981 (by now the bosses and experts each met once a month) it was decided that a two-stage increase was required: the 1 February target remained at 1,75 DM/kg and a target of 2,00 DM/kg was to be introduced 'without exception' from 1 March.

A table was drawn up in six national currencies of the target prices for six principal grades due to come into effect on 1 February and 1 March 1981. This table was attached to ICI's report of the meeting.

The bosses' and experts' meetings held in January 1981 were well attended. ANIC, ATO, DSM, Hoechst, ICI, Montepolimeri, Petrofina and Solvay took part in both sessions, while BASF, Huels, LINZ and SAGA were only at one of the two. It is not known whether Hercules was at either January 1981 session but it was present at the preceding meeting on 16 December 1980.

Documentation obtained from BASF, DSM, Hoechst, ICI, LINZ, Montepolimeri (February only), Shell and SAGA shows that these producers took steps to introduce the targets set for February and March.

34. The plan to move to 2,00 DM/kg on 1 March does not however appear to have succeeded. The producers modified their expectations and now hoped to reach the 1,75 DM/kg level by March.

An experts' meeting was held in Amsterdam on 25 March 1981. No records survives but immediately afterwards at least BASF, DSM, ICI, Montepolimeri and Shell gave instructions to raise target (or 'list')

prices to the equivalent of 2,15 DM/kg for raffia, 2,25 DM/kg for homopolymer, and 2,35 DM/kg for copolymer, effective on 1 May. Hoechst gave identical instructions for 1 May but was some four weeks behind the others in doing so. (No documentation was available for the other producers for this period). Some of the producers allowed their sales offices flexibility to apply 'minimum' or 'rock bottom' prices somewhat below the agreed targets.

During the first part of 1981 there was a strong upward movement in prices but despite the fact that the 1 May increase was strongly promoted by the producers momentum was not maintained. By mid year the producers anticipated either a stabilizing of price levels or even some downward movement as demand fell during the summer.

(c) August to December 1981

35. A further price initiative in September/October 1981 had already been foreseen by Shell and ICI in June of that year when the slowing down of the first quarter price rise had become apparent. Shell, ICI and Montepolimeri met on 15 June 1981 to discuss methods of implementing higher prices in the market (see post, point 67). Within a few days of this meeting both ICI and Shell instructed their sales offices to prepare the market place for a major rise in September based on a plan to move the raffia price to 2,30 DM/kg. Solvay also reminded its Benelux sales office on 17 July 1981 to warn customers of a substantial price increase due to take effect on 1 September, the exact amount of which was to be decided in the last week of July. (In this connection it is significant that an experts' meeting was planned for 28 July 1981.)

The original plan to go for 2,30 DM/kg in September 1981 was revised (probably at this meeting), with the planned level for August back to 2,00 DM/kg for raffia, 2,25 DM/kg for homopolymer and 2,40 DM/kg for copolymer. September prices were to be 2,20/2,40/2,55 DM/kg respectively. A handwritten note obtained at Hercules and dated 29 July 1981 (the day after the meeting, which Hercules probably did not attend) lists these prices as the 'official' prices for August and September and refers in cryptic terms to the source of the information.

More meetings were held in Geneva on 4 August and in Vienna on 21 August. Following these sessions, new instructions were given by producers to go for prices of 2,30/2,40/2,55 DM/kg on 1 October. BASF, DSM, Hoechst, ICI, Montepolimeri and Shell gave virtually identical price instructions to implement these prices in September and October.

36. The plan now was to move during September and October 1981 to a 'base price' level of 2,20 to 2,30 DM/kg for raffia. A Shell document indicates that originally a further step increase to 2,50 DM/kg on 1 November had been mooted but was abandoned.

Reports from the various producers show that during September prices increased and the initiative continued into October 1981 reaching achieved market prices of some 2,00 to 2,10 DM/kg for raffia. A Hercules note shows that during December 1981 the target of 2,30 DM/kg was revised downwards to a more realistic 2,15 DM/kg, but reports that 'general determination got prices up to DM 2,05, the closest ever to published (sic) target prices' <sup>(1)</sup>.

By the end of 1981, the trade press were reporting polypropylene market prices as raffia 1,95 to 2,10 DM/kg, homopolymer 2,10 to 2,20 DM/kg and copolymer 2,40, some 20 pfennig below the producers' targets. Capacity utilization was said to be running at a 'healthy' 80 %.

(d) June to July 1982

37. Although it had been expected that as supply and demand moved into better balance prices would increase further at the beginning of 1982, in fact by May the raffia market price had dropped again to 1,80 DM/kg.

In the experts' meeting held in Geneva on 13 May and attended by Hercules as well as all the 'regulars' — ATO, BASF, DSM, Hoechst, Huels, ICI, LINZ, Montepolimeri, Petrofina, SAGA and Solvay — it was agreed after a detailed review of the performance of each producer that a 'very good' opportunity existed for bringing in a price increase before the holiday period.

It was at this meeting that a suggestion from Solvay that future meetings were unnecessary since demand was now in line with production was rejected by the others on the ground that 'active steps' should be taken to move prices up rather than leaving the market to find its own level (source: ICI meeting report, confirmed by Hercules account of same meeting).

<sup>(1)</sup> Apparently no price lists as such were published or given to customers but in their internal documentation the producers frequently use the terms 'list' or 'target' prices interchangeably.

38. It was accordingly agreed to move to levels based on 2,00 DM/kg for raffia, from 1 June for most national markets but from 14 June for the United Kingdom. An expression of 'personal commitment' to the initiative was sought from the participants and was to be confirmed by the senior managers in the next bosses' session.

Various actions to support the move were foreseen including the limitation of sales volumes to an agreed proportion of usual sales, a resolve not to accept new business and an increase in bilateral contact between producers.

39. A detailed table of targets for 1 June was attached to the ICI report of the meeting showing new targets for each major grade in the various national currencies (raffia was to be DM 2,00/Bfrs 36/FF 5,00/Lit 1 100 per kilogram and £490 per tonne).

Internal price instructions or memoranda from ATO, BASF, Hoechst, Hercules, Huels, ICI, LINZ, Montepolimeri and Shell, mostly dated within a few days of the experts' meeting of 13 May 1982, show that these producers all took steps to implement the planned 1 June initiative. With a few insignificant exceptions their price instructions correspond exactly with those set out in the table of target prices discovered at ICI.

Price instructions for June were not available for DSM, Petrofina, Solvay or SAGA, but a DSM sales report refers to price increases being planned for June which it was hoped would prove successful.

When the experts' met in June however they could report only modest price increases. In Germany price increases had been announced but some producers were not 'holding out' when pressed by customers. The United Kingdom target of £490 per tonne had been based on the achievement not only of the 2,00 DM/kg target in other countries but also a further 10 pfennig and the apparent lack of progress had led to doubts about achieving the full increase in one step. In countries where difficulties were foreseen local meetings were scheduled (source: ICI report of meeting).

(e) September to November 1982

40. The 1 June 'price initiative' did not succeed in moving prices up to the planned level and in a joint bosses'/experts' session of 20 to 21 July 1982 a

two-stage increase was agreed to take the price to 2,00 DM/kg on 1 September and 2,10 DM/kg on 1 October.

This session was attended by ATO, BASF, DSM, Hercules, Hoechst, Huels, ICI, LINZ, Montepolimeri, Petrofina, Solvay and SAGA.

ICI took over the chairmanship of the meetings from Montepolimeri in August 1982. The change provided the occasion for obtaining from producers further expressions of 'commitment' to a significant increase of prices by the end of the year and the agreement of a quota control system to be ready for use by the beginning of 1983.

A senior director from ICI's Petrochemicals and Plastics Division met each of the other producers in a series of visits. A briefing note headed 'Object of visits', found at ICI, begins:

'Get maximum pressure on 1 September:

- Are they really behind it?
- Do they mean the 1,90/2,00 DM?
- Do they mean flexibility below that of 1 to 2 pfennigs in home market? Which? in non-home markets
- ...
- Will they announce in the press and to customers? When and where?
- Are they committed to local meetings?
- How long will they wait? Days? Weeks? for it to take place? Will they balance production and sale?
- Would they restrict volume in any event?
- Who (sic) do they see as problem companies?
- Does he have the real control?

41. The original plan to move to 2,00 DM/kg from 1 September was modified in a bosses' meeting of 20 August 1982. There was to be an immediate increase of 10 pfennig to all new orders for September and the 2,00 DM/kg minimum was to be in force one month later, that is on 1 October. At the same time producers were urged to restrict their monthly sales to the equivalent of their achieved market share in the first six months of 1982.

From the notes of the next experts' meeting held on 2 September 1982 (again with a full attendance) it

appears that the personal commitment given by the bosses was confirmed and the 'ground rules' restated. Producers were to be prepared to lose business rather than break the price but some time had to be allowed for the planned increase to be translated into actual market prices.

42. In this meeting the BASF representative warned of the danger of all the producers quoting a 'solid' DM 2,00 and it was generally agreed that if approached, producers other than the major suppliers to a particular customer would quote above DM 2,00 so as to assist the implementation of the target.

Again a detailed table showing the minimum prices for each grade and currency to be applied from 1 October was prepared.

It was at this meeting that the 'account leadership' scheme was devised to ensure the implementation of 'target prices' by coordinating price quotations to individual customers (see point 27).

At about this time the practice was also developed of each producer notifying to the meeting the tonnage of orders which it had accepted for forward delivery (1) at the target price and (2) below the target price respectively.

43. After the declarations of 'commitment' in the meetings of 20 August and 2 September, the producers gave instructions to their sales offices to implement price levels based on raffia at 2,00 DM/kg from 1 October (documentation was found in respect of ATO, DSM, Hercules, Hoechst, Huels, ICI, LINZ, Montepolimeri and Shell). Reflecting the reported expressions of personal commitment, many of these instructions underline in emphatic terms the need to take a firm or rigid line with customers and to forgo a sale if necessary to raise the price.
44. In the next bosses' meeting on 21 September 1982 (again attended by all the 'regulars', including Hercules) the producers reported on the steps which each had taken to implement the increase to DM 2,00 due for 1 October. They had in general given strict instructions to sales offices not to depart from the plan. General support was also expressed in this meeting for a second step to 2,10 DM/kg on 1 November, to become 'firm' in December (this 10 pfennig increase was confirmed in an experts' meeting on 6 October).

The producers also took steps to implement the further 10 pfennig per kilogram increase due during November (documentation was found in respect of BASF, DSM, Hercules, Hoechst, Huels, ICI, LINZ, Montepolimeri, Shell and SAGA). Their instructions to this effect followed soon after the experts' meeting of 6 October where the move had been confirmed. A telex sent by SAGA on 14 October 1982 to its United Kingdom subsidiary refers in connection with a planned local meeting to the 'relevant so-called agreed minimum list'.

Contrary to the claims made by the producers during the administrative procedure that target prices were never reached, the figures reported to the meeting concerning forward commitments at or above 'targets' on the one hand and below target level on the other show that for October and November the vast majority of orders had been booked at or above target price. This is confirmed by an ICI circular of 8 October 1982 to the European sales offices summarizing the first impressions of the 1 October price initiative: 'Despite some evidence of September commitments hanging over into October the total quantity appears to be low and all indications that we have received show that the new levels are being applied to all new orders . . . '.

45. ATO, BASF, DSM, Hercules, Hoechst, Huels, ICI, LINZ, Montepolimeri, FINA, Solvay and SAGA were thus all present at the majority, and in most cases, all the bosses' and experts' meetings held between July and November 1982 in which the autumn price initiative was planned and monitored (see Table 7). Shell admits attending a 'big four' meeting at Heathrow on 13 October (one week before the October bosses' meeting) and during September had been in regular contact with ICI about the October price initiative (source: ICI notes of telephone conversations meetings).

With the exception of FINA and Solvay, all the above-named producers supplied the Commission with price instructions issued to their local sales offices for October and November which correspond not only with each other in terms of amount and timing but also with the target price table attached to ICI's account of the 2 September experts' meeting (see Table 7). (Both Solvay and FINA claim to have issued the majority of their pricing directives by telephone.)

46. The price initiative was judged at least a partial success (ICI referred in a briefing note to the 'firm climate of the fourth quarter') and had resulted in an

effective increase in margins of about 20 pfennig per kilogram. However, ICI identified several areas of 'weakness' including low raffia price levels, a substantial price spread in the moulding area in Germany, and the absence at the time of a definitive 'volume agreement' (a new quota scheme was to start in January 1983).

The December 1982 meetings resulted in an agreement that the November/December level of 2,10 DM/kg was to be established by the end of January 1983 with new price tables to be drawn up for the countries out of line with the target (source: ICI meeting report). Again, all the regular participants were present at one or both of the December 1982 meetings.

(f) July to November 1983

47. In the first quarter of 1983 the price level weakened again and in the first meeting for which a memorandum was discovered (3 May) there was an agreement to try to apply a price target of 2,00 DM/kg in Germany in June 1983. ICI however considered this target over-ambitious with 1,80 DM/kg a more realistic minimum for the end of June.

During May 1983 the decision was taken to aim for a target of 2,00 DM/kg in September (an ICI note reads: '2,00 from 1 September or 1 October'). It was considered impossible to make the move in one jump from the then prevailing levels (around 1,70 DM/kg) and as an intermediate measure a target of 1,85 DM/kg was set from 1 July. In a meeting on 1 June 1983 those present (all the regular participants were there apart from Hercules and Solvay) 'reaffirmed complete commitment to the 1,85 move . . .'. Shell was reported to have 'committed (itself) to the move and would lead publicly in ECN' (a reference to a trade journal). Hercules was reported as 'very supportive' and was to announce new prices in June. All present had warned their sales forces which were in the process of informing customers of the proposed increase (source: ICI meeting report).

48. Echoing the mention of Shell leading 'publicly', an article appeared in the trade journal *European Chemical News* ('ECN') on 13 June 1983 which

reported that the producers were looking for higher prices, with Shell planning an increase to a minimum of 1,90 DM/kg on 1 July and a further increase in September. ICI and Montepolimeri were also said to be implementing similar increases.

Shell had since October 1982 been participating in most months in so-called 'pre-meetings' of the 'big four'.

The ECN article reported the market as 'increasingly tight' and indeed a somewhat telegraphic note made by ICI at about the end of May reads 'June volume — restrict.  $122\frac{1}{2}$  = June market assumed cf 130 + likely'. It continues: 'Shell to lead. ECN article 2 weeks. ICI informed'.

49. Immediately after the 20 May bosses' meeting ICI (23 May), DSM (25 May) and BASF (27 May) issued instructions to their sales offices to apply from 1 July a price table based on raffia 1,85 DM/kg, homopolymer DM 2,00 and copolymer 2,25. Their lists are identical for each grade and each national currency (some 40 or more items). An internal Hoechst report of 6 June 1983 sets out as the minimum price from 1 July 1,85, 2,00 and 2,25 DM/kg for raffia, homopolymer and copolymer. LINZ in a telex of 8 June (i.e. just after the 1 June meeting where 'commitment' had been 'reconfirmed') instructed its agents to apply list prices in each national currency which corresponded exactly with those of BASF, DSM and ICI. Montepolimeri had already on 17 May instructed its sales offices to apply an increase to come into force in June and to be carried on in July. Shell documentation for the United Kingdom and France shows that it knew of the agreed levels to be applied from 1 July and was basing its sales policy on these prices. Specific reference is made in a Shell paper entitled 'PP western Europe — Pricing' to a 'July target' of 1,85 DM/kg or £480 per tonne. A Shell 'market quality report' of 14 June 1983 also reported that 'In western Europe the integrated [Shell] companies are holding (indeed slipping back in Holland, United Kingdom) market shares as an aid to price stability.' Hercules informed its sales offices on 13 June and 29 June of the minimum price targets of 1,85/2,00/2,25 DM/kg. Only fragmented price instructions were obtained from ATO and Petrofina but these confirm that these producers were implementing the new price levels, somewhat belatedly in the case of Petrofina. Solvay was also behind the other producers in notifying the sales offices of the increase but its internal documentation, dating from 26 July, set immediate minimum prices for each country identical with the 1,85 DM/kg raffia target and gave new minima applicable from 1 September based on the DM 2,00 which had been agreed by the producers.



Thus with the exception of Huels (for which no price instructions were available for July 1983) all the producers which had attended the meetings or had promised support for the new price target of 1,85 DM/kg are shown to have given instructions to implement the new price.

50. Further meetings took place on 16 June, 6 and 21 July, 10 and 23 August and 5, 15 and 29 September 1983. The presence of all the regular participants — including Hercules — at some or, in most cases, all of these meetings is established by travel records. Only SAGA and LINZ did not provide the information on participation in specific meetings requested by the Commission under Article 11, but both admit being regular participants at meetings.

The intermediate price move of 1 July was judged successful with raffia prices reaching the 1,85 DM/kg target in August.

At the end of July and beginning of August 1983 BASF, DSM, Hercules, Hoechst, Huels, ICI, LINZ and Solvay all issued price instructions to their various national sales offices for application from 1 September (based on raffia at 2,00 DM/kg) which with insignificant exceptions are identical for each grade and national currency (for ATO, see point 50). For Montepolimeri and SAGA only the price instructions for one Member State were obtained but these correspond with those of the other producers for the country in question. A document found at SAGA UK refers specifically to the 1 September 'list' prices for the United Kingdom which had been agreed in a local meeting. Shell price documentation for the United Kingdom in the form of an internal note of 11 August indicates that the United Kingdom subsidiary was 'promoting' basic prices to be in force on 1 September which correspond with the targets fixed by the other producers (by the end of the month however Shell was instructing the United Kingdom sales office to postpone the full increase until the other producers had established the desired basic levels).

The price instructions obtained from the producers show that it was later decided to maintain the impetus of the September move with further steps based on raffia at 2,10 DM/kg on 1 October rising to 2,25 DM/kg on 1 November.

51. BASF, Hoechst, Huels, ICI, LINZ, Montepolimeri and Solvay each sent instructions to their sales offices setting identical prices for these months. Hercules, while instructing its sales offices to take a 'hard line' approach for October, first of all indicated minimum prices slightly below those of the other producers but

by 3 October it was requiring them to apply the same prices as the others 'with immediate effect'. For November, area managers were told by Hercules that their prices would have to get in line with the general price targets. DSM claims that no price instructions were issued for October or November but its September list prices are identical for each grade and national currency with those of all the other producers. SAGA UK also implemented the 10 pfennig price increase in October, although it was a fortnight behind the rest.

While ATO and Petrofina were present at all relevant meetings, the both claim that if any internal price instructions were given for the period they were by word of mouth.

An internal note obtained at ATO and dated 28 September 1983 however shows a table headed 'Rappel du prix de cota (sic)' giving for Germany, France, the United Kingdom and Italy prices for September and October for raffia, homopolymer and copolymer which are identical with those of BASF, DSM, Hoechst, Huels, ICI, LINZ, Montepolimeri and Solvay (see point 49). During the investigation at ATO in October 1983 the representatives of the undertaking confirmed that these prices were communicated to sales offices.

By the end of 1983, polypropylene prices were reported in the press as having 'firmed' to reach a raffia market price of 2,08 to 2,15 DM/kg (compared with the reported target of 2,25 DM/kg). The trade press reported the market as buoyant with a 15 to 16 % increase in demand over 1982 consumption and a further expansion being predicted for 1984 in the order of 6 to 8 %.

## VII. Volume targets and quotas

52. It was generally recognized that in order to achieve market conditions favourable to the success of agreed price initiatives some permanent system of volume control was required.

Prior to the assumption by ICI of the leadership of the group in August 1982 various schemes for sharing the market were applied. While percentage shares of the estimated available business had been allocated to each producer, there was not at this stage any systematic limitation in advance of overall production. Thus estimates of the total market had to be revised on a rolling basis and the sales in absolute tonnage terms of each producer had to be adjusted to fit the percentage entitlement.

The schemes for sharing the market between the producers were referred to as involving (variously) 'volume targets', 'target volumes', 'quotas' or sometimes 'aspirations'.

Each producer taking part was allocated a quota or target expressed either in tonnes or in percentages. In arriving at a quota scheme allowance had to be made for producers which did not attend meetings and so had not participated in the detailed discussions. In 1979 Hercules had its own individual quota but after that date was grouped together with Amoco or with Amoco and BP.

53. The latter both claim that they were unaware of any allocation having been made to them. Hercules however was taking part in meetings with detailed discussions on volumes (indeed a planning document originating from Montepolimeri and relating to a proposal for a 1982 quota system was found at its premises) and for the first quarter of 1983 at least it signified its satisfaction with the 'group' allocation of 53 000 tonnes to be split 21/21/11 between itself, Amoco and BP.

After mid-1982 at least it was the normal practice in meetings for the producers to report every month the tonnages which each had sold in the preceding month.

A comparison between the targets or quotas for each year and the achieved sales of each producer is shown in Table 8.

Details of the schemes for each year from 1979 (the first year when it is known a system was in operation) are as follows:

(a) 1979

54. Volume targets (in tonnes) were set for each producer for 1979 based in part at least upon their achieved sales in the preceding three years. The precise basis on which 'targets' for 1979 were allocated is not known, but arrangements had to be made to accommodate the expectations of the new arrivals which had recently come on stream and so had no 'historical' entitlement.

Tables found at ICI show the 'revised target' for each producer for 1979 compared with actual tonnage sales achieved during that period in western Europe.

The existence of a market sharing scheme for 1979 is confirmed by documents found at ATO which show the targets ('objectifs') of the four 'French' producers — ATO, Rhone-Poulenc, Solvay and Hoechst France for each national market.

(b) 1980

55. By the end of February 1980 'targets' — again expressed in tonnage terms — had been agreed for 1980 by the producers, based on an expected market of 1 390 000 tonnes (some 12 % more than the previous year).

A number of tables showing the 'agreed targets' for each producer for 1980 were found at ATO and at ICI. One of the tables discovered at ICI showing various proposals and the final agreed target was written in German and had obviously come from an (unidentified) German producer.

The original estimated total market available of 1 390 000 tonnes proved over-optimistic. The quota of each producer had to be revised downwards to fit total consumption during the year of only 1 200 000 tonnes (source: ICI report of January 1981 experts' meeting).

Of the four 'majors', only ICI's sales turned out to be below the target for 1980; for the other producers, 'achieved' sales were largely in line with their target share. Only DSM, which 'disputed any undertaking to cut back from their original target', had appreciably exceeded its allocation (sales of 46 100 tonnes compared with a target of 38 400).

