II

(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DECISION

of 27 July 1994

relating to a proceeding pursuant to Article 85 of the EC Treaty

(IV/31.865 — PVC)

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

(94/599/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation No 17 of 6 February 1962, First Regulation implementing Articles 85 and 86 of the Treaty [1], as last amended by the Act of Accession of Spain and Portugal,

Having regard to the Commission Decision of 24 March 1988 to initiate 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 Regulation No 99/63/EEC of the Commission of 25 July 1963 on the hearings provided for in Article 19 (1) and (2) of Council Regulation No 17 [2],

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

Whereas :

I. THE FACTS

(1) This Decision concerns the application of Article 85 of the EC Treaty to collusive arrangements amounting to a cartel involving the producers supplying the bulk thermoplastic PVC in the Community in pursuance of which they held regular secret meetings in order to coordinate their commercial behaviour, plan concerted price initiatives, fix target and/or minimum prices, agree target sales quotas for each producer and monitor the progress of the said collusive arrangements.

A. Introduction

1. *The undertakings*

(2) The undertakings to which this Decision is addressed are all major petrochemical producers. 17 undertakings participated in the infringement during the period covered by this Decision.

As a result of significant reorganization of the industry, some of the undertakings have been merged with others. Other producers have left the PVC sector but still continue in existence as undertakings. This Decision is addressed to the following undertakings [3] :

BASF,
DSM,
Elf Atochem,
Enichem,
Hoechst,
Huels,
ICI,
LVM,
Montedison,
SAV,
Shell,
and
Wacker.

[1] OJ No 13, 21. 2. 1962, p. 204/62.
[2] OJ No 127, 20. 8. 1963, p. 2268/63.

[3] The Commission Decision 89/190/EEC (OJ No L 74, 17. 3. 1989, p. 1) in this case remains valid as regards two other undertakings Norsk Hydro and Solvay : see recital 55.

2. *The product*

(3) PVC was one of the first bulk thermoplastic products to be developed. It is produced from vinyl chloride monomer (VCM), itself obtained from ethylene and chlorine feedstock. PVC has many important uses in heavy industry and construction as well as varied consumer applications. It can be converted into hard material or — compounded with plasticizers — made into flexible articles, including film. PVC is converted into the various end products by a variety of processes including extrusion, continuous coating, blow moulding and injection. Rigid PVC is mainly used for making pipes and construction materials, which since 1970 have overtaken the flexible forms of the product — film, fabric, etc. — in terms of importance.

Four different types of PVC are produced by various technologies and plant processes. 75 % of PVC usage is accounted for by suspension homopolymers and mass copolymers for general applications. Paste/emulsion polymers and suspension copoymers are speciality products.

3. *The PVC market in western Europe*

(4) PVC consumtion (all grades) in western Europe rose from 500 000 tonnes in 1960 to some 4 200 000 tonnes in 1986. Consumption has demonstrated a marked correlation with cyclical industrial production over the years although in the period 1986—1988 PVC usage outstripped annual growth.

In 1977 the west European market was supplied by about 30 manufacturers, reduced to 12 by 1988 as a result of mergers/restructuring and plant closures.

Thus in 1977 total 'nameplate' capacity was about 5 million tonnes, with European demand running at 3 400 000 tonnes and exports of 300 000 tonnes (imports were minimal).

In 1986 nameplate capacity was 5 110 000 tonnes with production totalling 4 400 000 tonnes giving a record utilization rate of 86 % of nominal capacity or 95 % of effective capacity. While imports had increased by 1986 to some 200 000 tonnes (mainly from Eastern Europe), Western Europe was still a substantial net PVC exporter (1986 exports: 435 000 tonnes).

At all relevant times there was a considerable inter-State trade in PVC, partly as a result of substantial variations in domestic supply and demand in the various Member States. Some 35 % of trade in western Europe took place across national boundaries.

Several producers — BASF, OCO, LVM, Norsk Hydro, Shell and Solvay — had plants in more than one country.

Only Solvay, Wacker and Hoechst did not possess their own integrated ethylene feedstock production. Downstream there was also considerable captive usage with up to 25 % of PVC output going to processors integrated in the same group as a producer.

4. *Overcapacity*

(5) The Commission accepts that over much of the period covered by this Decision (1980 to 1984) the PVC market in Europe was characterized by structural overcapacity. Almost all the producers reported substantial losses in this sector.

Besides overcapacity, among other factors accounting for the situation were said to be:

— the large number of producers and production sites, leading to uneven plant loading,

— different strategic conceptions of the PVC business among producers,

— a volatile market with periodic sharp downturns in demand,

— depressed demand in the western European economy generally in the early 1980s.

It is accepted that during 1981 to 1982 the producers were often operating at below break-even levels.

From about the fourth quarter of 1982 up to and including the second quarter of 1984 PVC producers in western Europe generally achieved a cash break-even. In the third quarter of 1984 however the industry experienced a return to net cash losses.

Plant rationalization schemes and closures had by 1987 largely eliminated overcapacity and during 1988 at least PVC producers were running their plants at full capacity and generating profits.

5. *Commission investigations*

(6) The existence of a possible infringement first came to light in late 1983 during investigations concerning another thermoplastic product. On 21 to 23 November 1983 investigation visits were made to ICI and Shell on the basis of authorizations specifically relating to suspected agreements contrary to Article 85 in the bulk thermoplastics PVC, polystrene, HdPE and LdPE. Subsequently during 1984 the Commission was obliged to adopt a decision under Article 11 (5) of Regulation No 17 requiring

ICI to provide information to relation to documents discovered at its premises. In January 1987 the Commission carried out investigations without prior warning at Atochem, Enichem and Solvay. More investigation visits were made later in 1987 to Huels, Wacker and LVM. The Commission was also obliged to adopt a series of decisions under Article 11 (5) following the refusal or failure of a large number of undertakings to provide information. In most cases the undertakings maintained their initial refusal.

B. Details of the infringement

1. *The origin of the cartel*

(7) The collusive arrangements which are the subject of this Decision originated in a proposal made in August 1980 and the discussions and consultations which followed. Two planning documents amounting to a blueprint for the cartel were found at ICI, the first proposing a new framework of meetings to administer a revised quota system and price fixing scheme, and the second, recording the generally favourable reaction of other producers to the ICI proposal.

According to the ICI proposals, the new framework [1] of meetings was to consist of a restricted planning group and a larger operating group of producers to administer quotas and price-fixing arrangements.

The planning group was to consist of 'S', 'ICI', 'W', 'H' and the 'new French company' and the larger meetings were to include these producers plus Anic, BASF, DSM, SAV and PCUK.

ICI has declined to confirm the identity of the undertakings referred to by a single letter but from the context and the list of proposed participants it is clear that 'S' means Solvay (then the largest PVC producer); 'W' is Wacker and 'H' in all probability is Huels, the largest German PVC producer [2] (Hoechst, the only other possibility, was only a minor producer of PVC). The 'new French company' must have meant Chloe, a company formed in 1980 in the context of the reorganization of the French petrochemical industry and later to change its name to Atochem (and subsequently to Elf Atochem).

These meetings were to discuss matters such as:

— the producers' percentage market shares together with any permitted variances about these quotas;

— arrangements for exchanging monthly data on the sales of each producer in each country;

— the achievement of greater price transparency with a common European price, although importers might still be allowed a penetration margin (2 % was suggested);

— the machinery of price initiatives and measures designed to ensure they were sucessfull including the discouraging of customer 'tourism' (buyers changing to a new supplier offering the lowest price).

A document summarizing the response of the PVC producers to the proposals shows that there was general support for the plan, the only reservations being expressed concerning the wisdom of allowing a possible flexibility in the individual quotas, as had been mooted in the ICI proposal.

2. *Meetings of producers*

(8) Following the 1980 proposals, meetings of the PVC producers took place 'fairly regularly at differing levels of seniority, approximately once a month' (response of ICI to Article 11 (5) of the Decision of 30 April 1984).

These 'informal' meetings (as ICI calls them) were arranged outside the framework of official chemical industry associations such as APME (Association of Polymer Manufactures in Europe). On ICI's own admission the discussions covered topics such as pricing and data on market shares, although it is claimed that no commitments between producers resulted from these discussions.

ICI identified the producers taking part in 'at least some' of these meetings during the period from August 1980 to September 1983 as:

ANIC (now Enichem),
Atochem (now known as Elf Atochem),
BASF,
DSM,
Enichem,
Hoechst,
Huels,
ICI,
Kemanord (a division of Kemanobel),
LVM,
Montedison,
Norsk Hydro,
PCUK,
SAV,
Shell,
Solvay
and
Wacker.