(c) 1981

56. The sharing of the market for 1981 was the subject of prolonged and complex negotiations.

At the beginning of the year it was agreed that as a temporary measure to help achieve the February/March price initiative each producer would restrict monthly sales to one-twelfth of 85 % of the 1980 'target' (source: ICI report of January experts' meeting).

In preparation for a more permanent scheme each producer communicated to the meeting the tonnage it hoped to sell during 1981. Added together these 'aspirations' largely exceeded total forecast demand.

Various compromise schemes were put forward. ICI thought that the four majors should 'give the lead' and accept a small reduction in their 1980 targets provided the newcomers also tempered their demands (source: ICI draft proposal).

57. As part of the discussions aimed at reaching agreement on a market sharing system for 1981 ICI and Shell met on at least two occasions, with Montepolimeri also present at one meeting. Shell was sceptical since in its view the proposals were based on overambitious estimates of the market but said it would be content with 11 to 12 %. More stringent volume control measures were considered by them including possible sanctions for exceeding sales quotas (source: ICI notes of meetings dated 27 May and 17 June 1981).

In the event no definitive quota agreement was reached for 1981. As a stopgap measure the producers took the previous year's quota of each producer as a theoretical entitlement and reported their actual sales each month to the meeting (source: Tables found at ICI headed 'Deviations per companies'). In this way actual sales were monitored against a notional split of the available market based on the 1980 quota.

(d) 1982

58. For a 1982 scheme complicated proposals were again advanced which attempted to reconcile divergent factors such as previous achievements, market aspirations and available capacity. The total market to be divided was estimated at 1 450 000 tonnes. Some producers submitted detailed plans for market sharing while others were content to communicate only their own tonnage aspirations.

One planning document found at both Hercules and ICI but emanating from Montepolimeri, suggested a formula, with detailed tables, to take account of 1981 achieved sales and 1982 nameplate capacity of each producer. According to the ICI note of the experts' meeting of 10 March 1982 it was on this occasion that the Montepolimeri representative circulated the tables with a view to trying to reach a quota agreement at the next bosses' meeting. ICI's proposal was for a system based on 1981 actual sales weighted by a share of the estimated market growth for 1982 over 1981 equivalent to each producer's percentage share of total capacity.

As with 1981, no definitive agreement was reached and for the first half of the year the monthly sales of each producer were communicated to the meeting and monitored against its achieved percentage share in the previous year.

59. When ICI took over the chairmanship from Montepolimeri in August 1982 it stressed that it was looking to introduce a new system for 1983 with agreement on market shares in a 'framework' to which all producers were committed (source: ICI report of bosses' meeting of August 1982; ICI note headed 'Quota'). ICI held bilateral discussions with each of the producers on the new system. Pending the introduction of such a quota scheme, producers were required in the second part of 1982 to aim to restrict their monthly sales to the same percentage of the overall market which each had achieved in the first six months of 1982 (source: ICI meeting reports).

By 1982 market shares had reached a relative equilibrium (described by ATO as a 'quasi-consensus'). Total western European consumption came to some 1 412 000 tonnes. Among the majors, ICI and Shell remained at about 11 % with Hoechst slightly below at 10,5 %. Montepolimeri, always the largest producer, had advanced slightly to take a 15 % market share compared with 14,2 % the previous year.

The market shares of the medium-sized producers — ATO, Solvay, BASF, Huels and Hercules — were stable in comparison with previous years, with DSM as the only exception, continuing its regular progression of 0,5 % per year.

(e) 1983

60. For 1983, ICI invited each producer to indicate its own quota ambitions as well as suggestions for what percentage each of the others should be allowed. Montepolimeri, ANIC, ATO, DSM, LINZ, SAGA and Solvay each submitted their own detailed proposals for a division of the market with suggested quotas for each producer. The three German producers submitted a joint proposal via BASF.

The various proposals were processed by computer to obtain an average which was compared with the individual percentage 'aspirations' of each producer.

61. The guidelines suggested by ICI for a new framework agreement for 1983 were essentially as follows:

- (a) to give recognition to the market achievements of each producer by taking the percentage of total sales made by each during a reference period (running from 1 January 1981 to 30 September 1982) and applying this to that part of the 1983 market equivalent to the market for 1982, estimated at 1 400 000 tonnes;
- (b) sharing the 75 000 tonnes by which sales in 1983 were expected to exceed 1982 sales in proportion to each producers's percentage of total nameplate capacity;
- (c) comparing the result with the expected performance of each producer in 1982 and adjusting any manifest anomalies;
- (d) treating Montepolimeri/ANIC/SIR as a single group and leaving them to decide the detailed division of their quota between themselves.

62. ICI considered it crucial to the success of any new plan for the 'big four' to present a united front to the other producers. Shell's view as communicated to ICI was that itself, ICI and Hoechst ought each to have a quota of 11 % (source: ICI document headed 'Polypropylene framework').

The ICI proposal for 1983 would have given the Italian producers 19,80 %, Hoechst and Shell 10,90 % each and itself 11,10 %.

For the purpose of preparing a quota scheme for 1983 the total available market was agreed by the producers at 1 470 000 tonnes.

63. Discussions on the proposals took place in several meetings in November and December. In the December experts' session a proposal was tabled limited in the first instance to the first quarter of the year. Total demand for the period was estimated at 367 500 tonnes. An ICI note shows that ATO, DSM, Hoechst, Huels, ICI, Montepolimeri and Solvay found their allocated quota 'acceptable'. 53 000 tonnes was allowed for Hercules, Amoco and BP together, and Hercules professed itself satisfied with 20 000 tonnes out of this figure (later amended to 21 000 tonnes) (source: ICI report of December 1982 experts' meeting: note of telephone conversation with Hercules of 3 December 1982).

The ICI report of the meeting did not record Shell's reaction to the proposal but that producer was present at a meeting of the 'big four' on 20 December 1982. An undated ICI note intended as a briefing for a meeting with Shell in or about May 1983 states that Shell had 'accepted west European quota levels of 39,5 Kt/qtr for Q1 and Q2 1983 . . . '.

Planning documents for the first quarter of 1983 found at Shell show a comparison between the Shell operating companies' planned sales in western Europe of 43 700 tonnes and the 'target' of 39 500 tonnes with attempts to reconcile the difference in terms of the 10,7 % market share for Shell on which the first quarter quota scheme was based. For its part Shell was concerned that its achieved market share should not exceed 11 %, the quota which it had originally proposed for ICI, Hoechst and itself, and indeed the individual operating companies had agreed to cooperate to keep to 11 %. In practice Shell's achieved market share of 10,9 % for the first five months of 1983 came close to this figure, the operating companies having been told that they should not jeopardize opportunities for price rises by seeking to increase market shares.

64. Documentation obtained at Shell confirms that a volume control scheme was continued into the second quarter of 1983: to keep its market share in the second quarter close to 11 % (a figure referred to as 'the agreed Shell target'), national sales companies in the Shell group were ordered to reduce their sales. Although there is no specific mention of quotas in the last producer's meeting for which notes were discovered (in June 1983), the ICI memorandum has the experts exchanging details of the tonnages sold by each in the previous month, which would indicate that some quota system was in operation.

65. Although at one stage the four leading producers had considered the possibility of reinforcing the volume control system by means of compensation payments or sanctions for exceeding the quota allocated, no such penalty scheme was ever in operation for polypropylene. Compliance with the agreed target was therefore in a sense voluntary, but the system of each producer reporting to the meetings the tonnage which it had sold in the preceding month, with the risk of facing criticism from the other producers if it was considered unruly, provided an inducement to observe its allocated target.

### VIII. *The Fides information exchange*

66. In July 1976 the polypropylene producers had set up a scheme for the monthly exchange of information of production, sales and stock movements in western Europe via the Fides Trust Company in Zurich. By April 1977 all the producers were participating except Hercules which joined later.

Under the Fides arrangement each producer reports its monthly data to a central clearing house which prepares and transmits to the subscribers composite figures for the whole polypropylene industry which do not identify individual producers but relate to national groupings each of several producers.

The official Fides system contains specific provisions designed to guarantee anonymity. Such safeguards were however rendered nugatory by the producers systematically exchanging amongst themselves either by telephone or at meetings the details of the tonnages delivered by each to the European market. The official Fides figures provided a useful method for checking the accuracy of the individual data supplied: they could be added up and any discrepancy with the Fides total would be apparent.

The records of meetings from June 1982 onwards show that it became the practice for each producer to report its sales in the previous month for comparison with its target. For Amoco, BP and Hercules however only a global estimate was available. BP and Amoco did not attend meetings and Hercules appears to have been reticent about communicating its own individual figures. However Hercules had the benefit of the individual data of the other producers, an internal documents show that it possessed accurate information on the deliveries in each Member State and the market shares of each of the other producers for 1981 and 1982.

### IX. *The special position of the four majors*

67. The four major producers — Montepolimeri, Hoechst, ICI and Shell — had identified a community of interest between themselves as the 'big four' as early as June 1977 with the discussions and agreement on floor prices (see point 16).

After the system of regular meetings was set up in late 1977, it was normal practice for a price 'initiative' to be signalled to the customers by a press announcement that one or other was planning an increase which the others were 'supporting' or 'following'.

Montepolimeri, ICI and Shell — Hoechst did not attend — met in June 1981 to discuss what action they might take themselves to increase prices. Among solutions discussed were: (a) sanctions against 'disruptive' producers; (b) control of production; (c) a new quota scheme; (d) a new initiative by the 'big four' on which they accommodated the smaller producers while making up their reduced sales in 'rest of the world' markets; and (e) a flat 20 pfennig increase from 1 July 1981 (source: ICI note of 17 June 1981).

68. ICI has admitted in a reply to a request for information under Article 11 of Regulation No 17 that the four major producers shared a common understanding that if prices were to be increased they as the market leaders would have to give a strong lead even at the expense of their own sales volume.

At the end of 1982 the 'big four' began to meet in restricted session the day before each bosses' meeting. These so-called 'pre-meetings' provided a forum in which the four major producers could agree a position between themselves prior to the full meeting. The idea was that the four major producers, with some 50 % of the market in their hands, could by adopting a united approach encourage moves towards price stability (source: ICI document headed 'Polypropylene framework'; Shell file note of 20 October 1982).

ICI has admitted that the topics discussed in pre-meetings were the same as those dealt with by the bosses' meetings which followed (source: ICI reply under Article 11), but Shell on the other hand has denied that the 'big four' meetings were in any sense preparatory to a plenary meeting or involved coordination on a common stance on topics to be discussed the following day. The records which exist of 'big four' meetings (in October 1982 and May 1983) however disprove this claim.

### D. *The factual arguments of the producers*

69. The factual arguments advanced by the producers during the course of the administrative procedure may be summarized as follows:

- (a) *The record of the meetings:* It is claimed that the notes of meetings discovered by the Commission at ICI are either not admissible

against other producers as proof of the facts recorded therein or are so unworthy of credence that no importance ought to be attached to them;

- (b) *Nature of the meetings:* While all producers admitted attending bosses' and experts' meetings (or in the case of Shell, 'big four' meetings) some producers claim that these were concerned only with general discussions of industry problems and never even touched upon matters affecting competition. Others admit that attempts were made to reach agreement on target prices or quotas but claim that no consensus ever evolved. Certain producers claim that whatever anti-competitive measures the other producers may have discussed or agreed at meetings they themselves were only present as 'observers' or to gain 'market intelligence' and for their part never committed themselves to any agreement or restriction of competition;

- (c) *Market study:* The three German producers commissioned a study by an expert econometrist designed to demonstrate that conditions of vigorous or even ruinous competition obtained in the polypropylene market in Germany (taken as representative of the EEC as a whole), that the pattern of rises and falls in price and the persistent losses in the industry disproved the existence of any collusion and that prices were determined by natural market forces such as supply and demand balance, the general economic environment and fighting between producers for market share;

- (d) *Centralized audit:* The majority of the producers — ATO, BASF, DSM, Hoechst, Huels, ICI, LINZ, Montepolimeri, Petrofina and Solvay — also participated in a centralized audit by a firm of chartered accountants of their invoices for polypropylene for 1982 and the first nine months of 1983. The producers claimed that the audit disclosed wide variances not only between the prices actually achieved in the market place and the producers' 'list' prices but also from producer to producer and from customer to customer. From this it was argued that conditions of intense competition prevailed in the market place which disproved the existence of any real collusion between the producers;

- (e) *Price instructions:* All the producers argued that the written price instructions which they had issued to their sales offices showed variances both as to timing or as to the actual prices to be quoted in comparison with the alleged targets fixed in meetings and as between each other. Some producers sought to argue that notwithstanding their participation in meetings any apparent

similarity in their price instructions was explicable by factors such as market transparency (information from customers or press announcements) and the oligopolistic structure of the market.

Other particular arguments advanced by individual producers will be dealt with in the part of this Decision in which the participation and the extent of involvement of each in the alleged infringements is assessed.

#### E. The Commission's assessment of the producers' factual arguments

##### (a) *The record of the meetings*

70. While offering various alternative interpretations of the nature and purpose of the meetings, the undertakings have not produced any documentary account of meetings or any oral evidence which might cast doubt on the accuracy of the ICI notes.

The account of two meetings as given by ICI in its internal reports is confirmed in every material respect by notes of the same meetings found at Hercules.

Such documentation relating to the subject matter of the meetings (target prices, price initiatives, quotas) as was found at other producers (such as ATO, DSM and Shell) during the investigation also confirms the facts as set out in the detailed reports of ICI. Documents discovered at ICI but which originated from other firms provide further convincing evidence, particularly as regards volume targets or quota schemes.

The ICI reports were prepared for the use of senior directors of ICI Petrochemicals and Plastics Division who attended the bosses' sessions and acted as chairmen of the meetings. Given ICI's role as chairman of the group there is every reason to suppose that care was taken to ensure the reports were complete and accurate. The suggestion that these reports were a flight of fancy cannot be accepted.

The Commission therefore concludes that the reports of the meetings provided an accurate, reliable and consistent record of those meetings, the matters discussed, the agreements reached, and the role of the various participants.

The Commission does not have available records of each meeting that was held from 1977 onwards but records were found of certain meetings in 1979 and 1981 which show that the subject matter and result were essentially the same as those relating to 1982 and 1983.

(b) *Nature of the meetings*

71. The available records of the meetings disprove the arguments advanced by the producers regarding the subject matter discussed and the allegedly limited extent of their participation. These documents show that agreement in detail was reached on the amount and timing of price initiatives and on the method of their implementation. As regards volume targets or quotas the numerous tables and calculations obtained which run from 1979 onwards contradict the claim that they were no more than 'proposals' which were never followed up.

(c) *The market study*

72. The economic survey of the German market does not disprove the existence of any agreement. Factors such as those invoked in the report — market structure and price transparency — could in the absence of evidence of collusion explain a general pattern of similar pricing behaviour. However, the Commission's objections are not based on general similarities in the price conduct of each producer. Even if there had not been direct proof of meetings, the uniformity and simultaneity of the price instructions over a long period was so marked that it would on its own have given rise to a strong presumption of concertation. In the present case the evidence goes much further and establishes conclusively a link of causation between the commercial conduct of the producers and the system of regular meetings.
73. The Commission has in any event never maintained that the system of regular meetings controlled fully the operations and sales of the producers or was the only factor affecting the price levels of polypropylene. Indeed the evidence relied upon by the Commission shows that the producers recognized that the market was affected by matters such as changes in demand or raw material price increases beyond their control. In deciding upon the amount, timing, modalities and chances of success of a planned price initiative such market factors had to be taken into account by the producers. One of the main purposes of the meetings however was to try to coordinate the response of the

producers to such factors. It may also be that price was determined to a large extent by conditions of supply and demand but the documentary evidence shows that by means of their volume control or quota systems the producers were attempting to manipulate those conditions.

(d) *The centralized audit*

74. While there is no reason to doubt that the audit, conducted by a firm of independent accountants, accurately records the net achieved selling prices (after all discounts) of the producers concerned in the period covered, the Commission does not accept the conclusions the producers seek to draw.

In the first place, the Commission has never alleged (as some producers have attempted to represent it to have done) that the producers all obtained a uniform cartel price or that the actual price obtained from each customer corresponded with the 'list' price for a particular month. The fact that average 'market' prices lagged behind or perhaps never even reached the 'target' does not detract from the validity of the Commission's objections. The essence of the present case is that following the agreement in meetings of target prices the producers all instructed their sales forces to aim at the implementation of these price levels and the 'targets' served as the basis for the negotiation of prices with customers (see point 90).

It was always recognized by the Commission during the procedure that even in a successful price initiative (and it was conceded that not all achieved their object) there might be areas of weakness in certain product areas or in particular national markets and that inevitably any initiative would need some time to work through.

A simple comparison of the net invoiced prices of each producer with his 'list' prices over the whole period is an exercise of limited probative value. The time scale covered by the audit includes not only known price initiatives — June 1982, last quarter 1982, July 1983, September 1983 (but not October or November) — but also periods in between where it is accepted by the Commission that price levels were stagnant or fell. Large variances between the nominal list prices of the producers and actual prices during these periods are only to be expected.

Further, if the achieved prices are compared with 'targets' set in the meetings, it must be borne in mind



(i) that the prices recorded in the audit are net prices after deduction of all discounts, allowances and rebates whereas 'targets' were gross prices; (ii) that certain major customers might have special fixed-price annual or quarterly contracts; (iii) that advance commitments covering several months might delay the application of the new price; (iv) that price increases might well be resisted by customers; (v) that implementation sometimes proved more difficult in certain product sectors or Member States than in others.

If these factors are borne in mind, the development of the prices charged to individual customers as compared with the target prices set in the course of particular price initiatives is consistent with the account given in the documentation found at ICI and other producers concerning the implementation of the price initiatives.

A comparison of the target prices agreed in meetings and achieved prices as reported in the trade press from September 1981 to December 1983 is shown in Table 9.

(e) *Price instructions*

75. The assertion by the producers that their price instructions did not correspond in timing or amount with the targets agreed in meetings or with each other is not substantiated by the facts. The Commission prepared and supplied to the producers detailed charts, supported by copies of the relevant price instructions from each producer relating to all known price initiatives between September 1979 and November 1983 (the charts were of necessity a condensation of the sometimes complex instructions as to timing or amount of an increase and the degree of flexibility permitted and had to be read subject to the content of the attached full instructions). An examination and comparison of the instructions themselves show the consistent pattern of producers giving price instructions implementing the 'target' referred to in the meeting notes. For those occasions (such as February to March 1981, 1 June 1982, 1 October 1982) where a full table of targets was drawn up in meetings for each grade and national currency, the instructions of several producers to each national sales office were available and can be seen to correspond exactly not only with each other but with each of some 40 prices set out in the table. On other occasions (such as September to November 1983) even if a full table of targets was not available, the instructions given by the producers are again identical. Certain producers on occasions permitted

their local sales office some discretion to delay implementing fully a new price or indicated 'minimum' or 'rock bottom' prices on which they could fall back. Major departures from plan had however to be referred to the head office. Others might as an exception specify special prices for particularly large customers. In the case of Hercules, a general circular telex was sent to the local sales offices in the EEC which almost invariably referred to the objective of reaching price levels corresponding with targets agreed in meetings. Specific telex instructions (often referring to the same general 'target' in DM or in the appropriate national currency) would be issued to each area to take account of local conditions and various factors which could affect the price which could actually be achieved. The overall picture however is one of price instructions being issued which implemented the targets decided in the relevant meeting.

76. Several producers attempted by reference to specific price initiatives to demonstrate the alleged 'independence' of their pricing behaviour from that of other producers or of a course of action decided in a meeting. Thus ICI argued, in relation to the intermediate increase to 1,85 DM/kg due on 1 July 1983, that the price instructions on which the Commission relied had been given by several producers before the date of the meeting in which the Commission said it had been agreed (on 1 June). This argument ignores the fact that the 1 June meeting was only confirmatory and the original decision to go for a target price of 1,85 DM/kg had already been made in an earlier meeting on 20 May 1983, ICI's instructions to this effect following only three days later on 23 May. Nor could ICI give any explanation for the fact that its new prices were exactly the same across a range of 40 or more items as those set by DSM and BASF and due to come into effect on the same day.

Hercules criticized the Commission for (it claimed) unfairly treating price instructions of different producers as contemporaneous when they were not. It drew particular attention to the lapse of at least 4 weeks between its price instructions of 26 July 1982 relating to an increase to 2,00 DM/kg with effect from 1 September and 2,10 DM/kg from 1 October and those cited by the Commission for the other producers. The instructions of the other producers were later because after Hercules had sent out its original telex it had been agreed to postpone the initiative by one month, and indeed Hercules itself sent out a telex on 24 August 1982 modifying the original instructions. More significantly, the first Hercules price instructions of 26 July ('For September and October we are seeking price increases based on raffia targets of DM 2,00/kg and 2,10/kg respectively') were given only five days after it had attended the session of 21 July in which those very targets had originally been fixed (the ICI note of the

meetings reads: 'The DM 2,00 was generally accepted for September with a further 10 pfennig increase to be announced simultaneously for 1 October').

Independently of the audit commissioned by the other producers, Hercules produced a survey which purported to show no pattern of relationship between its own price 'guidelines' and the target prices fixed in meetings. This conclusion results largely from the omission or selective interpretation of price instructions and the use not of the actual targets fixed for each grade in the appropriate national currency (as set out in the tables attached to ICI's note of the meetings) but of inaccurate 'notional' figures extrapolated by Hercules for the purposes of the exercise from the DM raffia grade target.

77. In some cases, the producers did not supply the Commission with a full set of price instructions from 1979 onwards as requested. Thus for two producers, Huels and Hercules, documentation was available only in relation to 1982 and 1983 and for Petrofina and Solvay in relation to 1983 only. It was claimed the documents for earlier years had been destroyed or never existed. The price instructions which were obtained show however that during the period or periods for which they made documents available these four producers were indeed taking action to implement the agreed targets.

ANIC and Rhône-Poulenc provided no price instructions but the record of meetings and other documents show that these two producers participated regularly in meetings in which price initiatives were discussed and agreed. The documentation relating to the quota arrangements show that they were fully involved in those schemes during the period they were in the polypropylene market.