[1] The reference to a 'new' framework of meetings and other evidence suggests that prior to 1980 some form of national quota system had been in force but this does not form the subject matter of this Decision.

[2] In any case, both Huels and Hoechst are identified by ICI and BASF as participants in the meetings.

According to ICI some of these producers attended meetings more regularly than others and participation in meetings varied from time to time. The Commission attempted to obtain from these producers more precise information on their participation in meetings but most of those named by ICI either denied all knowledge of meetings or claimed to have no details.

(9) Shell admits attending two meetings in 1983 in respect of which the Commission found evidence of its participation in the form of diary entries. Hoechst admits participation in unofficial meetings with competitors but claims they were never concerned with anticompetitive discussions. Other producers — having first claimed in answer to decisions adopted under Article 11 to have no recollection or knowledge of meetings — now admit (or do not deny) attending meetings but — like Hoechst — claim that their purpose was innocent. BASF in response to a decision adopted under Article 11 (5) of Regulation No 17 confirmed the participation in meetings of virtually all the undertakings named by ICI :

ANIC,
Atochem,
BASF,
Enichem,
Hoechst,
Huels,
ICI,
LVM,
Montedison,
Norsk Hydro,
Shell,
Solvay and
Wacker.

The only producers involved in these proceedings whose attendance at meetings was not confirmed by BASF were DSM and SAV. (These undertakings combined their PVC interests in early 1983 in their existing VCM joint venture LVM, which is among those named by BASF) (1).

No record or minute of any of these regular meetings has been forthcoming from the producers involved despite extensive and persistent inquiries on the part of the Commission.

Price initiatives by the industry are frequently described in the producers' internal documentation (point 17 to 22). Documents found at a number of undertakings show the existence of quotas and information exchanges (points 11 to 13). Given the express intention in the 1980 plan found at ICI to set up meetings to administer such schemes, the Commission is led to the conclusion that the regular meetings were in fact concerned with these subjects.

3. *Quota schemes*

(10) The 1980 planning document found at ICI shows that the proposal for tonnage quotas to be based in future on a company instead of a national basis as previously was strongly supported by the producers ; as was the suggestion that percentage quotas be based on the producers' achieved 1979 market shares, although anomalies remained to be settled.

The producers considered that for such a scheme to be realistic and workable, it had to include an agreed formula for the loading of new capacity and plants restarted after temporary closure.

Although the producers all claim that no quota scheme was ever introduced, the documentary evidence disproves their argument.

An ICI note of a message received from the then managing director of Montedison's petrochemical division on 15 April 1981 states that 'ICI on PVC for insance might have by the end of 1981 new capacity in Germany and have been asking for a 30 000 tonne increase in quota since January 1981'. (ICI was planning to build a new plant in Wilhelmshaven and close old capacity elsewhere).

(11) Indeed it is clear that the producers attempted to reinforce the quota scheme during 1981 by a compensation mechanism to penalize oversold producers in favour of those who had not reached their target. (The introduction of a compensation scheme for PVC in 1981 had already been foreseen in the 1980 planning document.)

According to a later ICI memorandum headed 'Sharing the Pain' (concerned primarily with discussions with Shell on proposals for a similar scheme for another product) the PVC producers 'where abel to work on agreed market share for 1981'. The PVC compensation scheme however (it continues) 'only allowed for adjustments if a company's or group of companies' sales fell below 95 % of "target". This allowed companies to creep up in market share at no penalty...'.

The producers' dismissal of the 'Sharing the Pain' document as somehow unreliable or speculative must be seen against ICI documentation (found a

(1) In 1989 the EMC Group, the parent of SAV, acquired DSM's 50 % shareholding in LVM and became sole proprietor.

Spanish producer) which confirms the existence of just such a scheme in 1981. This document proposed a compensation mechanism for LdPE 'very similar to a scheme recently introduced by PVC producers and put into operation for half of May sales and June sales'. The document concludes with a comparison between the proposed LdPE scheme and 'the PVC arrangement'. Only one PVC producer (apparently Shell) had not joined the PVC scheme. The note states : 'Can the (LdPE) scheme be operated with 2-3 producers outside ? PVC have only one outside'.

The existence of an equalization scheme is further confirmed by a document found at DSM which suggests however that to avoid having to make compensation deliveries some producers deliberately understated their sales. Industry statistics showed an apparent — but unlikely — 12 % increase in PVC sales in the first half of 1982 as compared with the same period in 1981. DSM remarks : 'Maybe an explanation could be found in a false declaration of sales in the first half of 1981 (compensation !). This item will be investigated'.

The suggestion that some producers may have cheated does not detract from the clear evidence that the compensation scheme was put into operation, albeit for a limited time.

(12) A volume control scheme continued until at least well into 1984, that is, even after the Commission had commenced its investigation in the thermopolastics sector in late 1983.

A document (drafted in English) headed 'PVC — First quarter' and relating to 1984 was discovered at Atochem (as Elf Atochem was then called) in January 1987. It lists the detailed monthly sales of the individual PVC producers for each of the first four months of the year and compares the achieved percentage market shares of each producer in the first quarter of 1984 with what is plainly a target share : '% T'.

The actual tonnage sales for January and February are headed 'final' whil those for March and April are headed 'Q'. It is apparent that in several cases the sales figures as the 'final' and 'quick' statistics as communicated by the producer concerned to the Fides information exchange. The Fides scheme is an industry-wide statistical service run by a Zurich-based accounting firm under which subscribing producers supply individual data to a central office which collates the information and produces global and anonymized statistics for the whole Western European market. From these global statistics each producer can determine its own market share but not those of competitors. The system contains confidentiality safeguards but there is nothing to prevent competitors from exchanging the information themselves in some other forum. The clear implication of the document found at Atochem is that the producers named exchanged their individual sales figures outside the official Fides system in order to monitor the operation of a quota system. Only in the case of ICI and Shell are rounded-off figures given.

(13) The firms named are Atochem, BASF, Enichem, Huels, ICI, Kemanord, LVM, Norsk Hydro, Pekema, Shell, Solvay and Wacker — effectively all the West European PVC producers at the relevant time (Montedison had left the sector in March 1983).

Their targets as compared with actual market share for the first quarter were as follows :

1984 Q1	% Sales	% Target
BASF	24,1	23,9
Hoechst		
Huels		
Wacker		
Atockem	11,7	12,1
Enichem	13,9	14,9
ICI	11,4	11,0
Kemanord	3,1	2,9
LVM	7,1	7,0
Norsk Hydro	5,6	5+
Pekema	1,4	1,3
Shell	6,3	7,1
Solvay	15,4	14,8
	100,0	100,0

(14) The Commission has attempted to obtain the Fides returns of all producers named in order to check :

(a) the accuracy of the tonnage sales given for each producer in the Atochem document;

(b) the extent to wich 1984 market shares corresponded with the targets shown in the Atochem document.

A number of producers claimed that statistical documents for 1984 were no longer available. In several cases however data were obtained and it is significant that for the most part the individual monthly tonnages shown in the document found at Atochem correspond exactly (to the tonne) with the supposedly confidential Fides declarations of the undertaking concerned: Solvay, Kemanord and Pekema. In the case of the four German producers their combined sales (as ascertained by the Commission from Fides returns and under Article 11 of Regulation No 17) for the first quarter of 1984 are within a few tonnes of the figure in the Atochem document, and the same applies to LVM.

The Commission has also been able to establish that the achieved market shares of each producer in 1984 came very close to the percentage targets set out in this document.

For instance, Solvay's actual 1984 market share of 14,8 % was exactly the target share given in this document. Similarly, the four German producers ended 1984 with an achivied 24 % compared with the 23,9 % target [1]. ICI's final percentage of 11,1 % compares with the 11 % target. (It is significant that ICI's own internal documents dating from 1984 refer on several occasions to its target of 11 %).

Elf Atochem claimed to be both ignorant of the meaning of the document and unable to identify its source (its style and typeface indicate that it probably did not come from a French producer).

Neither Elf Atochem — nor any other producer — has been able to provide any plausible expanation wich might cast doubt on the natural inference that the abbreviation '% T' means 'percentage targets'.

4. *Monitoring of sales in national markets*

(15) The 1980 planning document proposed that the meetings of the producers should cover the exchange of monthly data on sales by each producer in each country.

Annual reports for the PVC sector found at Solvay show that during the whole period covered by this Decision (1980 until at least the end of 1984) the home producers in certain major national markets had informed each other of the tonnages they had sold in that market.