#### F. The involvement of each producer

78. ICI, Montepolimeri, Hoechst and Shell as the 'big four' together constituted the nucleus of the arrangements which evolved from the 'floor price agreement'. After the system of regular meetings had evolved Montepolimeri assumed the leadership of the group, a responsibility which was ceded to ICI in August 1982. Hoechst, ICI and Montepolimeri were all regular participants in the bosses' and experts' meetings.

Shell did not attend these meetings but it was involved in the original floor price agreement, took part in *ad hoc* meetings with the other major producers and participated in the quota arrangements. On Shell's own admission prior to bosses' and experts' meetings its views were sometimes sought on the feasibility of price increases, and after such meetings it was informed by Montepolimeri or ICI that particular 'targets' had been proposed and passed on the information to its operating companies. Shell's internal documents confirm that it knew of and was participating in price 'initiatives', sometimes even as the ostensible leader. From the end of 1982 onward its representative regularly attended 'pre-meetings' of the four major producers. Operating companies of the Shell group took part in national meetings.

Apart from the 'big four' the other participants in the original 'floor price' agreement of mid-1977 cannot be identified with certainty. However, the later 1 December 1977 initiative by Montepolimeri, Hoechst, ICI and Shell had the express 'support' of Hercules, LINZ, Rhône-Poulenc, SAGA and Solvay at least. The participation of all these producers in collusive arrangements therefore dates from 1977, whatever the precise date on which each began to attend meetings.

The system of regular meetings began at about the end of 1977 but it is not possible to identify the precise date on which each individual producer began to attend <sup>(1)</sup>.

From the documentation relating to volume targets it is established that all the producers to which the present decision is addressed were implicated in the quota scheme by the time the 1979 'targets' were set up. Their participation in meetings is thus demonstrated from that date at the very latest (1980 in the case of Petrofina).

The Commission expressly rejects the argument raised by Huels that before mid-1982 the only meeting which it attended happened — by pure coincidence — to be the one in January 1981 for which a record was found at ICI and in which it was mentioned. The documents

<sup>(1)</sup> Of the producers not shown to have 'supported' the December 1977 initiative, ANIC admits taking part in meetings from the beginning; ATO admits taking part from 1978; BASF claims to have attended only 'sporadically' before 1980; DSM claims to be unaware of the date meetings started and only admits attending from 1980, while Huels claims to have attended only one meeting before mid-1982.

relating to volume targets from 1979 onwards implicate Huels and show that it was participating in such schemes from the beginning.

ANIC ceased to participate in meetings in about the middle or end of 1982 because of the reorganization of the Italian petrochemicals industry (but it was still involved in the quota arrangements covering the first quarter of 1983 at least). Rhône-Poulenc likewise disappeared from the polypropylene market at the end of 1980 and transferred its interest to its former partner, BP.

As the last producer to enter the market, Petrofina began to participate later than the others. Originally its polypropylene sales were handled by Montefina, a company owned in partnership with Montepolimeri. In March 1982 Petrofina assumed the marketing function for its share of the output of the Montefina plant. Petrofina admits that its representatives regularly attended bosses' and experts' meetings from then on. It is not certain whether before March 1982 Petrofina was separately represented at the meetings but the fact that it was usually treated separately from Montepolimeri for the purposes of quota schemes would indicate that it was already involved in these arrangements from 1980 onwards.

From time to time some producers — including SAGA in particular — were named in documents as 'flexible', 'unruly' or 'disruptive' in certain markets. These producers were however all regular participants in meetings and their price instructions and other internal documents show that on the whole they were cooperative members of the 'club' or — like SAGA — were prepared to be 'aggressive' on price to back up their demands for a better allocation under quota schemes.

Hercules, the only American-owned producer represented at meetings, claimed to have been present as an 'observer' and then only irregularly. It admits attending meetings from May 1979 as well as being

informed of what had transpired at meetings in which its representative was not present. From mid-1982, despite a threat to withdraw because the German producers did not 'accept' him, the Hercules representative went to some 15 out of 30 known plenary meetings. These included several bosses' sessions, and the ICI record shows that he took an active part in discussions, to the extent of proposing the 'account leadership' system. He also took part in local meetings covering the Benelux at least. While receiving detailed information on the monthly sales of the other producers, the Hercules representative does not appear to have communicated his firm's own figures to the others.

Hercules has attempted to present the attendance of its representative as an unofficial venture by a relatively junior employee. Its own documents however show that he occupied a responsible position in the company as the marketing manager for polypropylene, and that as early as 1977 when the floor price agreement was made and later in 1981, his superiors were themselves in contact with other producers on price arrangements. It is therefore inconceivable that they did not know the real purpose of his business trips which they authorized from May 1979 onwards.

Two producers, Amoco and BP did not attend meetings. There is however evidence that they were in contact with the 'club' on matters discussed in meetings such as pricing and the quota system. Both have however denied their involvement in anti-competitive agreements, although BP did admit that it gave non-committal replies to approaches from ICI which could have been interpreted as expressions of 'support'. Amoco was also in telephone contact with Hercules about the proposals for a quota scheme for the first quarter of 1983, while ICI telephoned BP on the same matter. In some cases the pricing of both Amoco and BP appears to have been aligned on the targets decided in meetings. Their conduct was to say the least imprudent but on the totality of the evidence the proof against them of participation in an infringement of Article 85 (1) is not conclusive.

## PART II

### LEGAL ASSESSMENT

#### A. Article 85

##### I. Article 85 (1)

79. Article 85 (1) of the EEC Treaty prohibits as incompatible with the common market all agreements

between undertakings or concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which directly or

indirectly fix purchase or selling prices or any other trading conditions and share markets or sources of supply.

## II. *The nature and structure of the 'agreement'*

80. From 1977 the producers of polypropylene supplying the EEC have been party to a whole complex of schemes, arrangements and measures decided in the framework of a system of regular meetings and continuous contact.

The overall plan of the producers was to meet and reach agreement upon specific matters, including at various times:

- the fixing of target prices,
- the modalities of price initiatives,
- the sharing of markets according to annual quota schemes or volume targets,
- at times where no definitive quota was in operation, temporary measures to control or monitor sales volumes,
- the exchange of detailed information on their individual activities of a kind normally considered a business secret so as to facilitate coordination of their behaviour.

By reason of the regular contacts in an institutionalized system of meetings the arrangements of the producers were constantly modified, varied or updated so as to take account of changing conditions and market reactions.

81. The Commission considers that the whole complex of schemes and arrangements decided in the context of a system of regular and institutionalized meetings constituted a single continuing 'agreement' within the meaning of Article 85 (1).

It is not necessary, in order for a restriction to constitute an 'agreement' within the meaning of Article 85 (1) for the agreement to be intended as legally binding upon the parties. An agreement exists if the parties reach a consensus on a plan which limits or is likely to limit their commercial freedom by determining the lines of their mutual action or abstention from action in the market. No contractual

sanctions or enforcement procedures are required. Nor is it necessary for such an agreement to be made in writing.

In the present case the producers, by subscribing to a common plan to regulate prices and supply in the polypropylene market, participated in an overall framework agreement which was manifested in a series of more detailed sub-agreements worked out from time to time.

82. In the detailed working out of the overall plan express agreement was reached in many areas (individual price initiatives and annual quota schemes). In some cases the producers may not have reached a consensus on a definitive scheme, such as quotas for 1981 and 1982. However their adoption of stopgap measures including exchange of information and the monitoring of actual monthly sales against achievements in some previous reference period not only involves an express agreement to set up and operate such measures but also indicates an implied agreement to maintain as far as possible the respective positions of the producers.

Given the detailed evidence on the price initiatives described in points 28 to 51, the Commission considers that even before 1979 the various initiatives reported as being 'led' by one or other producer and 'followed' by the others also resulted from an agreement between them.

This is the case for example with the December 1977 initiative (points 16 and 17). Even in front of customers at the EATP meetings producers like Hercules, Hoechst, ICI, LINZ, Rhône-Poulenc, SAGA and Solvay were stressing the perceived need for concerted action to increase prices. There was further contact on pricing between the producers outside the EATP meetings. In the light of these admitted contacts the Commission considers that behind the device of one or more producers complaining of inadequate levels of profitability and suggesting joint action while the others expressed 'support' for such moves lay on existing agreement on pricing. (Even in the absence of further contacts such a device might still indicate a sufficient consensus for an agreement within the meaning of Article 85 (1).)

83. The conclusion that there is one continuing agreement is not altered by the fact that some producers inevitably were not present at every meeting. Any 'initiative' took several months to plan and to implement and it would make little difference to the involvement of a producer if absent on occasion. In any case, the normal practice was for absentees to be informed of what had been decided in meetings. All

the undertakings to which this Decision is addressed took part in the conception of overall plans and in detailed discussions and their degree of responsibility is not affected by reason of their absence on occasion from a particular session (or in the case of Shell, from all plenary sessions).

The essence of the present case is the combination over a long period of the producers towards a common end, and each participant must take responsibility not only for its own direct role but also for the operation of the agreement as a whole. The degree of involvement of each producer is not therefore fixed according to the period for which its pricing instructions happened to be available but for the whole of the period during which it adhered to the common enterprise.

This consideration applies also to ANIC and to Rhône-Poulenc which left the polypropylene sector before the date of the Commission's investigations. No pricing instructions to sales offices were available at all from either of these two undertakings. Their attendance at meetings and their participation in the volume target and quota schemes can however be established from the documentary evidence. The agreement must be viewed as a whole and their involvement is established even if no price instructions from them were found.

84. Several producers have argued that their arrangements could not constitute 'agreement' in the sense of Article 85 (1), since any feeling of 'commitment' was lacking, on their part at least if not on the part of other participants. This assertion, put forward by the legal advisors of several firms, is unsupported by any oral or documentary evidence. It also ignores the fact that on a number of occasions, to reinforce a decision of a meeting or ensure the success of a price initiative, just such a specific expression of 'personal commitment' was sought from, and was given by, senior managers (e.g. bosses' meeting of 2 September 1982; experts' meeting of 1 June 1983).

However, even where agreements are not reinforced by such express declarations of 'commitment', the documentary evidence shows that agreement between producers was not merely illusory, as some have claimed. The conduct of the producers makes it apparent that they took seriously agreements reached in the meetings.

85. Thus, (as the price instructions demonstrate) price initiatives once agreed were implemented by the

producers ordering or advising their national sales offices to raise their prices to the new levels or otherwise carry out actions earlier agreed in a meeting. They also set up system of regular reporting of their activities which allowed for the monitoring of agreed plans.

The producers' consensus involved on the part of all of them an acceptance if not a positive intention that an identified plan was envisaged and would be carried out. Whatever the unrecorded mental reservations of some may have been on a particular scheme or price initiative they were deeply involved in the overall plan to fix prices and divide up the market. The fact that on some occasions producers may not have maintained their initial resolve and gave concessions to customers on price which undermined the 'initiative' does not preclude an unlawful agreement having been reached within the meaning of Article 85 (1). Indeed, the instances of allegedly 'unruly' or 'disruptive' pricing by an individual producer from time to time attempting to gain market position at the expense of the others (before whom the 'transgressor' could be called upon to explain himself) does not negate the overwhelming evidence of a concerted plan to regulate the market.

In the particular case of Hercules the undertaking cannot escape responsibility for the infringement by arguing that the attendance of its representative was 'unofficial' or that he withheld certain information from the other producers.

### III. *Concerted practices*

86. The Commission considers that the operation of the cartel, being based on a common and detailed plan, constituted an 'agreement' within the meaning of Article 85 (1).

The concepts of 'agreements' and 'concerted practices' are distinct, but cases may arise where collusion presents some of the elements of both forms of prohibited cooperation.

A concerted practice relates to a form of cooperation between undertakings which without having reached the stage where an agreement properly so-called has been concluded, knowingly substitutes practical cooperation for the risks of competition.



87. The object of the Treaty in creating a separate concept of concerted practice is to forestall the possibility of undertakings evading the application of Article 85 (1) by colluding in an anti-competitive manner falling short of a definite agreement by (for example) informing each other in advance of the attitude each intends to adopt, so that each could regulate its commercial conduct in the knowledge that its competitors would behave in the same way: judgment of the Court of Justice of 14 July 1972 in *Imperial Chemical Industries Ltd v. Commission*, Case 48/69 ([1972] ECR 619).

In its judgement of 16 December 1975 in relation to the *European Sugar Cartel: Suiker Unie and others v. Commission*, Joined Cases 40—48, 50, 54 to 56, 111, 113 and 114/73 ([1975] ECR 1663) the Court of Justice held that the criteria of coordination and cooperation laid down by the case law of the Court, which in no way requires the working out of an actual plan, must be understood in the light of the concept inherent in the provisions of the Treaty relating to competition that each economic operator must determine independently the commercial policy which he intends to adopt in the common market. This requirement of independence does not deprive undertakings of the right to adapt themselves intelligently to the existing or anticipated conduct of their competitors but it does strictly preclude any direct or indirect contact between them the object or effect whereof is either to influence the conduct on the market of an actual or potential competitor or to disclose to such a competitor the course of conduct which they themselves have decided to adopt or contemplate adopting on the market.

Thus conduct may fall under Article 85 (1) as a 'concerted practice' even where the parties have not reached agreement in advance on a common plan defining their action in the market but adopt or adhere to collusive devices which facilitate the coordination of their commercial behaviour. This might apply to the measures taken in 1981 and 1982 to report and monitor individual deliveries in the absence of a final quota system (although the systematic exchange of the information must have involved an 'agreement' in itself: see point 82). Further, in a complex cartel, some producers at one time or another might not express their definite assent to a particular course of action agreed by the others but nevertheless indicate their general support for the scheme in question and conduct themselves accordingly.

Shell's expressed scepticism on quota schemes while at the same time indicating to ICI what allocation was acceptable to it (see point 57) may be viewed in this way. In certain respects therefore the continuing cooperation and collusion of the producers in the

implementation of the overall agreement may display the characteristics of a concerted practice.

The importance of the concept of a concerted practice does not thus result so much from the distinction between it and an 'agreement' as from the distinction between forms of collusion falling under Article 85 (1) and mere parallel behaviour with no element of concertation. Nothing therefore turns in the present case upon the precise form taken by the collusive arrangements.

88. Most of the producers, having argued during the administrative procedure that their conduct in relation to alleged price initiatives does not result from any 'agreement' within the meaning of Article 85 (see point 82), go on to assert that it cannot either form the basis of a finding of concerted practice. The latter concept (they argue) requires some 'overt act' in the market, which is claimed to be wholly absent from the present case: no price lists or 'target prices' were ever communicated to customers.

This argument must be rejected. Were it necessary in the present case to rely on proof of a concerted practice, the requirement for some steps to be taken by the participants to realize their common object is fully met. The various price initiatives are a matter of record. It is also undeniable that the individual producers took parallel action to implement them. The steps taken by the producers both individually and collectively are apparent from the documentary evidence: meeting reports, internal memoranda, instructions and circulars to sales offices and letters to customers (see points 24 to 27). It is wholly irrelevant whether or not they 'published' price lists. The price instructions themselves provide not only the best available evidence of the action taken by each producer to implement the common object but also by their content and timing reinforce the evidence of collusion.

#### IV. *The object and effect of the agreement*

89. Article 85 (1) expressly mentions as restrictive of competition agreements which directly or indirectly fix selling prices or share markets between producers, the essential characteristics of the agreements under consideration in the present case.

In the present case, the basic purpose behind the institution of the system of regular meetings and the continuing collusion of the producers was to achieve price increases by means of a complex of agreements and arrangements.

By planning common action on price initiatives with target prices for each grade and national currency effective from an agreed date, the producers aimed to eliminate the risks which would be involved in any unilateral attempt to increase prices.

The various quota systems and other mechanisms designed to accommodate the divergent interests of the established producers and the newcomers all had as their ultimate objective the creation of artificial conditions of 'stability' favourable to price rises.

In pursuit of these objectives, the producers were aiming at the organization of the polypropylene market on a basis which substituted for the free operation of competitive forces an institutionalized and systematic collusion between producers and amounted to a cartel.

The fact that the polypropylene market was characterized over a period of several years by under-utilization of capacity, with attendant losses by the producers, does not relieve the agreement of its anticompetitive object.

90. It is not strictly necessary, for the application of Article 85 (1), given the overtly anticompetitive object of the agreement, for an adverse effect upon competition to be demonstrated.

However, in the present case the evidence shows that the agreement did in fact produce an appreciable effect upon competitive conditions.

The agreement in meetings of target prices for each grade and national currency was implemented by the producers all issuing price instructions to their national sales offices or agents which then had to inform customers of the new price levels.

The customers were thus faced as a result of these concerted price initiatives with a uniform basic price in each currency for each major grade. Individual customers might benefit from special conditions or discounts and some producers might delay the planned increase or make concessions. Some producers might fix their actual prices for some grades or in some countries slightly below the targets while still determining such prices in the context of a general move by all the other producers ('shaving' the cartel

price). The setting however of a particular price level which was then presented to the market as 'the list price' or 'the official price' meant that the opportunities for customers to negotiate with producers were already circumscribed and they were deprived of many of the benefits which would otherwise be available from the free play of competitive forces.

The documentary evidence, including the market reports of the producers themselves, thus shows the existence in the market place of concerted price initiatives involving all producers and the close link between these initiatives and the system of regular meetings.

91. It is true that the achieved price level generally lagged behind the 'targets' and that price initiatives tended to run out of momentum, sometimes eventually resulting in a sharp drop in prices. However the graphs relied upon by the producers themselves show a regular pattern over the years of close parallel movement of target and actual levels. During the period covered by known price initiatives the price achieved each month moved up toward the agreed target. When there was a sudden price 'collapse' (for example, when propylene prices fell) this was arrested by fixing a new and much lower target and the upward trend was re-established. The success of such a tactic was particularly marked in July to November 1983.

The deliveries of most producers in the years when a system was in operation did not generally show a sharp variance from the quota or target which had been allocated (see Table 8 in Annex). For the years 1981 and 1982 when no quota system could be agreed it was inevitable that the more ambitious producers would increase their share of the market as compared with the previous year or period of reference. However, by the exchange each month of information on deliveries the other producers could at least adjust their own conduct and perception of the market so as to take account of the attitude of the more aggressive producers. Even during 1981 and 1982, however, a broad equilibrium between producers as compared with the previous years was maintained.

Some producers pointed to variances between their original target tonnage and their actual deliveries in the year in question (particularly in 1980) and argued that this phenomenon disproved the existence of any quota system. In fact during this year the 'tonnage' targets had been continuously revised and the agreed market division retained overall in terms of percentage share. ATO, for example, stressed the progressive



increase in the tonnage which it had sold each year in western Europe (from 39 000 tonnes in 1979 to 45 000 tonnes in 1982). In fact its achieved market share in percentage terms was constant throughout (between 3,1 % and 3,2 %) and corresponded almost precisely with its percentage target for each year.

It was also argued that the changes in the market share of some producers since 1977 were evidence of 'unrestricted' competition. This argument overlooks the fact that quotas or targets were agreed so as to take account of the ambitions of the newcomers and the larger firms were willing to accept some reduction in their own market share in the interests of increasing price levels.

92. The fact that in practice the cartelization of the market was incomplete and did not entirely exclude the operation of competitive forces does not preclude application of Article 85. Given the large number of producers, their divergent commercial interests and the absence of any enforceable measures of constraint in the event of non-compliance by a producer with agreed arrangements, no cartel could control totally the activities of the participants.

The Commission does not accept the argument implicit in the written and oral observations of several of the producers and in the econometric study which they commissioned that in the absence of their arrangements market developments would have been the same. What might have occurred had there been no agreement is a matter of speculation but it is significant that the producers themselves acknowledged the effectiveness of their meetings in rejecting the suggestion in May 1982 that they cease to meet, since it was considered better, if supply and demand were in equilibrium, to take 'active steps' to move prices up rather than leave it to the market.

#### V. *Effect upon trade between Member States*

93. The agreement between the producers was apt to have an appreciable effect upon trade between Member States.

Article 85 is aimed at agreements which might harm the attainment of a single market between the Member States, whether by partitioning national markets or by affecting the structure of competition within the common market.

In the present case the pervasive nature of the collusive agreement, which covered virtually all trade throughout the EEC (and other western European countries) in a major industrial product, must automatically result in the diversion of trade from the channels which would have developed in the absence of such an agreement.

Fixing prices at an artificial level by agreement rather than by leaving the market to find its own balance impaired the structure of competition throughout the Community. The undertakings were relieved of the immediate need to respond to market forces and deal with the claimed excess capacity problem.

94. The fixing of target prices for each Member State, although needing to take some account of the prevailing local conditions — discussed in detail in national meetings — must have distorted the pattern of trade and the effect on price levels of differences in efficiency between producers. The system of account leadership, in directing customers to particular named producers, aggravated the effect of the pricing arrangements.

It is acknowledged by the Commission that in setting quotas or targets the producers did not break the allocation down by Member State or by region. However, the very existence of a quota or target would operate to restrict the opportunities open to a producer. It is also significant that while it did not form the subject of an express agreement national producers were anxious in negotiations on volumes to retain or regain a certain percentage entitlement in their traditional or home markets.

#### VI. *Jurisdiction*

95. Article 85 of the EEC Treaty applies to restrictive agreements which may affect trade between Member States even if the undertakings involved are established or have their headquarters outside the Community.

The fact that two undertakings have their head office located outside the Community does not affect their liability in respect of the infringements alleged. Both LINZ and SAGA exported directly to and carried out a substantial business in polypropylene within the EEC which was covered by the cartel to which they were party. They both had local subsidiaries and agents in several Member States to which they gave

pricing instructions in accordance with the agreed targets. The quota arrangements included not only their sales outside the EEC but also deliveries in the Community which in fact accounted for the major part of their polypropylene business.

In so far as the activities of the cartel related to non-EEC States (Switzerland, Austria, Sweden, Finland and, at the relevant time, Spain and Portugal) these are outside the scope of the present Decision.

The applicability of Article 85 (1) of the EEC Treaty to the Norwegian and Austrian firms to which this Decision is addressed is not precluded by the free trade agreements between the European Economic Community on the one hand and Norway <sup>(1)</sup> and Austria <sup>(2)</sup> on the other. While those agreements stipulate that agreements between undertakings, decisions of associations of undertakings or concerted practices which are anti-competitive are incompatible with the agreements in so far as they may affect trade between the EEC and the State in question, and provide for a procedure for eliminating infringements of the rules of competition, they contain no provision which prevents the Commission from immediately applying Article 85 (1) to agreements which apply inside the EEC and affect trade between Member States.