Indeed in relation to Italy one Solvay report expressly states: 'The division of the national market between the different producers for 1980 has been indicated on the basis of the exchange of data with our colleagues' (translation from original French).

Solvay has claimed that with the possible exception of Italy (where it can hardly deny contact with other producers) the information was obtained by deduction from officially available statistics and information received from customers. This assertion is however contradicted by Shell which stated that occasionally in the period January 1982 to October 1983 Solvay would telephone 'to seek confirmation of its estimation of Shell companies' sales tonnage', the implication being also that Solvay was the chairman of the meetings. In any case, while it might be possible to reach a broad estimate of market share using the methods Solvay claims to have employed, reasonably precise information could only come from the producers themselves.

(16) In view of the sparseness or even total absence of sales statistics at many of the undertakings named, it has been difficult to ascertain whether the sales figures noted by Solvay do in fact correspond in every case with the actual sales of the producers in question.

The Commission has however been able to ascertain that on the German market, Solvay's figures for the sales of Huels and BASF correspond exactly with their declarations to Fides for several years.

[1] New figures produced by Hoechst at the oral hearing (but without any supporting documentation) and relied upon by the other three German producers to support their assertion that the document found at Atochem wrongly stated their combined sales, are cleary unreliable and would have had to involve Hoechst loading its plant at over 105 % while the others achieved only 70 % occupation rates. After the hearing Hoechst produced yet a third set of figures somewhat closer to the information originally provided under Aricle 11 (the accuracy of which there is no reason to doubt).

For France, the Solvay figures for Shell are substantially correct for 1981 to 1983. LVM's totals sales in France for 1983 and 1984 are correctly stated, and for Atochem the 1984 sales are also given accurately (no other data is forthcoming from Atochem to enable the Solvay figures to be checked for other years).

The Solvay documents only show annual sales for each producer, but the existence of some system of monthly monitoring of individual sales (although not for each national market) is demonstrated by the document found at Atochem.

5. Target prices and price initiatives

(17) The document shows that one of the main tasks of the proposed meetings was to be the detailed planning and coordination of price initiatives.

Under the heading 'Proposals on how these meetings will operate' the note listed the following:

— how to achieve greater price transparency,

— delta (1) for importers (2 % maximum ?),

— higher prices UK and Italy (levelling up ?),

— ...,

— abatement of tourism (2).

The first price initiative was foreseen for the last quarter of 1980, to be preceded by a stabilization period of orderly marketing during which the suppliers were to have contact only with customers they had supplied during a previous three-month reference period.

A meeting was scheduled for 18 September 1980 in order to secure the commitment of the members of the planning and operational groups to the planned October/December price initiative as well as to make arrangements for seeking the support of the few producers outside the cartel.

The price for suspension grade PVC had fallen during the summer of 1980 to as low as DM 1,00 per kilogram. In the ICI planning document, the October/November price was given as DM 1,35 and the November/December price as DM 1,50.

(1) That is, a permitted discount off list price.
(2) 'Tourism' is the phenomenon whereby customers faced with a price increase from their regular supplier seek lower quotes from other producers.

The planned initiative was indeed put into effect. According to an ICI internal report of 12 November 1980, 'The price increase announced for November is meant to bring all West European suspension prices to a minimum of DM 1,50 (£ 330/te)...'. Documents found at Wacker, Solvay and DSM confirm the existence of the concerted initiative.

(18) In spite of the absence in the records of many of the producers of any documentation showing their price objectives, the Commission has been able to identify some 15 PVC price initiatives in the period covered by this Decision. (Details are set out in Table 1.)

Periodic initiatives by the industry to raise the European price to a particular target level were regularly reported in the specialist trade press. These reports described prevailing market conditions and almost invariably identified the new target price level and the date on which the increases were to become effective.

The specialist press reports of a particular price push or initiative correspond with indications in the documentation of those producers for which pricing records are available that a particular target had been set by the industry and concerted action was planned to achieve it. (The European target was always fixed in German marks, with the equivalent in the different national currencies being calculated for each national market.)

(19) Indeed on one occasion in April 1983 the trade press — which sometimes hinted at collusion but usually avoided direct accusations — reported rumours that a meeting of PVC producers had been held in Paris to discuss market dicipline, volume control and set new price targets. (The holding of this particular meeting on 2 March 1983 is confirmed by both ICI and Shell.)