The Commission has in its procedures with regard to LINZ and Statoil followed the recommendations of the OECD in competition matters.

## VII. Undertakings

96. The European petrochemical industry has been the subject of reorganization both during the period covered by the Commission's investigations and subsequently and in some cases the corporate structure of the undertakings involved has been changed.

Some producers which participated in the alleged infringements have transferred their activities in the sector to other undertakings: the polypropylene activities of ANIC for instance were taken over by Montepolimeri in a restructuring of the Italian plastics industry but ANIC still exists as an undertaking. The Commission does not consider that by transferring its activities in this sector to Montepolimeri ANIC is absolved from responsibility for infringements in which it participated until the latter part of 1982. The

same applies to Rhône-Poulenc which divested itself of its polypropylene activities at the beginning of 1981.

The change inside the Montedison grouping (since the opening of the present procedure the group's polypropylene business operates under the style of Montedipe) does not affect the application of Article 85 (1). Nor does the creation of the Himont operation by Hercules and the Montedison group, both of which still exist as the separate entities which were responsible for the infringements.

97. The reorganization of the Norwegian petrochemical industry and the merger of SAGA Petrokjemi into the government-owned Statoil group call for separate examination. This reorganization was completed and took legal effect shortly after the investigations conducted by the Commission, namely as from 1 January 1984.

The manufacturing capacity of the Norwegian thermoplastics industry is owned by IS Norpolefin, a partnership with legal personality set up in 1973 in which Norsk Hydro, Statoil and SAGA Petrokjemi each held a one-third interest. The operation of the Norpolefin plant and the marketing of its output was however entrusted to SAGA Petrokjemi under a management contract. Prior to 1982, SAGA Petrokjemi had had several shareholders, but in that year one of them, SAGA Petroleum, took over 100 % of the capital. In 1983 SAGA Petroleum took steps to dispose of SAGA Petrokjemi and eventually sold it to Statoil. The disposal was approved by the Norwegian Government and Parliament.

98. On 1 January 1984 SAGA Petrokjemi, which had been constituted as a partnership with legal personality under Norwegian law, ceased to exist as a separate legal entity, being absorbed into Statoil. It now forms a separate profit centre in the Statoil organization. By virtue of the merger of SAGA Petrokjemi with Statoil, Statoil took over the one-third share in IS Norpolefin and the benefit of the management agreement held until then by SAGA Petrokjemi. Statoil now operates in its own name the thermoplastics business formerly represented by SAGA Petrokjemi, continuing as 'manager' of the Norpolefin operation. The marketing subsidiaries of SAGA Petrokjemi in Denmark and the United Kingdom are now styled as subsidiaries of Statoil but perform exactly the same function as before in relation to the sale and marketing of thermoplastics.

Statoil contends that it is not liable for any infringements which may have been committed by

<sup>(1)</sup> OJ No L 171, 25. 6. 1973, p. 1.

<sup>(2)</sup> OJ No L 300, 31. 12. 1972, p. 3.

SAGA Petrokjemi, since that undertaking ceased to exist on 1 January 1984, that is between the date the alleged behaviour took place and the time the Commission issued statements of objections.

99. It is accepted by the Commission that there is no evidence that Statoil continued the infringement by participating in meetings or otherwise after the takeover of SAGA Petrokjemi. Nor is it suggested that the acquisition by Statoil was intended to frustrate the application of EEC competition rules. Moreover, even though Statoil has always been a partner in the Norpolefin operation (originally having a one third interest and now two-thirds) it is accepted that any infringement of Article 85 was committed not by Norpolefin but by SAGA Petrokjemi by reason of its management and marketing function.

It cannot seriously be contested that had SAGA Petrokjemi continued in existence in its original form the Commission could have imposed a fine upon it for its participation in the cartel in so far as this involved its function inside the EEC.

The essential issue for the purposes of the present case is whether following the merger and despite the changes in structure and legal form the undertaking which committed the infringement is still in existence or whether it has been liquidated.

The question is one to be determined exclusively by reference to the rules of Community law and cannot be made to depend upon rules of national law.

The subjects of EEC competition rules are undertakings, a concept which is not identical with the question of legal personality for the purposes of company law or fiscal law. The term 'undertaking' is not defined in the Treaty. It may, however, refer to any entity engaged in commercial activities and in the case of corporate bodies may refer to a parent or to a subsidiary or to the unit formed by the parent and subsidiaries together.

Although SAGA Petroleum held 56 % and ultimately 100 % of the beneficial interest in SAGA Petrokjemi, the Commission does not consider that the two formed a single 'undertaking' so that the behaviour of SAGA Petrokjemi could be imputed to SAGA Petroleum under the concept of 'undertaking identity'. SAGA Petrokjemi always operated as a separate commercial entity and cannot be considered as

forming part of the same economic unit as SAGA Petroleum. By contrast, however, the subsidiaries of SAGA Petrokjemi in Denmark and the United Kingdom did form part of the same business and their actions can be imputed to SAGA Petrokjemi.

100. In the present case the Commission considers that although it ceased to have a separate legal personality on the occasion of the merger with Statoil the undertaking which committed the infringement continued in existence. The fact that it has been subsumed into a larger group or undertaking, Statoil, is not determinative. Had Statoil on acquiring SAGA Petrokjemi constituted it as a separate subsidiary the Commission would not have been prevented from imposing a penalty on SAGA or Statoil. As the legal advisers of Statoil observed (making a different point) the precise form of a transfer was a matter of luck and circumstance and could depend on the vagaries of national law.

It is not necessary that Statoil be shown to have carried on or adopted the unlawful conduct of SAGA Petrokjemi for the Commission to be entitled to address a Decision to it. The determining factor is whether there is an economic and functional continuity between the original undertaking and its successor.

Statoil has not dissolved the business of SAGA Petrokjemi or liquidated its assets. On the contrary, it has continued the economic activities, and retained the essential functions, of SAGA for operating the Norpolefin plant and marketing its output. Statoil's own advertising material placed in the trade press soon after the takeover emphasizes the continuity of activity, management and employment: 'The many customers who buy plastic raw materials from Bamble will not notice any significant change. The only basic change is the name of the operator. The organization remains the same and the same people will continue with the work involved. Those who used to be employed by SAGA Petrokjemi are now employed by Statoil . . .' (ECN Scandinavia supplement, 26 March 1984). The continuity of management is underlined by the fact that the senior officer of SAGA Petrokjemi who represented it in meetings at the bosses level not only continued after the takeover in his previous position in SAGA of Vice-President for Marketing and Sales but was later promoted to President of Statoil's petrochemicals and plastics operations.

101. The case of SAGA Petrokjemi can be distinguished from that of ANIC and Rhône-Poulenc. In the latter two cases the undertaking which committed the infringement remains in being as a separate entity even

though it has disposed of its polypropylene business to other producers (Montepolimeri and BP). The Commission therefore holds ANIC and Rhône-Poulenc responsible for the infringement they committed until they ceased to participate in the cartel on leaving the polypropylene sector. In the case of SAGA Petrokjemmi on the other hand the undertaking which committed the infringement was merged and combined with another undertaking. Although the activities of Statoil are clearly much broader than those of the former SAGA Petrokjemmi the Commission considers that the merger does not extinguish the liability for anti-competitive behaviour of the undertaking which it absorbed. From an economic point of view the undertaking has continued.

Indeed the former SAGA Petrokjemmi operation now forms a separate profit centre inside Statoil and as such is still a separately identifiable entity in economic terms. However, for the purposes of enforcement it is always necessary to identify an entity possessing legal personality. A fine cannot be imposed upon a division of a company if it is not constituted as a separate legal entity and the Commission must proceed against the company even if its activities include other sectors besides the one to which the infringement relates.

The approach of the Commission is entirely consistent with its previous practice in Case IV/30.907 — Peroxygen products (Decision of 23 November 1984, *Official Journal of the European Communities* No L 35 of 7 February 1985, page 1). In that case PCUK the undertaking which committed the infringement, was split up after the infringement ceased and its peroxygen interests were absorbed by Atochem. The Commission held that since PCUK had ceased to exist as a separate legal entity Atochem, having taken over its peroxide business and adopted its economic objectives, must be the addressee of any Decision and responsible for the payment of any fines imposed in respect of infringements committed by PCUK.

102. In the Shell group, the undertaking responsible for the coordination and strategic planning in the thermoplastics sector is the 'service' company Shell International Chemical Company. It was this undertaking which participated in the meetings with the other majors and acted as the channel of communication between the cartel and the various Shell operating (manufacturing and selling) companies in the EEC. These companies took part in the national or local meetings.

By reason of its overall responsibility for the planning and coordination of the activities of the Shell group

companies in polypropylene the Commission considers that Shell International Chemical Company is the appropriate addressee of this Decision.

Petrofina did not have a separate marketing function outside Montefina — the joint Montepolimeri-Fina production company — until March 1982. Until that date Montefina sold the production of the Feluy plant on behalf of both the parents. However, for the purposes of calculating quotas, the entitlement of each of the parent companies was usually treated separately during this period. Petrofina was thus a participant in its own right in quota arrangements from 1980 onwards. Even if this were not the case, Petrofina must still take joint responsibility for any participation in the cartel by Montefina until March 1982.

#### VIII. Regulation (EEC) No 2988/74

103. Several producers named in connection with the 'floor price agreement' in mid-1977 have argued that such arrangements were entirely separate from any later system of regular meetings which developed so that the Commission is precluded from imposing any fines by virtue of Regulation (EEC) No 2988/74 <sup>(1)</sup> which applies a five year limitation period.

The Commission does not accept that the 'floor price' arrangements in mid-1977 were so distinct from the producers' later conduct dating from the end of 1977 as to benefit from the Regulation. The difference between the 'floor prices' and the 'minimum' or 'target' prices which were later fixed in regular meetings is largely one of terminology. Both ICI and Shell were at pains to emphasize that the 'floor price' discussions were not limited to the four major producers but involved others. The same situation — the arrival of new producers and the perceived slide in price levels — was said to be behind the 'floor price' system and the later more structured meetings.

Given the clear factual and circumstantial lien between the arrangements the Commission considers that in considering fines it is not precluded by Regulation (EEC) No 2988/74 from taking account of the so-called 'floor price' agreement of mid-1977.

<sup>(1)</sup> OJ No L 319, 29. 11. 1974, p. 1.

IX. *Duration of the infringement*

104. The involvement of the four majors — Hoechst, ICI, Montepolimeri and Shell — dates from the 'floor price agreement' made in mid-1977 and the 'initiative' led by Montepolimeri (then Montedison) at the end of the year.

Hercules, LINZ, Rhône-Poulenc, SAGA and Solvay all expressed their 'support' for the price initiative of December 1977 in circumstances which indicated their adherence to and association with a common design going far beyond independent business judgment.

ICI has stated that the regular participants in the producer meetings — which began in late 1977 at about the time of the December 1977 initiative and had been preceded by unofficial contacts — included besides the above-named producers ANIC, ATO, BASF, DSM and Huels, and later Petrofina.

105. The precise date on which each producer began to attend regular plenary meetings cannot be established with certainty but in the case of Hoechst, ICI, Montepolimeri, Shell, Hercules, LINZ, Rhône-Poulenc, SAGA and Solvay their involvement in the 'floor price agreement' and/or the collusive arrangements regarding the December 1977 price initiative is in any case established and dates from either mid-1977 or the end of that year.

The date on which ANIC, ATO, BASF, DSM and Huels began to participate in the arrangements cannot have been later than 1979 since all these five producers are shown to have been involved in the market sharing or quota systems which were first in force in that year.

Petrofina (via Montefina) did not enter the market until 1980 and even if its representatives only began to attend meetings regularly in March 1982 (Petrofina's position on this point is ambiguous) it was involved from 1980 in the quota arrangements.

The system of meetings continued until at least the end of September 1983. Most of the producers claim that with the Commission's investigations on 13 and 14 October of that year the meetings — or at least their participation therein — terminated. Whatever the date of the last meeting however the agreement continued to produce its effects at least until November 1983, the last month for which it is known that target prices were agreed.

For the purposes of assessing any fines, the Commission considers that while the infringement dated from mid-1977, the mechanism by which it was to operate was not completely established until about the beginning of 1979.

## B. Remedies

I. *Article 3 of Regulation No 17*

106. Where the Commission finds that there is an infringement of Article 85, it may require the undertakings concerned to bring such infringement to an end in accordance with Article 3 of Regulation No 17.

The undertakings have all vigorously denied that any infringement of Article 85 occurred. A number have continued to dispute that the regular meetings even touched on matters affecting competition. While some undertakings have informed the Commission that steps have been taken to ensure that its representatives no longer attend meetings, it is not known whether the meetings or communication between firms have in fact ever ceased.

It is therefore necessary for the Commission not only to find that an infringement has been committed but also to require the undertakings to terminate the said infringement.

In the case of the Fides information exchange, they must be prohibited from any unofficial contacts involving the exchange of information of competition significance normally considered as a trade secret and which could facilitate the continuation of any express or tacit market sharing agreement or understanding.

II. *Article 15 (2) of Regulation No 17*

107. Under Article 15 (2) of Regulation No 17, the Commission may by decision impose on undertakings fines of from one thousand to one million ECU, or a sum in excess thereof but not exceeding 10 % of the turnover in the preceding business year of each of the undertakings participating in the infringement where, either intentionally or negligently, they infringe Article 85 (1). In fixing the amount of the fine, regard is to be had to both the gravity and to the duration of the infringement.

The undertakings to which the Decision is addressed deliberately infringed Article 85. With full knowledge of the prohibition imposed by Community law and of the risks of substantial penalties they deliberately set up and operated a secret and institutionalized system



of regular meetings to fix prices and quotas in an important industrial product. Several of the undertakings concerned — BASF, Hoechst, ICI — had already been the subject of fines imposed by the Commission for collusion in the chemicals industry (Dyestuffs — Decision of 24 July 1969, *Official Journal of the European Communities* No L 195, of 7 August 1969, page 11).

The infringement was of relatively long duration, having begun in 1977. For the purposes of Article 15 (2) however the Commission considers that its more serious aspects were manifested from about the end of 1978 and the beginning of 1979 when quota or volume control schemes were established to reinforce price initiatives. The meetings continued at least until the Commission investigations and the effects of the agreement continued at least until the 1 November price initiative. There is every reason to believe that but for the unannounced investigations carried out by the Commission in October 1983 the cartel would have continued indefinitely. Although there is no substantive evidence to show that the infringement has in fact been terminated, the Commission will assess any fines on the basis of the operation of the cartel only up to late 1983.

The Commission considers the infringement to be of particular gravity and to merit substantial fines.

108. In determining the fines, the Commission has taken into account the following considerations:

- collusion on pricing and market sharing are by their very nature serious restrictions on competition,
- the polypropylene market is an important and rapidly expanding industrial sector worth in western Europe some 1 500 million ECU in 1983,
- the undertakings participating in the infringement account for almost the whole of this market,
- the collusion was institutionalized in a system of regular cartel meetings which set out to regulate and organize in explicit detail the market for polypropylene,
- the meetings were held in conditions of great secrecy,
- in mitigation of the penalties, it is however accepted that the undertakings incurred substantial losses on their polypropylene operations over a considerable period, that price initiatives generally did not achieve their objective in full and that in the last resort there were no measures of constraint to ensure compliance with quotas or other measures.

109. In assessing the fines to be imposed on individual undertakings the Commission has taken into consideration the role played by each in the collusive arrangements, the length of time they participated in the infringement, their respective deliveries of polypropylene to the Community and their individual total turnover.

The four largest producers — Montepolimeri, Hoechst, ICI and Shell — formed the nucleus of the arrangements and constituted an unofficial directorate the members of which considered themselves to have a special responsibility towards ensuring the success of the cartel.

Montepolimeri and ICI each held at some stage the chairmanship of the group and from the documentation it is apparent that this role was not a nominal one only. ICI in particular insisted that it would assume the responsibility for leading the group only on condition that greater efforts were made by all to achieve price rises and took the initiative in proposing a new and more effective quota system.

The Commission does not consider that any substantial individual mitigating factor arises from the fact that Shell did not attend the plenary sessions. It was involved from the beginning in the price initiatives and quota systems. Operating companies of the group took part in local meetings. Even before it began to attend 'pre-meetings' of the 'big four' in October 1982 it was meeting other major producers in detailed discussions on the matters covered by the regular bosses' and experts' sessions.

Similarly the fact that Hercules did not communicate its own detailed sales figures to the other producers, while itself benefiting from the information they supplied, does not constitute a mitigating factor.

Nor does the Commission accept that any substantial distinction can be made between the other producers on the basis of their individual degree of commitment to the agreed arrangements. Perception of individual interest may sometimes have diverged but all the producers were frequent attenders at the meetings and took steps to implement the cartel's decisions.

In the case of Petrofina, Rhône-Poulenc and ANIC, the Commission takes into account the shorter duration of their participation in the arrangements as compared with the other producers.

The Commission also takes into account that a very few of the producers cooperated (but not to the extent

that they claim) with the Commission's investigations, at least once the incriminating evidence had been discovered.

HAS ADOPTED THIS DECISION:

#### Article 1

ANIC SpA, ATO Chemie SA (now Atochem), BASF AG, DSM NV, Hercules Chemicals NV, Hoechst AG, Chemische Werke Huels (now Huels AG), ICI PLC, Chemische Werke LINZ, Montepolimeri SpA (now Montedipe), Petrofina SA, Rhône-Poulenc SA, Shell International Chemical CO. LTD, Solvay & Cie and SAGA Petrokjemis AG & Co. (now part of Statoil) have infringed Article 85 (1) of the EEC Treaty, by participating:

- in the case of ANIC, from about November 1977 until a date in late 1982 or early 1983,
- in the case of Rhône-Poulenc, from about November 1977 until the end of 1980,
- in the case of Petrofina, from 1980 until at least November 1983,
- in the case of Hoechst, ICI, Montepolimeri and Shell from about mid-1977 until at least November 1983,
- in the case of Hercules, LINZ and SAGA and Solvay from about November 1977 until at least November 1983,
- in the case of ATO, from at least 1978 until at least November 1983,
- in the case of BASF, DSM and Huels, from some time between 1977 and 1979 until at least November 1983,

in an agreement and concerted practice originating in mid-1977 by which the producers supplying polypropylene in the territory of the EEC:

- (a) contacted each other and met regularly (from the beginning of 1981, twice each month) in a series of secret meetings so as to discuss and determine their commercial policies;
- (b) set 'target' (or minimum) prices from time to time for the sale of the product in each Member State of the EEC;
- (c) agreed various measures designed to facilitate the implementation of such target prices, including (principally) temporary restrictions on output, the exchange of detailed information on their deliveries, the holding of local meetings and from late 1982 a system of 'account management' designed to implement price rises to individual customers;

- (d) introduced simultaneous price increases implementing the said targets;
- (e) shared the market by allocating to each producer an annual sales target or 'quota' (1979, 1980 and for at least part of 1983) or in default of a definitive agreement covering the whole year by requiring producers to limit their sales in each month by reference to some previous period (1981, 1982).

#### Article 2

The undertakings named in Article 1 shall forthwith bring the said infringement to an end (if they have not already done so) and shall henceforth refrain in relation to their polypropylene operations from any agreement or concerted practice which may have the same or similar object or effect, including any exchange of information of the kind normally covered by business secrecy by which the participants are directly or indirectly informed of the output, deliveries, stock levels, selling prices, costs or investment plans of other individual producers, or by which they might be able to monitor adherence to any express or tacit agreement or to any concerted practice covering prices or market sharing inside the EEC. Any scheme for the exchange of general information to which the producers subscribe (such as Fides) shall be so conducted as to exclude any information from which the behaviour of individual producers can be identified and in particular the undertakings shall refrain from exchanging between themselves any additional information of competitive significance not covered by such a system.

#### Article 3

The following fines are hereby imposed on the undertakings named herein in respect of the infringement found in Article:

- (i) ANIC SpA, a fine of 750 000 ECU, or Lit 1 103 692 500;
- (ii) Atochem, a fine of 1 750 000 ECU, or FF 11 973 325;
- (iii) BASF AG, a fine of 2 500 000 ECU, or DM 5 362 225;
- (iv) DSM NV, a fine of 2 750 000 ECU, or Fl 6 657 640;
- (v) Hercules Chemicals NV, a fine of 2 750 000 ECU, or Bfrs 120 569 620;
- (vi) Hoechst AG, a fine of 9 000 000 ECU, or DM 19 304 010;
- (vii) Huels AG, a fine of 2 750 000 ECU, or DM 5 898 447,50;
- (viii) ICI PLC, a fine of 10 000 000 ECU, or £ 6 447 970;
- (ix) Chemische Werke LINZ, a fine of 1 000 000 ECU, or Lit 1 471 590 000;
- (x) Montedipe, a fine of 11 000 000 ECU, or Lit 16 187 490 000;
- (xi) Petrofina SA, a fine of 600 000 ECU, or Bfrs 26 306 100;



- (xii) Rhône-Poulenc SA, a fine of 500 000 ECU, or FF 3 420 950;
- (xiii) Shell International Chemical Co. Ltd, a fine of 9 000 000 ECU, or £ 5 803 173;
- (xiv) Solvay & Cie, a fine of 2 500 000 ECU, or Bfrs 109 608 750;
- (xv) Statoil Den Norske Stats Oljeselskap AS (now incorporating SAGA Petrokjemi), a fine of 1 000 000 ECU, or £ 644 797.

#### Article 4

The fines imposed under Article 3 shall be paid within three months of the date of notification of this Decision to the following bank accounts:

##### Belgium

- (v), (xi), (xiv): No 426-4403001-52, Kredietbank, Agence Schuman, 2 Rond Point Schuman, 1040 Bruxelles.

##### Germany

- (iii), (vi), (vii): No 260/00/64910, Sal. Oppenheim und Cie, Untersachsenhausen 4, 5000 Köln 1.

##### France

- (ii), (xii): No 9957 M, Crédit Lyonnais, Agence Intern. in 693, 16, rue du 4 Septembre, 75002 Paris Cedex 02.

##### Italy

- (i), (ix), (x): No 26952/018, Cassa di Risparmio delle Provincie Lombarde, Via Monte di Pietà, 8, 20121 Milano.

##### United Kingdom

- (viii), (xiii), (xv): No 108.63.41, Lloyds Bank Ltd, Overseas Department, PO Box 19, 6 Eastcheap, London EC 3P 3AB.

##### Netherlands

- (iv): No 41.60.95.518, Amrobank, Rembrandtplein 47, Postbus 1220, 1000 EH Amsterdam.

#### Article 5

This Decision is addressed to:

- ANIC SpA, Direzione Generale, 2097 San Donato Milanese, Casella Postale 12120, I-20100 Milano,
- Atochem SA, La Défense 5, Cedex 24, F-92091 Paris la Défense,
- BASF AG, Karl Bosch Str. 38, D-6700 Ludwigshafen,
- DSM, PO Box 65, NL-6400 AB Heerlen,
- SA Hercules Chemicals NV, Mercure Centre, Raketstraat 100, B-1130 Brussels,
- HOECHST AG, Postfach 80 03 20, D-6230 Frankfurt-am-Main 80,
- HUELS AG, D-4370 Marl,
- ICI PLC, Imperial Chemical House, Millbank, GB-London SW1 P 3JF,
- CHEMISCHE WERKE LINZ AG,
  - (a) Postfach 2 96, A-4021 Linz (Austria);
  - (b) c/o Chemie Linz Italia, via Mascheroni 19, I-20145 Milano,
- Montedipe SpA, via Taramelli 26, I-20124 Milano,
- PETROFINA SA, Chemical Sales Division, 33 rue de la Loi, B-1040 Brussels,
- RHÔNE-POULENC SA, 25 Quai Paul Doumer, F-92408 Courbevoie-Cedex,
- SHELL Chemical International Trading Company, SHELL INTERNATIONAL CHEMICAL Co. Ltd, Shell Centre, GB-London SE 1 7PG,
- SOLVAY et CIE, 33 rue du Prince Albert, B-1050 Brussels,
- STATOIL, Den Norske Stats Oljeselskap AS,
  - (a) N-3960 Stathelle (Norway);
  - (b) c/o Statoil (UK) Ltd, 25-29 Queen Street, Maidenhead, GB-Berks SL 6 1NB.

This Decision is enforceable pursuant to Article 192 of the EEC Treaty.

Done at Brussels, 23 April 1986.

*For the Commission*

Peter SUTHERLAND

*Member of the Commission*

## ANNEX

TABLE 1

## MARKET SHARES IN WESTERN EUROPE (by Producer)

(in %)

|               | 1979 <sup>(1)</sup> | 1980 <sup>(1)</sup> | 1981 <sup>(1)</sup> | 1982 <sup>(1)</sup> |
|---------------|---------------------|---------------------|---------------------|---------------------|
| ATO           |                     |                     |                     |                     |
| SOLVAY        |                     |                     |                     |                     |
| BP            |                     |                     |                     |                     |
| ICI           |                     |                     |                     |                     |
| SHELL         |                     |                     |                     |                     |
| DSM           |                     |                     |                     |                     |
| FINA          |                     |                     |                     |                     |
| AMOCO         |                     |                     |                     |                     |
| HERCULES      |                     |                     |                     |                     |
| MONTEPOLIMERI |                     |                     |                     |                     |
| ANIC/SIR      |                     |                     |                     |                     |
| HOECHST       |                     |                     |                     |                     |
| BASF          |                     |                     |                     |                     |
| HUELS         |                     |                     |                     |                     |
| LINZ          |                     |                     |                     |                     |
| SAGA          |                     |                     |                     |                     |
| PAULAR        |                     |                     |                     |                     |
| TAQSA         |                     |                     |                     |                     |
|               | 100                 | 100                 | 100                 | 100                 |

<sup>(1)</sup> In the published version of the Decision, some figures have hereinafter been omitted, pursuant to the provisions of Article 21 of Regulation No 17 concerning non-disclosure of business secrets.

Source: Producers internal documents.

TABLE 2

## POLYPROPYLENE SALES OF WESTERN EUROPEAN PRODUCERS

(in Kt)

|  | 1979    | 1980    | 1981    | 1982    | 1983<br>(six months) |
|--|---------|---------|---------|---------|----------------------|
| France                                 | 146,3   | 155,3   | 175,7   | 194,2   | 115,8                |
| Germany                                | 269,0   | 259,8   | 281,2   | 299,5   | 176,3                |
| Belgium/Luxembourg                     | 60,2    | 68,1    | 88,7    | 110,0   | 65,8                 |
| Netherlands                            | 38,0    | 42,6    | 46,5    | 47,6    | 25,2                 |
| Italy                                  | 274,5   | 281,2   | 300,6   | 288,4   | 161,2                |
| United Kingdom                         | 235,2   | 203,7   | 227,0   | 228,3   | 127,8                |
| Ireland                                | 12,5    | 10,4    | 16,0    | 11,3    | 5,4                  |
| Denmark                                | 33,1    | 29,0    | 35,9    | 32,9    | 19,3                 |
| Greece                                 | 18,0    | 18,3    | 17,5    | 17,9    | 6,5                  |
| Total EEC                              | 1 086,8 | 1 068,3 | 1 189,1 | 1 230,1 | 703,3                |
| Remaining European countries           | 154,5   | 152,5   | 168,3   | 182,1   | 102,9                |
| Total western European countries       | 1 241,5 | 1 220,8 | 1 357,4 | 1 412,2 | 806,2                |
| Rest of the world                      | 201,8   | 257,1   | 299,5   | 357,8   | 198,5                |
| Total sales<br>(excluding coproducers) | 1 443,3 | 1 478   | 1 656,8 | 1 770,0 | 1 004,7              |

Source: FIDES data and producers' assessments.

TABLE 3

## DATES AND LOCATION OF KNOWN BOSSES' AND EXPERTS' MEETINGS

| Date                   | Location   | Type          |
|------------------------|------------|---------------|
| 26 – 27 September 1979 | not known  | not known     |
| 31 January 1980        | Zurich     | not known     |
| 19 March 1980          | Zurich     | bosses        |
| 7 May 1980             | Zurich     | not known     |
| 18 June 1980           | Milan      | not known     |
| 2 October 1980         | Zurich     | experts       |
| 13 – 15 October 1980   | Zurich     | experts       |
| 23 January 1981        | Geneva     | experts       |
| ? January 1981         | Geneva     | bosses        |
| 18 – 20 February 1981  | Copenhagen | not known     |
| 28 July 1981           | Geneva     | experts       |
| 4 August 1981          | Geneva     | bosses        |
| 28 August 1981         | Vienna     | not known     |
| 17 November 1981       | Copenhagen | bosses        |
| 20 November 1981       | Zurich     | experts       |
| 16 December 1981       | Zurich     | bosses        |
| 18 December 1981       | Vienna     | experts       |
| 14 January 1982        | Zurich     | experts       |
| 20 January 1982        | Zurich     | bosses        |
| 15 February 1982       | Milan      | experts       |
| 17 February 1982       | Zurich     | bosses        |
| 17 March 1982          | Zurich     | bosses        |
| 6 April 1982           | Zurich     | bosses        |
| 14 April 1982          | Zurich     | experts       |
| 13 May 1982            | Geneva     | experts       |
| 18 May 1982            | Zurich     | bosses        |
| 9 June 1982            | Zurich     | experts       |
| 16 June 1982           | Copenhagen | bosses        |
| 20 July 1982           | Vienna     | bosses        |
| 21 July 1982           | Vienna     | experts       |
| 12 August 1982         | Zurich     | extraordinary |
| 2 September 1982       | Zurich     | experts       |
| 21 September 1982      | Zurich     | bosses        |
| 6 October 1982         | Zurich     | experts       |
| 22 October 1982        | Zurich     | bosses        |
| 2 November 1982        | Barcelona  | experts       |
| 10 November 1982       | Zurich     | experts       |
| 19 November 1982       | Zurich     | bosses        |
| 2 December 1982        | Zurich     | experts       |
| 21 December 1982       | Zurich     | bosses        |
| 13 January 1983        | Geneva     | bosses        |
| 3 February 1983        | Vienna     | experts       |
| 16 February 1983       | Vienna     | bosses        |
| 4 March 1983           | Barcelona  | experts       |
| 14 April 1983          | Geneva     | bosses        |
| 3 May 1983             | Zurich     | experts       |
| 20 May 1983            | Barcelona  | bosses        |
| 1 June 1983            | Vienna     | experts       |
| 16 June 1983           | Vienna     | bosses        |
| 6 July 1983            | Zurich     | experts       |
| 10 August 1983         | London     | experts       |
| 23 August 1983         | Zurich     | bosses        |
| 5 September 1983       | Rome       | experts       |
| 15 September 1983      | Rome       | bosses        |
| 29 September 1983      | Zurich     | experts       |

TABLE 4

| Date         | Type           | Place      | ATO              | BASF | DSM | HERCULES         | HOECHST | HUELS                            | ICI | LINZ <sup>(3)</sup> | MONTEPOLI-MERI <sup>(4)</sup> | PETROFINA | SOLVAY | SAGA <sup>(1)</sup> |
|--------------|----------------|------------|------------------|------|-----|------------------|---------|----------------------------------|-----|---------------------|-------------------------------|-----------|--------|---------------------|
| 1982         |                |            |                  |      |     |                  |         |                                  |     |                     |                               |           |        |                     |
| 13 May       | Experts        | Geneva     | V                | V    | V   | V                | V       | V                                | V   | V                   | V                             | V         | V      | V                   |
| 18 May       | Bosses         | Zurich     | V                | ?    | V   | D                | V       | ?                                | V   | ?                   | P                             | V         | ?      | ?                   |
| 9 June       | Experts        | Zurich     | V                | V    | V   | V                | V       | V                                | V   | V                   | V                             | V         | V      | —                   |
| 16 June      | Bosses         | Copenhagen |                  |      |     |                  |         | No details available             |     |                     |                               |           |        |                     |
| 21 July      | Bosses/Experts | Vienna     | V                | V    | V   | V                | V       | V                                | V   | V                   | V                             | V         | V      | V                   |
| 12 August    | Special        | Zurich     | V                | V    | V   | —                | V       | —                                | V   | V                   | —                             | —         | —      | —                   |
|              |                |            |                  |      |     |                  |         | Extraordinary meeting for France |     |                     |                               |           |        |                     |
| 20 August    | Bosses         | Zurich     | V                | V    | V   | D                | V       | V                                | V   | V                   | V                             | V         | V      | V                   |
| 2 September  | Experts        | Zurich     | V                | V    | V   | V                | V       | V                                | V   | V                   | V                             | V         | V      | V                   |
| 21 September | Bosses         | Zurich     | V <sup>(1)</sup> | V    | V   | V <sup>(2)</sup> | V       | V                                | V   | V                   | V                             | V         | V      | V                   |
| 6 October    | Experts        | Zurich     | V                | V    | V   | V                | V       | V                                | V   | V                   | V                             | —         | V      | V                   |
| 22 October   | Bosses         | Zurich     | V                | V    | V   | —                | V       | V                                | V   | ?                   | V                             | V         | ?      | ?                   |
| 4 November   | Experts        | Barcelona  | V                | ?    | ?   | —                | V       | V                                | V   | ?                   | V                             | —         | V      | V                   |
| 10 November  | Experts        | Geneva     | V                | ?    | V   | —                | V       | ?                                | V   | ?                   | P <sup>(4)</sup>              | ?         | ?      | ?                   |
| 19 November  | Bosses         | Zurich     | V                | V    | V   | V                | V       | V                                | V   | ?                   | P                             | V         | ?      | ?                   |
| 2 December   | Experts        | Zurich     | V                | V    | V   | V                | V       | V                                | V   | V                   | V                             | V         | V      | V                   |
| 21 December  | Bosses         | Zurich     | D                | V    | V   | V                | V       | V                                | V   | ?                   | P                             | V         | ?      | ?                   |

<sup>(1)</sup> ATO claims not to have attended on 21 September 1982 but ICI meeting record shows it did participate.  
<sup>(2)</sup> Hercules claims not to have attended these meetings but its travel records and/or ICI's report indicate otherwise.  
<sup>(3)</sup> LINZ and Statoil did not provide details under Article 11 of Regulation No 17 of participation in individual meetings but their presence at certain meetings is established by ICI notes and they were both regular participants.  
<sup>(4)</sup> Montepolimeri's account under Article 11 of Regulation No 17 of its attendance at meetings is incomplete but its definite presence at certain other meetings is established by ICI notes.

Key:  
V = Presence at meeting established by documentary evidence (meeting notes or travel records).  
P = Presence at meeting probable.  
D = Presence at meeting doubtful or denied.  
? = Information not available.  
— = Absence from meeting established.

TABLE 4 (cont.)

| Date         | Type    | Place     | ATO | BASF | DSM | HERCULES         | HOECHST | HUELS | ICI | LINZ <sup>(3)</sup> | MONTEPOLI-MERI <sup>(4)</sup> | PETROFINA | SOLVAY | SAGA <sup>(3)</sup> |
|--------------|---------|-----------|-----|------|-----|------------------|---------|-------|-----|---------------------|-------------------------------|-----------|--------|---------------------|
| 1983         |         |           |     |      |     |                  |         |       |     |                     |                               |           |        |                     |
| 13 January   | Bosses  | Geneva    | V   | V    | P   | V                | V       | V     | V   | ?                   | V                             | V         | V      | ?                   |
| 3 February   | Experts | Vienna    | V   | V    | V   | V <sup>(1)</sup> | V       | V     | V   | ?                   | V                             | V         | V      | ?                   |
| 16 February  | Bosses  | Vienna    | V   | V    | V   | V                | V       | V     | V   | ?                   | V                             | V         | D      | ?                   |
| 3 March      | Experts | Barcelona | V   | D    | V   | V                | V       | V     | V   | ?                   | V                             | V         | V      | ?                   |
| 16 March     | Bosses  | Madrid    | V   | D    | V   | D                | V       | V     | V   | ?                   | P                             | V         | V      | ?                   |
| 14 April     | Bosses  | Geneva    | V   | V    | V   | —                | V       | V     | V   | ?                   | V                             | V         | V      | ?                   |
| 3 May        | Experts | Zurich    | V   | V    | V   | —                | V       | V     | V   | V                   | V                             | V         | V      | V                   |
| 20 May       | Bosses  | Barcelona | V   | V    | V   | —                | V       | V     | V   | ?                   | V                             | V         | V      | ?                   |
| 1 June       | Experts | Vienna    | V   | V    | V   | —                | V       | V     | V   | V                   | V                             | V         | —      | V                   |
| 16 June      | Bosses  | Vienna    | V   | V    | V   | —                | V       | V     | V   | ?                   | V                             | V         | V      | ?                   |
| 6 July       | Experts | Zurich    | V   | V    | V   | V                | V       | V     | V   | ?                   | P                             | V         | D      | ?                   |
| 21 July      | Bosses  | Zurich    | V   | V    | V   | D                | V       | V     | V   | ?                   | P                             | V         | V      | ?                   |
| 10 August    | Experts | London    | V   | V    | V   | D                | V       | V     | V   | ?                   | P                             | V         | V      | ?                   |
| 23 August    | Bosses  | Zurich    | D   | V    | V   | V                | V       | V     | V   | ?                   | P                             | V         | V      | ?                   |
| 5 September  | Experts | Rome      | ?   | ?    | V   | —                | V       | V     | V   | ?                   | V                             | ?         | V      | ?                   |
| 15 September | Bosses  | Rome      | D   | V    | V   | —                | V       | V     | V   | ?                   | V                             | V         | V      | ?                   |
| 30 September | Experts | Zurich    | ?   | V    | V   |                  | V       | V     | V   | ?                   | V                             | V         | D      | ?                   |

(2) Hercules claims not to have attended these meetings but its travel records and/or ICI's report indicate otherwise.  
(3) LINZ and Statoil did not provide details under Article 11 of Regulation No 17 of participation in individual meetings but their presence at certain meetings is established by ICI notes and they were both regular participants.  
(4) Montepolimeri's account under Article 11 of Regulation of its attendance at meetings is incomplete but its definite presence at certain other meetings is established by ICI notes.

Key:  
V = Presence at meeting established by documentary evidence (meeting notes or travel records).  
P = Presence at meeting probable.  
D = Presence at meeting doubtful or denied.  
? = Information not available.  
— = Absence from meeting established.

TABLE 5  
‘BIG FOUR PRE-MEETINGS’

| Date             | Location  | Participants                          |
|------------------|-----------|---------------------------------------|
| 13 October 1982  | Heathrow  | HOECHST — ICI — MONTEPOLIMERI — SHELL |
| 20 December 1982 | Zurich    | HOECHST — ICI — MONTEPOLIMERI — SHELL |
| 12 January 1983  | Geneva    | HOECHST — ICI — MONTEPOLIMERI — SHELL |
| 15 February 1983 | Vienna    | HOECHST — ICI — MONTEPOLIMERI — SHELL |
| 13 April 1983    | Geneva    | HOECHST — ICI — MONTEPOLIMERI — SHELL |
| 19 May 1983      | Barcelona | HOECHST — ICI — MONTEPOLIMERI — SHELL |
| 22 August 1983   | Zurich    | HOECHST — ICI — MONTEPOLIMERI — SHELL |



TABLE 6

## DATES AND LOCATION OF KNOWN LOCAL MEETINGS: 1982 to 1983

| Date              | Country/Area   | Location   |
|-------------------|----------------|------------|
| 1982              |                |            |
| 4 February 1982   | United Kingdom | London     |
| 5 February 1982   | Belgium        | Brussels   |
| 22 February 1982  | France         | Paris      |
| 8 April 1982      | Belgium        | Brussels   |
| 3 May 1982        | France         | Paris      |
| 4 May 1982        | Belgium        | Brussels   |
| 2 June 1982       | United Kingdom | London     |
| 8 June 1982       | France         | Paris      |
| 16 June 1982      | Belgium        | Brussels   |
| 30 June 1982      | France         | Paris      |
| 9 July 1982       | Belgium        | Brussels   |
| 23 August 1982    | Belgium        | Brussels   |
| 13 September 1982 | United Kingdom | London     |
| 14 September 1982 | Belgium        | Brussels   |
| 18 October 1982   | United Kingdom | London     |
| 20 October 1982   | Belgium        | Brussels   |
| 15 November 1982  | United Kingdom | London     |
| 23 November 1982  | Belgium        | Brussels   |
| 17 December 1982  | Belgium        | Brussels   |
| 1983              |                |            |
| 20 January 1983   | United Kingdom | London     |
| 28 January 1983   | Belgium        | Brussels   |
| 3 February 1983   | France         | Paris      |
| 25 February 1983  | Belgium        | Brussels   |
| 1 March 1983      | France         | Paris      |
| 7 March 1983      | Scandinavia    | Copenhagen |
| 10 March 1983     | United Kingdom | London     |
| 22 March 1983     | France         | Paris      |
| 25 March 1983     | Belgium        | Brussels   |
| 7 April 1983      | United Kingdom | London     |
| 6 May 1983        | Belgium        | Brussels   |
| 10 May 1983       | Scandinavia    | Gothenburg |
| 16 May 1983       | Belgium        | Brussels   |
| 18 May 1983       | France         | Paris      |
| 17 June 1983      | Belgium        | Brussels   |
| 5 July 1983       | United Kingdom | London     |
| 28 July 1983      | United Kingdom | London     |
| 12 August 1983    | Belgium        | Brussels   |
| 24 August 1983    | Scandinavia    | Copenhagen |
| 24 August 1983    | France         | Paris      |
| 7 September 1983  | Belgium        | Brussels   |
| 9 September 1983  | United Kingdom | London     |
| 23 September 1983 | Netherlands    | Amsterdam  |
| 3 October 1983    | Belgium        | Brussels   |

TABLE 7A  
1 September 1979

|                       | Target<br>1 September | ATO                   | BASF                               | HOECHST              | ICI                 | LINZ                | MONTE-<br>POLIMERI             | SHELL                          |
|-----------------------|-----------------------|-----------------------|------------------------------------|----------------------|---------------------|---------------------|--------------------------------|--------------------------------|
|                       |                       | Date of communication |                                    |                      |                     |                     |                                |                                |
|                       |                       | 29 August<br>1979     | 24 – 27 July<br>1979               | 1 – 9 August<br>1979 | 30 July<br>1979     | 20 June<br>1979     | 30 July<br>1979 <sup>(2)</sup> | 30 July<br>1979 <sup>(3)</sup> |
|                       |                       | Effective date        |                                    |                      |                     |                     |                                |                                |
|                       |                       | 1 September<br>1979   | 1 September<br>1979 <sup>(1)</sup> | 1 September<br>1979  | 1 September<br>1979 | 1 September<br>1979 | 27 August<br>1979              | 1 September<br>1979            |
| <b>Raffia</b>         |                       |                       |                                    |                      |                     |                     |                                |                                |
| DM                    | 2,05 <sup>(1)</sup>   |                       | 2,05                               | 2,02 – 2,07          | 2,05                | 2,05                | 2,05                           |                                |
| Lit                   |                       |                       | 920                                | 920                  |                     |                     | 920                            |                                |
| £                     |                       |                       | 500                                |                      | 500                 |                     | 500                            | 500                            |
| FF                    |                       | 4,70                  | 4,70                               |                      |                     |                     | 4,70                           |                                |
| Bfrs                  |                       |                       | 33                                 | 33                   |                     |                     | 33                             |                                |
| <b>Homopolymer IM</b> |                       |                       |                                    |                      |                     |                     |                                |                                |
| DM                    |                       |                       | 2,05                               | 2,02 – 2,07          | 2,05                |                     |                                |                                |
| Lit                   |                       |                       | 920                                | 920                  |                     |                     |                                |                                |
| £                     |                       |                       | 510                                |                      | 510                 |                     |                                | 510                            |
| FF                    |                       | 4,70                  | 4,70                               |                      |                     |                     |                                |                                |
| Bfrs                  |                       |                       | 33                                 | 33                   |                     |                     |                                |                                |
| <b>Copolymer GP</b>   |                       |                       |                                    |                      |                     |                     |                                |                                |
| DM                    |                       |                       |                                    |                      | 2,20                |                     |                                |                                |
| Lit                   |                       |                       |                                    |                      |                     |                     |                                |                                |
| £                     |                       |                       |                                    |                      | 550                 |                     |                                | 550                            |
| FF                    |                       | 5,00                  |                                    |                      |                     |                     |                                |                                |
| Bfrs                  |                       |                       |                                    |                      |                     |                     |                                |                                |

<sup>(1)</sup> For Germany: 20 August 1979.

<sup>(2)</sup> As per Press release and ECN report.

<sup>(3)</sup> Handwritten 'floor' prices corresponding with ICI memorandum of same date.

TABLE 7B

January 1981

|                       | DSM                   | HOECHST                      | ICI             | LINZ             | MONTEPOLI-MERI   | SAGA                 | SHELL            |
|-----------------------|-----------------------|------------------------------|-----------------|------------------|------------------|----------------------|------------------|
|                       | Date of communication |                              |                 |                  |                  |                      |                  |
|                       | 8 December 1980       | 29 October 1980              | 1 December 1980 | 31 December 1980 | 9 December 1980  | 3 – 15 December 1980 | 17 December 1980 |
|                       | Effective date        |                              |                 |                  |                  |                      |                  |
|                       | 1 January 1981        | December 1980 – January 1981 | 5 January 1981  | 1 January 1981   | 31 December 1980 | 1 January 1981       | 1 January 1981   |
| <b>Raffia</b>         |                       |                              |                 |                  |                  |                      |                  |
| DM                    | 1,50                  | 1,50                         | 1,50            | 1,50             |                  | 1,50                 | 1,50             |
| Lit                   |                       |                              | 720             |                  | 720              | 720                  |                  |
| £                     | 325                   |                              | 320             |                  |                  | 320/350              |                  |
| FF                    | 3,50                  |                              | 3,50            |                  |                  | 3,50                 |                  |
| <b>Homopolymer IM</b> |                       |                              |                 |                  |                  |                      |                  |
| DM                    | 1,70                  | 1,70                         | 1,70            | 1,70             |                  | 1,70                 | 1,70             |
| Lit                   | —                     |                              | 750             |                  | 750              |                      |                  |
| £                     | 380                   |                              | 380             |                  |                  | 380/395              |                  |
| FF                    | 4,00                  |                              | 4,00            |                  |                  | 4,00                 |                  |
| <b>Copolymer GP</b>   |                       |                              |                 |                  |                  |                      |                  |
| DM                    | 2,00                  | 1,95                         | 2,00            | 1,95             |                  | 2,00                 | 2,00             |
| Lit                   | —                     |                              | 850             |                  | 870              |                      |                  |
| £                     | 430                   |                              | 430             |                  |                  | 430/465              |                  |
| FF                    | 4,40                  |                              | 4,30            |                  |                  | 4,70                 |                  |

TABLE 7C

1 February 1981

|                       | Target<br>1 February<br>1981 <sup>(1)</sup> | BASF                  | DSM                | HOECHST                | ICI                 | LINZ                | MONTE-<br>POLIMERI                 | SHELL               |
|-----------------------|---|-----------------------|--------------------|------------------------|---------------------|---------------------|------------------------------------|---------------------|
|                       |   | Date of communication |                    |                        |                     |                     |                                    |                     |
|                       |   | 22 December<br>1980   | 26 January<br>1980 | 5 – 16 January<br>1980 | 31 December<br>1980 | 31 December<br>1980 | 23 December<br>1980 <sup>(2)</sup> | 17 December<br>1980 |
|                       |   | Effective date        |                    |                        |                     |                     |                                    |                     |
|                       |   | 4 weeks<br>later      | 1 February<br>1981 | February<br>1981       | February<br>1981    | February<br>1981    | 1 February<br>1981                 | 1 February<br>1981  |
| <b>Raffia</b>         |   |                       |                    |                        |                     |                     |                                    |                     |
| DM                    | 1,75  | 1,77                  | 1,75               | 1,75                   | 1,75                | 1,75                |                                    | 1,75                |
| Lit                   | 820   | 820                   |                    | 820                    | 820                 |                     | 820                                |                     |
| £                     | 370   | 370                   | 370                | 370                    |                     |                     |                                    |                     |
| FF                    | 4,00  | 4,00                  | 4,00               |                        | 4,00                |                     |                                    |                     |
| Bfrs                  | 27 – 28                                     | 27                    | 27                 | 27                     |                     |                     |                                    |                     |
| Fl                    | 1,90  |                       | 1,90               |                        |                     |                     |                                    |                     |
| <b>Homopolymer IM</b> |   |                       |                    |                        |                     |                     |                                    |                     |
| DM                    | 1,85  | 1,87                  | 1,85               | 1,85                   | 1,85                | 1,85                |                                    |                     |
| Lit                   | 850   | 850                   |                    | 850                    | 850                 |                     | 850                                |                     |
| £                     | 400   | 450                   | 400                | 400                    |                     |                     |                                    |                     |
| FF                    | 4,30  | 4,30                  | 4,30               |                        | 4,30                |                     |                                    |                     |
| Bfrs                  | 29,50                                       | 29,50                 | 29,50              | 29,50                  |                     |                     |                                    |                     |
| Fl                    | 2,00  |                       | 2,00               |                        |                     |                     |                                    |                     |
| <b>Copolymer GP</b>   |   |                       |                    |                        |                     |                     |                                    |                     |
| DM                    | 2,00  | 2,02                  | 2,00               | 2,00                   | 2,00                | 2,00                |                                    |                     |
| Lit                   | 950   | 950                   |                    | 950                    | 950                 |                     | 950                                |                     |
| £                     | 450   | 470                   | 470                | 430                    |                     |                     |                                    |                     |
| FF                    | 4,65  | 4,65                  | 4,60               |                        | 4,60                |                     |                                    |                     |
| Bfrs                  | 32,25                                       | 34,25                 | 32,25              | 32,25                  |                     |                     |                                    |                     |
| Fl                    | 2,15  |                       | 2,15               |                        |                     |                     |                                    |                     |

<sup>(1)</sup> As per table attached to ICI meeting report of January 1981.

TABLE 7D  
March—April 1981

|                       | Target<br>1 March<br>1981 <sup>(1)</sup> | BASF                     | DSM                | HOECHST                   | ICI                                | LINZ                | MONTE-<br>POLIMERI | SAGA                | SHELL               |
|-----------------------|--|--------------------------|--------------------|---------------------------|------------------------------------|---------------------|--------------------|---------------------|---------------------|
|                       |  | Date of communication    |                    |                           |                                    |                     |                    |                     |                     |
|                       |  | 5–25<br>February<br>1981 | 26 January<br>1981 | 10–20<br>February<br>1981 | 28 January/<br>27 February<br>1981 | 26 February<br>1981 | 27 March<br>1981   | 23 February<br>1981 | 27 March<br>1981    |
|                       |  | Effective date           |                    |                           |                                    |                     |                    |                     |                     |
|                       |  | 1 March<br>1981          | 1 March<br>1981    | March<br>1981             | March<br>1981                      | March<br>1981       | 1 April<br>1981    | 7 March<br>1981     | April<br>1981       |
| <b>Raffia</b>         |  |                          |                    |                           |                                    |                     |                    |                     |                     |
| DM                    | 2,00                                     | 2,00                     | 2,00               | 2,05                      | 2,00                               | 2,00                | (2,00)             |                     | 2,00 <sup>(2)</sup> |
| Lit                   | 950                                      | 950                      |                    | (950)                     |                                    |                     | (1 000)            |                     |                     |
| £                     | 410                                      | 400                      | 410                | (410)                     | 410                                |                     | (410)              | 410                 | (410)               |
| FF                    | 4,60                                     | 4,60                     | 4,60               |                           | 4,60                               |                     | (4,70)             |                     |                     |
| Bfrs                  | 32 (33)                                  | 32                       | 32                 | 32                        | 32                                 |                     | (32)               |                     |                     |
| Fl                    | 2,10                                     |                          | 2,15               |                           |                                    |                     | (2,15)             |                     |                     |
| <b>Homopolymer IM</b> |  |                          |                    |                           |                                    |                     |                    |                     |                     |
| DM                    | 2,10                                     | 2,10                     | 2,10               | 2,15                      | 2,10                               | 2,10                | (2,10)             |                     |                     |
| Lit                   | 980                                      | 980                      |                    | (980)                     |                                    |                     | (1 030)            |                     |                     |
| £                     | 430/420                                  | 430                      | 430                | (420)                     | 420                                |                     | (420)              | 420                 |                     |
| FF                    | 4,90                                     | 4,90                     | 4,90               |                           | 4,90                               |                     | (5,00)             |                     |                     |
| Bfrs                  | 33,50                                    | 33,50                    | 33,50              | 33,50                     | 33,50                              |                     | (33,50)            |                     |                     |
| Fl                    | 2,25                                     |                          | 2,25               |                           |                                    |                     | (2,25)             |                     |                     |
| <b>Copolymer GP</b>   |  |                          |                    |                           |                                    |                     |                    |                     |                     |
| DM                    | 2,25                                     | 2,25                     | 2,25               | 2,30                      | 2,25                               | 2,25                | (2,25)             |                     |                     |
| Lit                   | 1 080                                    | 1 080                    |                    | (1 080)                   |                                    |                     | (1 130)            |                     |                     |
| £                     | 465/470                                  | 465                      | 465                | (470)                     | 470                                |                     | (470)              | 470                 | (470)               |
| FF                    | 5,20                                     | 5,20                     | 5,20               |                           | 5,20                               |                     | (5,30)             |                     |                     |
| Bfrs                  | 36                                       | 38,25                    | 36                 | 36                        | 36                                 |                     | (36)               |                     |                     |
| Fl                    | 2,45                                     |                          | 2,45               |                           |                                    |                     | (2,45)             |                     |                     |

<sup>(1)</sup> As per table attached to ICI meeting report of January 1981.

<sup>(2)</sup> Shell meeting briefing paper noted 'Price objective 2 DM/kg minimum for 1 March 1981'.

N.B.: The amounts in parenthesis are price increases for April.

TABLE 7E

May 1981

|                       | BASF  | DSM           | HOECHST       | ICI  | MONTEPOLIMERI | SHELL         |
|-----------------------|---|---------------|---------------|--|---------------|---------------|
|                       | Date of communication                       |               |               |  |               |               |
|                       | 27 March 1981;<br>6 May 1981<br>(confirmed) | 28 April 1981 | 23 April 1981 | 27 March 1981;<br>24 April 1981<br>(confirmed) | 27 March 1981 | 27 March 1981 |
|                       | Effective date                              |               |               |  |               |               |
|                       | 1 May 1981                                  | 1 May 1981    | 1 May 1981    | 1 May 1981                                     | 1 May 1981    | 1 May 1981    |
| <b>Raffia</b>         |   |               |               |  |               |               |
| DM                    | 2,15  | 2,15          | 2,15          | 2,15   | 2,15          | 2,15          |
| Lit                   | 1 050                                       | 1 075         |               |  | 1 075         |               |
| £                     | 450   | 450           |               | 450  | 445           | 450           |
| FF                    | 4,90  | 5,00          |               |  | 5,05          |               |
| Bfrs                  | 34  | 35            |               |  | 34,50         |               |
| Fl                    |   | 2,35          |               |  | 2,30          |               |
| Dkr                   |   | 6,75          |               |  | 6,75          |               |
| <b>Homopolymer IM</b> |   |               |               |  |               |               |
| DM                    | 2,25  | 2,25          | 2,25          | 2,25   | 2,25          | —             |
| Lit                   | 1 075                                       | 1 100         |               |  | 1 110         |               |
| £                     | 460   | 470           |               | 460  | 455           | —             |
| FF                    | 5,20  | 5,30          |               |  | 5,35          |               |
| Bfrs                  | 35,50                                       | 36,50         |               |  | 36            |               |
| Fl                    |   | 2,45          |               |  | 2,40          |               |
| Dkr                   |   | 7,05          |               |  | 7,05          |               |
| <b>Copolymer GP</b>   |   |               |               |  |               |               |
| DM                    | 2,40  | 2,40          | 2,40          | 2,40   | 2,40          | —             |
| Lit                   | 1 175                                       | 1 200         |               |  | 1 200         |               |
| £                     | 520   | 520           |               | 520  | 505           | 520           |
| FF                    | 5,40  | 5,60          |               |  | 5,65          |               |
| Bfrs                  | 38  | 39            |               |  | 38,50         |               |
| Fl                    |   | 2,65          |               |  | 2,60          |               |
| Dkr                   |   | 7,45          |               |  | 7,45          |               |



TABLE 7F

September 1981

|                       | BASF                  | DSM              | HERCULES                    | HOECHST          | ICI              | MONTEPOLIMERI    | SHELL          |
|-----------------------|-----------------------|------------------|-----------------------------|------------------|------------------|------------------|----------------|
|                       | Date of communication |                  |                             |                  |                  |                  |                |
|                       | 7 August 1981         | 6 August 1981    | 29 July 1981 <sup>(1)</sup> | 10 July 1981     | 4 August 1981    | 4 September 1981 | 28 August 1981 |
|                       | Effective date        |                  |                             |                  |                  |                  |                |
|                       | 7 September 1981      | 1 September 1981 | September 1981              | 1 September 1981 | 1 September 1981 | September 1981   | September 1981 |
| <b>Raffia</b>         |                       |                  |                             |                  |                  |                  |                |
| DM                    |                       | 2,20             | 2,20                        | —                |                  | 2,30             | 2,20           |
| £                     | 425                   | 425              |                             |                  | 425<br>(= + 40)  |                  | + 40           |
| FF                    | 5,20                  | 5,20             |                             |                  |                  | 5,20             |                |
| <b>Homopolymer IM</b> |                       |                  |                             |                  |                  |                  |                |
| DM                    |                       | 2,40             | 2,40                        | 2,40             |                  | 2,40             |                |
| £                     | 450                   | 450              |                             |                  | 450              |                  |                |
| FF                    | 5,50                  | 5,50             |                             |                  |                  | 5,50             |                |
| <b>Copolymer GP</b>   |                       |                  |                             |                  |                  |                  |                |
| DM                    |                       | 2,55             | 2,55                        | 2,55             |                  | 2,55             |                |
| £                     | 500                   | 500              |                             |                  | 500              |                  |                |
| FF                    | 5,80                  | 5,80             |                             |                  |                  | 5,80             |                |

<sup>(1)</sup> Hercules note of 'official prices' for September (Price instructions to sales offices not available from Hercules).

TABLE 7G

October 1981

|                       | BASF  | DSM              | HOECHST        | ICI              | MONTEPOLIMERI    | SHELL                               |
|-----------------------|---|------------------|----------------|------------------|------------------|-------------------------------------|
|                       | Date of communication   |                  |                |                  |                  |                                     |
|                       | 7 September 1981  | 4 September 1981 | 10 August 1981 | 7 September 1981 | 4 September 1981 | 28 August 1981;<br>8 September 1981 |
|                       | Effective date  |                  |                |                  |                  |                                     |
|                       | 1 October 1981<br>(Germany)<br>5 October 1981<br>(United Kingdom) | October 1981     | October 1981   | 5 October 1981   | October 1981     | 1 October 1981                      |
| <b>Raffia</b>         |   |                  |                |                  |                  |                                     |
| DM                    | 2,30  | 2,30             | 2,30           |                  | 2,30             | 2,30                                |
| Lit                   |   | 1 150            |                |                  | 1 150            |                                     |
| £                     | 485   | 500              |                | 485<br>(= + 60)  |                  | (+ 60)                              |
| FF                    |   | 5,50             |                |                  | 5,50             |                                     |
| <b>Homopolymer IM</b> |   |                  |                |                  |                  |                                     |
| DM                    | 2,40  | 2,40             | 2,40           |                  | 2,40             |                                     |
| Lit                   |   | 1 180            |                |                  | 1 180            |                                     |
| £                     | 510   | 520              |                | 510              |                  | 510                                 |
| FF                    |   | 5,80             |                |                  | 5,80             |                                     |
| <b>Copolymer GP</b>   |   |                  |                |                  |                  |                                     |
| DM                    | 2,55  | 2,55             | 2,55           |                  | 2,55             |                                     |
| Lit                   |   | 1 280            |                |                  | 1 280            |                                     |
| £                     | 560   | 560              |                | 560              |                  | 560                                 |
| FF                    |   | 6,10             |                |                  | 6,10             |                                     |

TABLE 7H  
1 June 1982

|                |       | ATO            | BASF                       | HOECHST     | HERCULES       | Date of communication |                 |             |                |           | LINZ      | MONTEPOLIMERI | SHELL |
|----------------|-------|----------------|----------------------------|-------------|----------------|-----------------------|-----------------|-------------|----------------|-----------|-----------|---------------|-------|
|                |       | 27 May 1982    | 3—19 May 1982              | 25 May 1982 | 18—19 May 1982 | 14 May 1982           | 17 May 1982     | 25 May 1982 | 14—17 May 1982 |           |           |               |       |
|                |       | 1 June 1982    | June 1982<br>(UK mid-June) | 1 June 1982 | June 1982      | immediate             | 14 June 1982    | June 1982   | June 1982      | June 1982 | June 1982 | 21 June 1982  |       |
|                |       | Effective Date |                            |             |                |                       |                 |             |                |           |           |               |       |
| Raffia         | DM    | 2,00           | 2,00                       |             | 2,00           | 2,00                  |                 |             |                |           | 2,00      |               |       |
|                | Lit   | 1 100          | 1 100                      |             | 1 100          | 1 100                 |                 |             |                |           | 1 100     |               |       |
|                | £     | 490            | 490                        |             | 485            |                       | 490<br>(= + 50) |             |                |           |           | = + 50        |       |
|                |       | (14 June)      |                            |             |                |                       |                 |             |                |           |           |               |       |
|                | FF    | 5,00           | 5,00                       |             |                |                       |                 |             |                |           | 5,00      |               |       |
|                | Bfrs  | 36             |                            |             | 36             |                       |                 |             |                |           |           |               |       |
|                | Fl    | 2,20           |                            |             | 2,06           |                       |                 |             |                |           |           |               |       |
| Dkr            | 6,70  |                | 6,70 (2)                   |             |                |                       |                 |             |                |           |           |               |       |
| Homopolymer IM |       |                |                            |             |                |                       |                 |             |                |           |           |               |       |
| DM             | 2,20  |                | 2,20                       |             | 2,15           | 2,20                  |                 |             |                |           | 2,20      |               |       |
| Lit            | 1 120 |                | 1 120                      |             | 1 120          |                       |                 | 1 120       |                |           | 1 120     |               |       |
| £              | 500   |                | 500                        |             | 495            |                       | 500             |             |                |           |           |               |       |
| FF             | 5,50  |                | 5,45                       |             | 5,40           |                       |                 |             |                |           | —         |               |       |
| Bfrs           | 38    |                |                            |             | 38             |                       |                 |             |                |           |           |               |       |
| Fl             | 2,40  |                |                            |             | 2,10           |                       |                 |             |                |           |           |               |       |
| Dkr            | 7,40  |                |                            | 7,40        |                |                       |                 |             |                |           |           |               |       |
| Copolymer GP   |       |                |                            |             |                |                       |                 |             |                |           |           |               |       |
| DM             | 2,50  |                | 2,50                       |             | 2,45           | 2,50                  |                 |             |                |           | 2,40      |               |       |
| Lit            | 1 250 |                | 1 230                      |             | 1 250          |                       |                 | 1 250       |                |           | 1 250     |               |       |
| £              | 550   |                | 550                        |             | 545            |                       | 550             |             |                |           |           |               |       |
| FF             | 5,80  |                | 5,75                       |             | 5,75           |                       |                 |             |                |           | 5,80      |               |       |
| Bfrs           | 42    |                |                            |             | 42             |                       |                 |             |                |           |           |               |       |
| Fl             | 2,60  |                |                            |             | 2,27           |                       |                 |             |                |           |           |               |       |
| Dkr            | 8,35  |                |                            | 8,35        |                |                       |                 |             |                |           |           |               |       |

<sup>(1)</sup> As per table attached to ICI report of experts' meeting of 13 May 1982.

<sup>(2)</sup> Hoechst price instructions for Sweden, Norway and Finland in same telex correspond exactly with 'targets' set out in ICI table.

TABLE 7H (continued)  
Attendance at relevant meetings

| Date   | Type    | ATO | BASF | DSM | HERCULES | HOECHST | HUELS | ICI | LINZ | MONTE-POLIMERI | PETROFINA | SOLVAY | SAGA |
|--------|---------|-----|------|-----|----------|---------|-------|-----|------|----------------|-----------|--------|------|
| 13 May | Experts | V   | V    | V   | V        | V       | V     | V   | V    | V              | V         | V      | V    |
| 18 May | Bosses  | V   | ?    | V   | D        | V       | ?     | V   | ?    | P              | V         | ?      | ?    |
| 9 June | Experts | V   | V    | V   | V        | V       | V     | V   | V    | V              | V         | V      | —    |

Synopsis of meeting

|                             |   |
|-----------------------------|---|
| 13 May                      | 'Experts' meeting agrees price initiative based on raffia at 2,00 DM/kg from 1 June (United Kingdom: 14 June) and 'personal commitment' to be confirmed by bosses on 18 May.    |
| 18 May                      | No record available of bosses meeting.  |
| 9 June                      | Sales of individual companies in first five months compared with 1981 market share. Reports on price developments in each market. Local meetings planned for Italy and Belgium. |
| NB: See the Key to Table 4. |   |

TABLE 71  
1 October 1982

|  | ATO                   | BASF                      | DSM                                | HERCULES                                   | HOECHST              | HUELS                              | ICI  | LINZ                | MONTE-POLIMERI       | SHELL             |
|--|-----------------------|---------------------------|------------------------------------|--|----------------------|------------------------------------|--|---------------------|----------------------|-------------------|
| Target<br>1 October<br>1982 <sup>(1)</sup> | Date of communication |                           |                                    |  |                      |                                    |  |                     |                      |                   |
|  | 7 September<br>1982   | 11 - 26 October<br>1982   | 8 September<br>1982                | 26 July -<br>20 October 1982               | 16 September<br>1982 | 6 September<br>1982                | (See list of<br>targets for<br>1 October 1982) | 1 October<br>1982   | 24 September<br>1982 | 26 August<br>1982 |
|  | Effective date        |                           |                                    |  |                      |                                    |  | Effective date      |                      |                   |
|  | October<br>1982       | October/<br>November 1982 | 1 October<br>1982                  | September -<br>October 1982 <sup>(2)</sup> | 1 October<br>1982    | 1 October<br>1982                  |  | October<br>1982     | October<br>1982      | 1 October<br>1982 |
| Raffia                                     | 2,00                  | 2,00<br>(1 100)<br>470    | 2,00<br>1 100<br>470<br>5,20<br>38 | 2,00<br>1 100<br>470                       | 2,00                 | 2,00<br>1 100<br>470<br>5,20<br>38 |  | 2,00                | 2,00<br>(1 100)      | 470               |
| DM   |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| Lit  |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| £  |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| FF   |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| Bfrs                                       |                       | (38)                      |                                    |  |                      |                                    |  |                     |                      |                   |
| Fl   |                       |                           | 2,20                               |  |                      |                                    |  |                     |                      |                   |
| Dkr  |                       |                           | 6,90                               |  |                      |                                    |  |                     |                      |                   |
| DM (Greece)                                |                       |                           | 2,15                               |  |                      |                                    |  | 6,90 <sup>(3)</sup> |                      |                   |
| Homopolymer IM                             |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| DM   | 2,20                  | 2,20<br>(1 120)<br>490    | 2,20<br>1 120<br>490<br>5,50<br>40 | 2,15<br>1 120<br>490                       | 2,20                 | 2,20<br>1 120<br>490<br>5,50<br>40 |  | 2,20                | 2,20<br>(1 120)      | 490               |
| Lit  |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| £  |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| FF   |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| Bfrs                                       |                       | (40)                      |                                    |  |                      |                                    |  |                     |                      |                   |
| Fl   |                       |                           | 2,40                               |  |                      |                                    |  |                     |                      |                   |
| Dkr  |                       |                           | 7,60                               |  |                      |                                    |  | 7,60                |                      |                   |
| DM (Greece)                                |                       |                           | 2,35                               |  |                      |                                    |  |                     |                      |                   |
| Copolymer GP                               |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| DM   | 2,50                  | 2,50<br>(1 250)<br>550    | 2,50<br>1 250<br>550<br>5,80<br>44 | 2,40<br>1 250<br>550                       | 2,50                 | 2,50<br>1 250<br>550<br>5,80<br>44 |  | 2,50                | 2,50<br>(1 250)      | 550               |
| Lit  |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| £  |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| FF   |                       |                           |                                    |  |                      |                                    |  |                     |                      |                   |
| Bfrs                                       |                       | (44)                      |                                    |  |                      |                                    |  |                     |                      |                   |
| Fl   |                       |                           | 2,60                               |  |                      |                                    |  |                     |                      |                   |
| Dkr  |                       |                           | 8,55                               |  |                      |                                    |  | 8,55                |                      |                   |
| DM (Greece)                                |                       |                           | 2,50                               |  |                      |                                    |  |                     |                      |                   |

(<sup>1</sup>) As per table attached to ICI report of experts' meeting of 2 September 1982.  
 (<sup>2</sup>) Hercules 'list prices' for Germany, Italy and the Netherlands for September as communicated after meeting of 21 July 1982.  
 (<sup>3</sup>) LINZ 'targets' for Finland, Norway, Switzerland and Sweden in same telex correspond exactly with targets as set out in ICI table.  
 N.B.: The amounts in parenthesis are November prices.

TABLE 7J  
November—December 1982

|                       | BASF                            | DSM             | HERCULES                        | HOECHST         | HUELS           | ICI            | LINZ            | MONTEPOLIMERI                               | SAGA            | SHELL                  |
|-----------------------|---------------------------------|-----------------|---------------------------------|-----------------|-----------------|----------------|-----------------|---|-----------------|------------------------|
|                       | Date of Communication           |                 |                                 |                 |                 |                |                 |   |                 |                        |
|                       | 15 October/<br>26 November 1982 | 14 October 1982 | 21 October/<br>30 November 1982 | 13 October 1982 | 8 October 1982  | 8 October 1982 | 14 October 1982 | 24 September 1982                           | 14 October 1982 | 1—25 November<br>1982  |
|                       | Effective date                  |                 |                                 |                 |                 |                |                 |   |                 |                        |
|                       | November—<br>December 1982      | November 1982   | November—<br>December 1982      | 1 November 1982 | 1 November 1982 | November 1982  | November 1982   | November 1982<br>(postponed to<br>December) | —               | early<br>December 1982 |
| <b>Raffia</b>         |                                 |                 |                                 |                 |                 |                |                 |   |                 |                        |
| DM                    | 2,10                            | 2,10            | ± 2,10                          | 2,10            | 2,10            | 2,10           | 2,10            | 2,10  |                 | (2,10)                 |
| Lit                   | (1 160)                         | 1 150           | (1 140)                         | 1 150           | 1 150           | 1 150          |                 |   |                 |                        |
| £                     | (490)                           | 490             | (490)                           | 490             | 490             |                |                 |   | 590             | (490)                  |
| FF                    | (5,30)                          |                 |                                 |                 | 5,50            | 5,50           |                 |   |                 |                        |
| Bfrs                  | (40)                            | 40              |                                 |                 | 40              | 40             |                 |   |                 |                        |
| Fl                    | (2,20)                          | 2,30            |                                 |                 | 2,30            | 2,30           |                 |   |                 |                        |
| Dkr                   |                                 | 7,20            |                                 |                 |                 |                | 7,20            |   |                 |                        |
| <b>Homopolymer IM</b> |                                 |                 |                                 |                 |                 |                |                 |   |                 |                        |
| DM                    | 2,20                            | 2,30            |                                 |                 | 2,30            | 2,30           | 2,30            | 2,30  |                 | (2,30)                 |
| Lit                   |                                 | 1 180           | (1 160)                         |                 | 1 180           | 1 180          |                 |   |                 |                        |
| £                     | (500)                           | 510             | (505)                           |                 | 510             |                |                 |   | 510             | (510)                  |
| FF                    | (5,70)                          |                 |                                 |                 | 5,80            | 5,80           |                 |   |                 |                        |
| Bfrs                  | (42)                            | 42              |                                 |                 | 42              | 42             |                 |   |                 |                        |
| Fl                    | (2,50)                          | 2,50            |                                 |                 | 2,50            | 2,50           |                 |   |                 |                        |
| Dkr                   |                                 | 8,00            |                                 |                 |                 |                | 8,00            |   |                 |                        |
| <b>Copolymer GP</b>   |                                 |                 |                                 |                 |                 |                |                 |   |                 |                        |
| DM                    | 2,60                            | 2,60            |                                 |                 | 2,60            | 2,60           | 2,60            | 2,60  |                 | (2,50)                 |
| Lit                   |                                 | 1 300           | (1 380)                         |                 | 1 300           | 1 300          |                 |   |                 |                        |
| £                     | (570)                           | 570             | (565)                           |                 | 570             |                |                 |   | 570             | (570)                  |
| FF                    | (5,90)                          |                 |                                 |                 | 6,10            | 6,10           |                 |   |                 |                        |
| Bfrs                  | (46)                            | 46              |                                 |                 | 46              | 46             |                 |   |                 |                        |
| Fl                    | (2,70)                          | 2,70            |                                 |                 | 2,70            | 2,70           |                 |   |                 |                        |
| Dkr                   |                                 | 9,00            |                                 |                 |                 |                | 9,00            |   |                 |                        |

TABLE 7J (continued)  
Attendance at relevant meetings

| Date         | Target         | ATO | BASF | DSM | HERCULES | HOECHST | HUELS | ICI | LINZ | MONTE-<br>POLIMERI | PETROFINA | SOLVAY | SAGA |
|--------------|----------------|-----|------|-----|----------|---------|-------|-----|------|--------------------|-----------|--------|------|
| 21 July      | Bosses/Experts | V   | V    | V   | V        | V       | V     | V   | V    | V                  | V         | V      | V    |
| 20 August    | Bosses         | V   | V    | V   | —        | V       | V     | V   | V    | V                  | V         | V      | V    |
| 2 September  | Experts        | V   | V    | V   | V        | V       | V     | V   | V    | V                  | V         | V      | V    |
| 21 September | Bosses         | V   | V    | V   | V        | V       | V     | V   | V    | V                  | V         | V      | V    |
| 6 October    | Experts        | V   | V    | V   | V        | V       | V     | V   | V    | V                  | —         | V      | V    |

Synopsis of meetings

|              |  |
|--------------|--|
| 21 July      | Joint bosses'/experts' meeting decides on two stage initiative based on raffia price of 2,00 DM/kg on 1 September; 2,10 on 1 October.  |
| 20 August    | Increase of 10 pfennig or equivalent on all new orders for September where price below target with 2,00 DM/kg to be implemented from 1 October. 'Commitment' of bosses obtained.   |
| 2 September  | Experts' meeting to progress implementation of agreement reached in bosses meeting of 20 August. Personal 'commitment' confirmed. Account leadership scheme started. 2,00 DM/kg target from 1 October with table of targets for each grade national currency.                  |
| 21 September | Bosses report on steps taken by individual companies to implement planned increases. Strict instructions had been given to sales teams. General support for further 10 pfennig price increase in November with a view to 'going firm' in December.                             |
| 6 October    | Confirmed that companies would start advising customers before bosses' meeting of 22 October of further 10 pfennig increase for November (plan to 'consolidate' in November and implement increase fully in December. ICI undertakes to submit proposal for 1983 quota scheme. |

NB:  
Shell was in telephone contact with ICI concerning the price initiative on 9 and 10 September 1982 and attended a 'big four pre-meeting' on 13 October 1982.  
The amounts in parenthesis are December prices.  
See the Key to Table 4.



TABLE 7K  
July 1983

|                |          | ATO                   | BASF        | DSM         | HERCULES           | HOECHST     | ICI                | LINZ             | MONTE-POLIMERI | PETROFINA    | SHELL                 | SOLVAY       |
|----------------|----------|-----------------------|-------------|-------------|--------------------|-------------|--------------------|------------------|----------------|--------------|-----------------------|--------------|
|                |          | Date of communication |             |             |                    |             |                    |                  |                |              |                       |              |
| Target 1 July  |          | 14 June 1983          | 27 May 1983 | 25 May 1983 | 29 June 1983       | 6 June 1983 | 23 May 1983        | 8 June 1983      | 17 May 1983    | 20 July 1983 | 25 May - 24 June 1983 | 26 July 1983 |
|                |          | Effective date        |             |             |                    |             |                    |                  |                |              |                       |              |
| Raffia         | 1,85 (1) | July 1983             | 2 July 1983 | 1 July 1983 | July - August 1983 | 1 July 1983 | July - August 1983 | June - July 1983 | immediate      | 1 July 1983  | immediate             |              |
|                |          | DM                    |             | 1,85        | 1,85               | 1,85        | 1,85               | 1,85             |                | 1,85         |                       | 1,85         |
|                |          | Lit                   | 1 100       | 1 100       | 1 100              | 1,85        | 1 100              |                  | 1 100          | 1 120        |                       | 1 100        |
|                |          | £                     | 480         | 480         | 480                |             | 480                |                  |                |              | 480                   | 480          |
|                |          | FF                    | 5,30        | 5,30        |                    |             | 5,30               |                  |                | 5,45         | 5,30                  |              |
|                |          | Bfrs                  | 36          | 36          |                    |             | 36                 |                  |                |              |                       | 36           |
|                |          | Fl                    | 2,05        | 2,05        |                    |             | 2,05               | 2,05 (2)         |                |              |                       | 2,05         |
| Homopolymer IM |          | Dkr                   | 6,60        | 6,60 (2)    |                    |             | 6,60 (2)           | 6,60 (2)         |                |              |                       |              |
|                |          | DM                    |             | 2,00        | 2,00               | 2,00        | 2,00               | 2,00             |                |              |                       | 2,00         |
|                |          | Lit                   | 1 120       | 1 120       | 1 120              |             | 1 120              |                  | 1 120          |              |                       | 1 120        |
|                |          | £                     | 500         | 500         | 500                |             | 500                | 500              |                |              | 500                   | 485          |
|                |          | FF                    | 5,60        | 5,60        |                    |             | 5,60               |                  |                |              | 5,60                  |              |
|                |          | Bfrs                  | 38          | 38          |                    |             | 38                 |                  |                |              |                       | 38           |
|                |          | Fl                    | 2,25        | 2,25        |                    |             | 2,25               | 2,20             |                |              |                       | 2,25         |
| Copolymer GP   |          | Dkr                   | 7,15        | 7,15        |                    |             | 7,15               | 7,15             |                |              |                       |              |
|                |          | DM                    |             | 2,25        | 2,25               | 2,25        | 2,25               | 2,25             |                |              |                       | 2,25         |
|                |          | Lit                   | 1 250       | 1 250       | 1 250              |             | 1 250              |                  | 1 250          |              |                       | 1 250        |
|                |          | £                     | 560         | 560         | 560                |             | 560                | 560              |                |              | 550                   | 550          |
|                |          | FF                    | 6,00        | 6,00        |                    |             | 6,00               |                  |                |              | 6,00                  |              |
|                |          | Bfrs                  | 41          | 41          |                    |             | 41                 |                  |                |              |                       | 41           |
|                |          | Fl                    | 2,50        | 2,50        |                    |             | 2,50               | 2,40             |                |              |                       | 2,50         |
|                |          | Dkr                   | 8,00        | 8,00        |                    |             | 8,00               | 8,00             |                |              |                       |              |

(1) No table of 'targets' was attached to meeting reports but the DSM and ICI 'minimum' prices appear to set out the agreed targets based on raffia on 1,85 DM/kg.  
(2) The DSM, ICI and Linz list (or 'minimum') prices for Norway, Sweden and Finland are also identical for each grade.

TABLE 7K (continued)  
Attendance at relevant meetings

| Date    | Type    | ATO | BASF | DSM | HERCULES | HOECHST | HUELS | ICI | LINZ | MONTE-POLIMERI | PETROFINA | SOLVAY | SAGA |
|---------|---------|-----|------|-----|----------|---------|-------|-----|------|----------------|-----------|--------|------|
| 3 May   | Experts | V   | V    | V   | —        | V       | V     | V   | V    | V              | V         | V      | V    |
| 20 May  | Bosses  | V   | V    | V   | —        | V       | V     | V   | ?    | V              | V         | V      | ?    |
| 1 June  | Experts | V   | V    | V   | —        | V       | V     | V   | V    | V              | V         | —      | V    |
| 16 June | Bosses  | V   | V    | V   | —        | V       | V     | V   | ?    | V              | V         | V      | ?    |
| 6 July  | Experts | V   | V    | V   | V        | V       | V     | V   | ?    | P              | V         | D      | ?    |

Synopsis of meeting

|  |   |
|--|---|
| 3 May  | Discussions on prices and tonnages supplied by each producer to 'key accounts'.   |
| 20 May   | Agreement for move on 1 September to 2,00 DM/kg with intermediate step in July.   |
| 1 June   | Participants reaffirm 'complete commitment' to 1,85 DM/kg move by 1 July. All had informed sales forces and were in process of informing customers. Shell reported to have 'committed itself' to the move and would lead the initiative publicly. Hercules reported to be 'very supportive' and announcing increases in June. |
| 16 June  | No record available.  |
| 6 July   | No record available.  |
| NB: Shell attended a 'big four pre-meeting' on 19 May 1983.<br>See the Key to Table 4. |   |

TABLE 7L

|                                      | ATO                              | BASF                          | DSM                 | HERCULES            | HOECHST             | HUELS               | ICI                           | LINZ                | MONTÉ-POLIMERI    | SHELL               | SOLVAY                           | SAGA                             |
|--------------------------------------|----------------------------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|-------------------------------|---------------------|-------------------|---------------------|----------------------------------|----------------------------------|
| Date of communication                |                                  |                               |                     |                     |                     |                     |                               |                     |                   |                     |                                  |                                  |
| Target<br>1 September <sup>(1)</sup> | —                                | 27 July –<br>4 August<br>1983 | 2 August<br>1983    | 4 August<br>1983    | 5 August<br>1983    | 26 July<br>1983     | 22 July –<br>4 August<br>1983 | 11 August<br>1983   | 25 July<br>1983   | 11 August<br>1983   | 26 July<br>1983                  | 5 August<br>1983                 |
|                                      | Effective date                   |                               |                     |                     |                     |                     |                               |                     |                   |                     |                                  |                                  |
|                                      | September<br>1983 <sup>(2)</sup> | 1 September<br>1983           | 1 September<br>1983 | 1 September<br>1983 | 1 September<br>1983 | 1 September<br>1983 | 1 September<br>1983           | 1 September<br>1983 | September<br>1983 | 1 September<br>1983 | September<br>1983 <sup>(1)</sup> | September<br>1983 <sup>(2)</sup> |
|                                      | Raffia                           |                               |                     |                     |                     |                     |                               |                     |                   |                     |                                  |                                  |
|                                      | DM                               | 2,00                          |                     | 2,00                | 2,00                | 2,00                | 2,00                          | 2,00                | 2,00              |                     | 2,00                             |                                  |
|                                      | Lit                              | 1 200                         | 1 200               | 1 200               | 1 200               | 1 200               | 1 200                         | 1 200               | 1 200             | 1 200               |                                  | 2,00                             |
| £                                    | 500                              | 500                           | 500                 | 500                 | 500                 | 500                 | 500                           | 500                 | 500               | 480 – 500           | 500                              | 500                              |
| FF                                   | 5,50                             | 5,50                          | 5,50                | 5,50                | 38                  | 5,50                | 5,50                          | 38                  |                   |                     | 38                               |                                  |
| Bfrs                                 |                                  | 38                            |                     |                     | 38                  | 38                  |                               |                     |                   |                     |                                  |                                  |
| Fl                                   |                                  | 2,20                          | 2,20                | 2,20                | 2,20                | 2,20                | 2,20                          | 2,20                |                   |                     | 2,20                             |                                  |
| Dkr                                  |                                  |                               | 7,20 <sup>(1)</sup> |                     |                     |                     | 7,20 <sup>(3)</sup>           | 7,20 <sup>(3)</sup> |                   |                     |                                  |                                  |
| Homopolymer IM                       |                                  |                               |                     |                     |                     |                     |                               |                     |                   |                     |                                  |                                  |
| DM                                   | 2,10                             |                               | 2,10                | 2,10                | 2,15                | 2,10                | 2,10                          | 2,10                |                   |                     | 2,10                             |                                  |
| Lit                                  | 1 220                            | 1 220                         | 1 220               | 1 220               | 1 220               | 1 220               | 1 220                         | 1 220               | 1 220             |                     | 1 220                            |                                  |
| £                                    | 520                              | 520                           | 520                 | 520                 |                     | 520                 | 520                           | 520                 |                   | 520 reduced to 500  | 520                              | 520                              |
| FF                                   | 5,80                             | 5,80                          | 5,80                |                     |                     | 5,80                | 5,80                          |                     |                   |                     |                                  |                                  |
| Bfrs                                 |                                  | 40                            | 40                  |                     | 40                  | 40                  | 40                            |                     |                   |                     | 40                               |                                  |
| Fl                                   |                                  | 2,30                          | 2,30                | 2,30                | 2,30                | 2,30                | 2,30                          | 2,30                |                   |                     | 2,30                             |                                  |
| Dkr                                  |                                  | 7,50 <sup>(1)</sup>           |                     |                     |                     |                     | 7,50                          | 7,50                |                   |                     |                                  |                                  |
| Copolymer GP                         |                                  |                               |                     |                     |                     |                     |                               |                     |                   |                     |                                  |                                  |
| DM                                   | 2,40                             |                               | 2,40                | 2,40                | 2,40                | 2,40                | 2,40                          | 2,30                |                   |                     | 2,40                             |                                  |
| Lit                                  | 1 350                            | 1 350                         | 1 350               | 1 350               | 1 350               | 1 350               | 1 350                         |                     | 1 350             |                     | 1 350                            |                                  |
| £                                    | 580                              | 580                           | 580                 | 570                 |                     | 580                 | 580                           |                     |                   | 580 reduced to 570  | 580                              | 580                              |
| FF                                   | 6,20                             | 6,20                          | 6,20                |                     |                     | 6,20                | 6,20                          |                     |                   |                     |                                  |                                  |
| Bfrs                                 |                                  | 44                            | 44                  |                     | 44                  | 44                  | 44                            |                     |                   |                     | 44                               |                                  |
| Fl                                   |                                  | 2,60                          | 2,60                | 2,55                | 2,60                | 2,60                | 2,60                          | 2,60                |                   |                     | 2,60                             |                                  |
| Dkr                                  |                                  |                               | 8,60                |                     |                     |                     | 8,60                          | 8,25                |                   |                     |                                  |                                  |

(11) No table of targets for September, October or November was attached to meeting reports but the 'targets' appear to be the prices shown for DMS and ICI.

(<sup>2</sup>) As per note headed 'Rappel du prix de Cota'.

(3) The prices of DSM, ICI and LINZ for all three basic grades in Norway, Sweden, Finland and Switzerland are also identical.

TABLE 7M  
October 1983

|                       | ATO             | BASF                               | HERCULES                            | HOECHST                             | HUELS               | ICI                                 | LINZ              | MONTE-POLIMERI       | SHELL                | SOLVAY            | SAGA               |
|-----------------------|-----------------|------------------------------------|-------------------------------------|-------------------------------------|---------------------|-------------------------------------|-------------------|----------------------|----------------------|-------------------|--------------------|
| Date of communication |                 |                                    |                                     |                                     |                     |                                     |                   |                      |                      |                   |                    |
|                       | unknown         | 15 August –<br>9 September<br>1983 | 16 September –<br>3 October<br>1983 | 30 September –<br>6 October<br>1983 | 8 September<br>1983 | 26 August –<br>15 September<br>1983 | 31 August<br>1983 | 21 September<br>1983 | 21 September<br>1983 | 6 October<br>1983 | unknown            |
| Effective date        |                 |                                    |                                     |                                     |                     |                                     |                   |                      |                      |                   |                    |
|                       | October<br>1983 | 1 October<br>1983                  | October<br>1983                     | 1 October<br>1983                   | 1 October<br>1983   | 1 October<br>1983                   | October<br>1983   | October<br>1983      | October<br>1983      | October<br>1983   | 17 October<br>1983 |
| <b>Raffia</b>         |                 |                                    |                                     |                                     |                     |                                     |                   |                      |                      |                   |                    |
| DM                    | 2,10            | 2,10                               | 2,65                                | 2,10                                | 2,10                | 2,10                                | 2,10              | 2,10                 |                      | 2,10              |                    |
| Lit                   | 1 250           | 1 250 (1)                          | 1 230 (1)<br>1 250 (2)              | 1 250                               | 1 250               | 1 250                               |                   | 1 250                |                      | 1 250             |                    |
| £                     | 520             | 520                                | 510                                 | 520                                 | 520                 | 520                                 |                   | 520                  | 500 – 520            | 520               | 520                |
| FF                    | 5,80            | 5,80                               | 5,70 (1)<br>5,80 (2)                |                                     | 5,80                | 5,80                                |                   | 5,80                 |                      |                   |                    |
| Bfrs                  |                 | 40                                 | 39,50                               | 40                                  | 40                  | 40                                  |                   | 40                   |                      | 40                |                    |
| Fl                    |                 | 2,35                               | 2,18                                | 2,35                                | 2,35                | 2,35                                | 2,35              |                      |                      | 2,35              |                    |
| Dkr                   |                 | 7,55                               | 7,30                                |                                     |                     | 7,55                                | 7,55              | 7,55                 |                      |                   |                    |
| <b>Homopolymer IM</b> |                 |                                    |                                     |                                     |                     |                                     |                   |                      |                      |                   |                    |
| DM                    | 2,20            |                                    | 2,15                                | 2,20                                | 2,20                | 2,20                                | 2,20              | 2,20                 |                      | 2,20              |                    |
| Lit                   | 1 270           | 1 270                              | 1 250 (1)<br>1 270 (2)              | 1 270                               | 1 270               | 1 270                               |                   | 1 270                |                      | 1 270             |                    |
| £                     | 540             | 540                                | 530                                 | 540                                 | 540                 | 540                                 | 540               | 540                  | 530 – 540            | 540               | 540                |
| FF                    | 6,10            | 6,10                               | 6,00 (1)<br>6,10 (2)                |                                     | 6,10                | 6,10                                | 5,40              | 6,10                 |                      |                   |                    |
| Bfrs                  |                 | 42,50                              | 42                                  | 42,50                               | 42,50               | 42,50                               |                   | 42,50                |                      | 42,50             |                    |
| Fl                    |                 | 2,45                               | 2,25                                | 2,45                                | 2,45                | 2,45                                | 2,45              |                      |                      | 2,45              |                    |
| Dkr                   |                 | 7,85                               | 7,60                                |                                     |                     | 7,85                                | 7,85              |                      |                      |                   |                    |
| <b>Copolymer GP</b>   |                 |                                    |                                     |                                     |                     |                                     |                   |                      |                      |                   |                    |
| DM                    | 2,50            |                                    | 2,40                                | 2,50                                | 2,50                | 2,50                                | 2,50              | 2,40                 |                      | 2,35              |                    |
| Lit                   | 1 400           | 1 400                              | 1 380 (1)<br>2. 1 400 (2)           | 1 400                               | 1 400               | 1 400                               |                   | 1 400                |                      | 1 430             |                    |
| £                     | 600             | 600                                | 590                                 | 600                                 | 600                 | 600                                 | 600               | 600                  | 590 – 600            | 600               | 600                |
| FF                    | 6,50            | 6,50                               | 6,30 (1)<br>6,50 (2)                |                                     | 6,50                | 6,50                                |                   |                      |                      |                   |                    |
| Bfrs                  |                 | 44                                 | 43,50                               | 44                                  | 45,50               | 44                                  |                   |                      |                      | 44                |                    |
| Fl                    |                 | 2,75                               | 2,55                                | 2,75                                | 2,75                | 2,75                                | 2,75              |                      |                      | 2,65              |                    |
| Dkr                   |                 | 8,95                               | 8,30                                |                                     |                     | 8,75                                | 8,95              |                      |                      |                   |                    |

TABLE 7N  
November 1983

|                | BASF                   | HERCULES                 | HOECHST         | HUELS             | ICI                            | LINZ            | MONTEPOLIMERI     | SOLVAY         | SAGA                       |
|----------------|------------------------|--------------------------|-----------------|-------------------|--------------------------------|-----------------|-------------------|----------------|----------------------------|
|                | Date of communication  |                          |                 |                   |                                |                 |                   |                |                            |
|                | 26 - 29 September 1983 | 30 September 1983        | 6 October 1983  | 20 September 1983 | 27 September - 17 October 1983 | 19 October 1983 | 21 September 1983 | 6 October 1983 | 25 October 1983            |
| Effective date |                        |                          |                 |                   |                                |                 |                   |                |                            |
| Raffia         | 1 November 1983        | November - December 1983 | 1 November 1983 | 1 November 1983   | November 1983                  | November 1983   | November 1983     | November 1983  | 17 November 1983           |
|                | DM                     | 2,25                     | 2,25            | 2,25              | 2,25                           | 2,25            | 2,25              | 2,25           |                            |
|                | Lit                    |                          | 1 330           | 1 330             | 1 330                          |                 | 1 350             | 1 330          |                            |
|                | £                      |                          | 560             | 560               | 560                            | 560             | 560               | 560            | 540                        |
|                | FF                     |                          |                 | 6,25              | 6,25                           |                 | 6,25              |                | (+ 20 on 17 December 1983) |
|                | Bfrs                   |                          | 45              | 45                | 45                             |                 | 45                | 40 (¹)         |                            |
| Homopolymer IM | FI                     |                          | 2,50            | 2,50              | 2,50                           |                 |                   | 2,50           |                            |
|                | DM                     | 2,35                     |                 |                   |                                |                 |                   | 2,35           |                            |
|                | Lit                    |                          |                 |                   | 2,35                           | 2,35            | 2,35              | 1 350          |                            |
|                | £                      |                          | 1 350           | 585               | 580                            | 585             | 585               | 585            | 560                        |
|                | FF                     |                          |                 | 6,55              | 6,55                           |                 | 6,55              |                |                            |
|                | Bfrs                   |                          | 47              | 47                | 47                             |                 | 47                | 42,50 (¹)      |                            |
| Copolymer GP   | FI                     |                          | 2,60            | 2,60              | 2,60                           |                 |                   | 2,60           |                            |
|                | DM                     | 2,65                     |                 |                   |                                |                 |                   | 2,50           |                            |
|                | Lit                    |                          |                 | 1 480             | 1 480                          | 2,65            | 2,55              | 1 510          |                            |
|                | £                      |                          | 660             | 660               | 660                            | 660             | 660               | 660            | 620                        |
|                | FF                     |                          |                 | 6,95              | 6,95                           |                 | 6,75              |                |                            |
|                | Bfrs                   |                          | 53              | 53                | 53                             |                 | 51                | 44 (¹)         |                            |
|                | FI                     |                          | 2,95            | 2,95              | 2,95                           |                 |                   | 2,80           |                            |

(¹) Price applicable pending government authorization of price rise.

TABLE 7N (continued)  
Attendance at relevant meetings

| Date         | Type    | ATO | BASF | DSM | HERCULES | HOECHST | HUELS | ICI | LINZ | MONTE-POLIMERI | PETROFINA | SOLVAY | SAGA |
|--------------|---------|-----|------|-----|----------|---------|-------|-----|------|----------------|-----------|--------|------|
| 6 July       | Experts | V   | V    | V   | V        | V       | V     | V   | ?    | P              | V         | D      | ?    |
| 21 July      | Bosses  | V   | V    | V   | D        | V       | V     | V   | ?    | P              | V         | V      | ?    |
| 10 August    | Experts | V   | V    | V   | D        | V       | V     | V   | ?    | P              | V         | V      | ?    |
| 23 August    | Bosses  | D   | V    | V   | V        | V       | V     | V   | ?    | P              | V         | V      | ?    |
| 5 September  | Experts | ?   | ?    | V   | —        | V       | V     | V   | ?    | V              | ?         | V      | ?    |
| 15 September | Bosses  | D   | V    | V   | —        | V       | V     | V   | ?    | V              | V         | V      | ?    |
| 29 September | Experts | ?   | V    | V   | D        | V       | V     | V   | ?    | V              | V         | D      | ?    |

No records available of individual meetings.

NB:  
Shell attended a 'big four pre-meeting' on 22 August 1982.  
See the Key to Table 4.



TABLE 8  
VOLUME TARGET/QUOTA SCHEMES 1979 TO 1983 (\*)

1979

|               | 'Revised target' <sup>(1)</sup><br>(tonnes) | Actual<br>Sales <sup>(2)</sup><br>(tonnes) | Actual<br>Sales <sup>(1)</sup><br>(tonnes) | Market Share <sup>(2)</sup><br>(%) |
|---------------|---|--|--|------------------------------------|
| AMOCO         | 63,9  |  |  |                                    |
| ANIC/SIR      | 57,0  |  |  |                                    |
| ATO           | 38,3  |  |  |                                    |
| BASF          | 55,0  |  |  |                                    |
| DSM           | 36,4  |  |  |                                    |
| HERCULES      | 59,0  |  |  |                                    |
| HOECHST       | 155,2                                       |  |  |                                    |
| HUELS         | 74,7  |  |  |                                    |
| ICI           | 151,3                                       |  |  |                                    |
| LINZ          | 47,2  |  |  |                                    |
| MONTEPOLIMERI | 191,6                                       |  |  |                                    |
| PETROFINA     | 10,7  |  |  |                                    |
| RHONE-POULENC | 37,3  |  |  |                                    |
| SHELL         | 150,3                                       |  |  |                                    |
| SOLVAY        | 37,3  |  |  |                                    |
| SAGA          | 28,5  |  |  |                                    |
| SPANISH       | 55,0  |  |  |                                    |
|               | 1 248,7                                     | 1 240,8                                    | 1 240                                      | 100                                |

(<sup>1</sup>) As per ICI table headed 'Producers' Sales to West Europe' comparing performance for 1976 to 1978 with 1979: 'revised target' and 'actual' sales.

(<sup>2</sup>) As per ICI table (no heading) comparing 1979 'actual' with 1980 'target' and 'actual' and 1981 'aspirations'.

1980

|                      | Original-<br>Target <sup>(1)</sup> | Original-<br>Target <sup>(2)</sup><br>(tonnes) | Actual<br>Sales <sup>(2)</sup><br>(tonnes) | Target<br>Market Share <sup>(2)</sup><br>(%) | Achieved<br>Market Share <sup>(2)</sup><br>(%) |
|----------------------|------------------------------------|--|--|--|--|
| AMOCO/HERCULES       | 150                                | 150  |  | 10,85  |  |
| ANIC/SIR             | 61                                 | 61   |  | 4,41   |  |
| ATO                  | 43                                 | 43   |  | 3,11   |  |
| BASF                 | 64                                 | 60   |  | 4,34   |  |
| BP                   | 40                                 | 41   |  | 2,97   |  |
| DSM                  | 45                                 | 45   |  | 3,26   |  |
| HERCULES (see above) | —                                  | —  |  | —  |  |
| HOECHST              | 165                                | 165  |  | 11,94  |  |
| HUELS                | 80                                 | 80   |  | 5,79   |  |
| ICI                  | 160                                | 160  |  | 11,57  |  |
| LINZ                 | 55                                 | 55   |  | 3,98   |  |
| MONTEPOLIMERI        | 205                                | 205  |  | 14,83  |  |
| PETROFINA            | max. 20                            | 15   |  | 1,09   |  |
| SHELL                | 160                                | 160  |  | 11,57  |  |
| SOLVAY               | 42                                 | 42   |  | 3,04   |  |
| SAGA                 | 38                                 | 38   |  | 2,75   |  |
| SPANISH              | 62                                 | 62   |  | 4,49   |  |
|                      | max. 1 390                         | 1 382  | 1 207,9                                    | 100  | 100  |

(<sup>1</sup>) As per table headed 'Polypropylene — Sales Target 1980 (Kt)' found at ATO.

(<sup>2</sup>) As per ICI table (no heading) comparing 1979 'actual' with 1980 'targets' and 'actual' and 1981 'aspirations'.

NB: Target was revised to take account of reduced demand: see ICI note of experts meeting of January 1981.

\* In the published version of the Decision, some figures have hereinafter been omitted, pursuant to the provisions of Article 21 of Regulation No 17 concerning non-disclosure of business secrets.

## 1981

|                | 'Aspirations'<br>( <sup>(1)</sup> )<br>(tonnes) | ( = % ) | Quota %<br>(from 1980) ( <sup>(2)</sup> ) | 'Theoretic'<br>entitlement ( <sup>(2)</sup> )<br>(tonnes) | Actual<br>Sales ( <sup>(2)</sup> )<br>(tonnes) | Performance<br>( <sup>(3)</sup> )<br>(%) |
|----------------|---|---------|---|---|--|--|
| AMOCO/HERCULES | 135   | 9,53    | 10,8                                      | 145,2   |  |  |
| ANIC/SIR       | 69  | 4,87    | 4,4                                       | 59,2  |  |  |
| ATO            | 45  | 3,18    | 3,1                                       | 41,7  |  |  |
| BASF           | 61  | 4,30    | 4,6                                       | 61,8  |  |  |
| BP             | 46  | 3,25    | 2,9                                       | 39,0  |  |  |
| DSM            | 55  | 3,88    | 3,2                                       | 43,0  |  |  |
| HOECHST        | 166   | 11,70   | 11,9                                      | 160,0   |  |  |
| HUELS          | 80  | 5,60    | 5,8                                       | 78,0  |  |  |
| ICI            | 155   | 10,95   | 11,6                                      | 155,9   |  |  |
| LINZ           | 62  | 4,38    | 4,0                                       | 53,6  |  |  |
| MONTEPOLIMERI  | 200   | 14,12   | 14,8                                      | 198,9   |  |  |
| PETROFINA      | 20  | 1,41    | 1,1                                       | 14,2  |  |  |
| SHELL          | 155   | 10,95   | 11,6                                      | 155,9   |  |  |
| SOLVAY         | 62  | 4,38    | 3,0                                       | 40,3  |  |  |
| SAGA           | 45  | 3,18    | 2,7                                       | 36,3  |  |  |
| SPANISH        | 60  | 4,20    | 4,5                                       | 60,5  |  |  |
|                | 1 416   |         |   | 1 344,2   | 1 344,2  |  |

(<sup>(1)</sup>) As per ICI table (no heading) comparing 1979 'actual' with 1980 'targets' and 'actual' and 1981 'aspirations'.

(<sup>(2)</sup>) As per document headed 'PP-departures per companies'.

(<sup>(3)</sup>) No final quota agreement was reached for 1981 and performance was monitored against 1980 'model'.

## 1982

|                | 'Adjusted Quota'        |                        | 1982<br>'Expected'<br>(tonnes) ( <sup>(2)</sup> ) | Actual<br>(12 months)<br>(tonnes) ( <sup>(3)</sup> ) | 12 months<br>Performance<br>(%) ( <sup>(4)</sup> ) |
|----------------|-------------------------|------------------------|---|--|--|
|                | (Kt) ( <sup>(1)</sup> ) | (%) ( <sup>(1)</sup> ) |   |  |  |
| AMOCO/HERCULES | 160                     | 11,03                  | 199,1   |  |  |
| ANIC/SIR       | 58                      | 4,00                   | 37,7  |  |  |
| ATO            | 45                      | 3,10                   | 45,2  |  |  |
| BASF           | 59                      | 4,07                   | 62,3  |  |  |
| BP             | 49                      | 3,38                   | (see AMOCO/<br>HERCULES)                          |  |  |
| DSM            | 62                      | 4,21                   | 68,5  |  |  |
| HOECHST        | 163                     | 11,24                  | 149,7   |  |  |
| HUELS          | 69                      | 4,76                   | 66,8  |  |  |
| ICI            | 161                     | 11,10                  | 159,6   |  |  |
| LINZ           | 57                      | 3,93                   | 51,7  |  |  |
| MONTEPOLIMERI  | 218                     | 15,04                  | 217,0   |  |  |
| PETROFINA      | 30                      | 2,07                   | 28,4  |  |  |
| SHELL          | 152                     | 10,48                  | 156,1   |  |  |
| SOLVAY         | 58                      | 4,00                   | 59,1  |  |  |
| SAGA           | 37                      | 2,55                   | 40,9  |  |  |
| SPANISH        | 58                      | 4,00                   | 58,1  |  |  |
|                | 1 450                   |                        |   | 1 412  |  |

(<sup>(1)</sup>) As per MONTEPOLIMERI proposal found at ICI and HERCULES.

(<sup>(2)</sup>) As per ICI working paper.

(<sup>(3)</sup>) As noted by HERCULES.

(<sup>(4)</sup>) No final quota agreement was reached for 1982.

## 1983

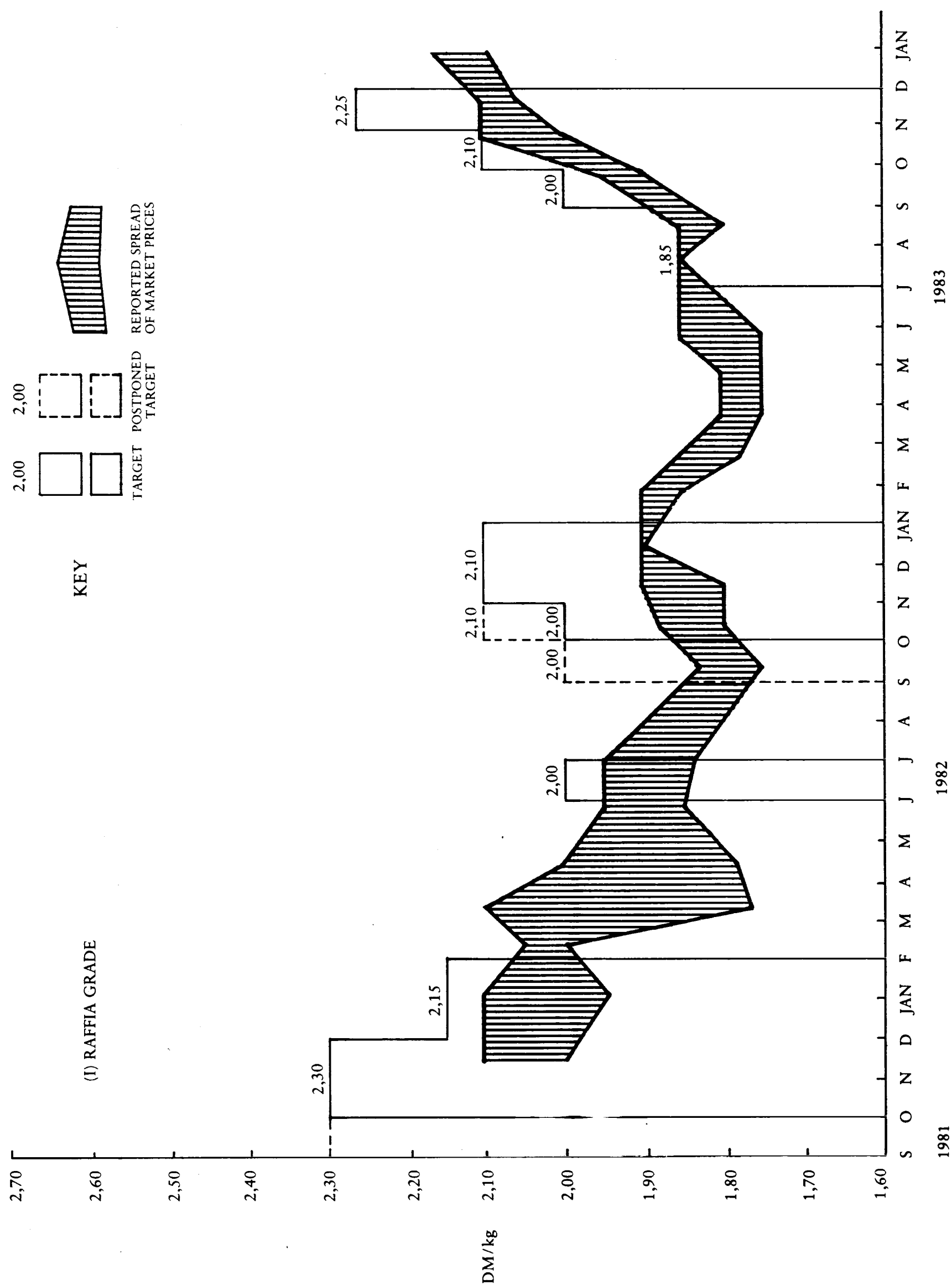
|                   | Average of<br>Proposals <sup>(1)</sup><br>(%) | Individual<br>Aspirations <sup>(2)</sup><br>(%) | 'Revised<br>Proposal' <sup>(2)</sup><br>1983<br>(%) | 1983 QI<br>Proposal <sup>(3)</sup><br>(tonnes) | = (%) |
|-------------------|---|---|---|--|-------|
| AMOCO/HERCULES/BP | 14,12   | (14,10)   | 14,20   | 53,0   | 14,42 |
| ANIC/SIR          | 3,32  | 3,61  | 2,80  | 10,5   | 2,85  |
| ATO               | 3,13  | 3,90  | 3,15  | 12,5   | 3,40  |
| BASF              | 4,30  | 4,50  | 4,30  | 16,0   | 4,35  |
| DSM               | 4,49  | 5,17  | 4,65  | 18,0   | 4,90  |
| HOECHST           | 10,88   | 11,50   | 10,90   | 40,0   | 10,88 |
| HUELS             | 4,83  | 5,30  | 4,80  | 18,5   | 5,03  |
| ICI               | 11,31   | 11,50   | 11,10   | 41,0   | 11,16 |
| LINZ              | 3,67  | 5,00  | 3,65  | 13,5   | 3,67  |
| MONTEPOLIMERI     | 14,80   | 16,46   | 15,00   | 55,5   | 15,10 |
| PETROFINA         | 1,93  | 1,88  | 2,00  | 8,0  | 2,18  |
| SHELL             | 10,75   | (11,50)   | 10,90   | 39,5   | 10,74 |
| SOLVAY            | 3,98  | 4,70  | 4,05  | 15,5   | 4,22  |
| SAGA              | 2,71  | 3,06  | 2,90  | 15,5   | 4,22  |
| SPANISH           | 4,12  | (4,10)  | 4,10  | 15,5   | 4,22  |
| CNP               | 1,50  | 1,54  | 1,50  |  |       |
|                   | 99,83   | 107,82  | 100,00  | 367,5  |       |

<sup>(1)</sup> As per ICI printout (3 CRG 1 disk 3'').

<sup>(2)</sup> As per ICI table headed '1983 Framework'.

<sup>(3)</sup> As per table headed '1983 Quarter I Proposal' attached to ICI report of December 1982 Experts' meeting.

TABLE 9



Source: 1. *European Chemical News*  
'Plastics Monitor' (for price spread).