According to an ICI memorandum of 31 January 1983, the target prices in Europe were fairly well known through the industry and as such were 'posted levels'. The memorandum went on:

'It is widely acknowledged that these posted levels will not be achieved in a slack market... but the announcement does have a psychological effect upon the buyer. An analogy is the car purchase where the "List price" is set at such a level that the purchaser is satisfied when he obtains his 10-15 % discount, he has struck a "good deal", but the car producer/garage has still an adequate margin.'

The writer recommended that the PVC industry announce widely target prices which are well above likely attainable, e.g. DM 1,65 per kilogram in March.

In fact, following the Paris meeting on 2 March 1983, a two-step price initiative designed to raise the price first to DM 1,50 and then DM 1,65 per kilogram was attempted and proved largely succesful. A Shell report of 13 March 1983 reads :

'A major initiative is planned to stop this (price) erosion, with minimum targets established for March/April of DM 1,50/1,65 per kilogram respectively.'

From the second quarter of 1983 market demand increased and prices rose steadily with targets of DM 1,80 per kilogram on 1 September and DM 1,90 per kilogram on 1 November being set.

(20) The internal price instructions which were obtained from a number of undertakings (DSM, ICI, LVM, Shell, Wacker) confirm that price initiatives were a concerted industry-wide exercise, with producers introducing the same price targets to be effective on the same date, and frequently referring to supporting planned price increases' of industry initiatives.

The available price instructions and internal documentation of producers often emphasize the need for sales offices to show firmness in support of a particular price initiative. This might involve confining sales to regular customers (avoiding 'tourism'), allowing concessions off the new price list only after obtaining head office approval, or even refusing business rather than brake the price.

The Commission required the undertakings in the present case to provide all documentation showing internal price objectives, price lists or pricing instructions to national sales offices. With the exeption of the abovementioned undertakings (where documentation was obtained during on-the-spot investigations) the undertakings claimed either that any such documentation had been destroyed as a matter of routine or that it had never existed since all price instructions were given by telephone. Others claimed that all pricing decisions were taken on a customer-by-customer basis and that no overall policy was ever defined. The Commission does not accept that in so price-sensitive a sector these undertakings can have had no specific pricing objectives or that no written records were maintained, particularly since certain other producers had very full documentation.

The Commission is not therefore able, in the absence of price documentation from the producers, to show that all of them simultanesly introduced identical price lists or even applied the German mark European targets.

What can however be demonstrated is that one of the major objects of the meetings in which they were all involved was to set price targets and coordinate price initiative.

(21) The undertakings do not deny that industry-wide initiatives took place. For the most part, however, they argue that they were the manifestation of spontaneous competitive forces. They attribute the phenomenon of price initiatives to the economic theory of 'barometric price leadership', where one or other of the larger producers sets a price which approximates to that which would emerge in any event under conditions of full competition and is then followed by the others without any illicit contact taking place.

In order to accept the validity of such arguments the Commission would have to ignore the considerable documentary evidence as to :

(i) the express purpose of the regular meetings as foreseen in the 1980 planning documents ;

(ii) the participation in those meetings of almost all the producers of PVC ;

(iii) the producers' internal marketing reports which suggest that price initiatives were part of a concerted plan.

In the light of their attendance at meetings, it is idle for the producers to claim (as some do) that they heard of impending price initiatives by reading commercial journals and decided independently to support them.

(22) The Commission is aware that in spite of the efforts of the producers to ensure common price discipline the concerted price initiatives in PVC often met with only mixed success or in some cases were considered a complete failure.

Various factors might account for the gab between list and prevailing market price levels. In some cases customers bought heavily at the old price in advance of expected or announced price initiatives. Some producers might be tardy in applying the new lists in particular national markets; others might offer special discounts or rebates to selected customers; others might try to steer a middle course between increasing prices to the target level and retaining their market share; low prices in one national market might also have a negative effect on a neighbouring market; in 1981 to 1982 in particular the sharp drop in demand created difficulties for concerted pricing actions.

It is also true that a number of producers who took part in the meetings were named as aggressive or disruptive in certain markets by other producers who considered themselves as strong supporters of price initiatives and were prepared to lose volume in order to force through an increase.

Nevertheless the initiatives frequently involved an upward move in prices as can be seen from Table 2. Customers were usually faced with a known marker or reference price in the market. While individual customers might receive special conditions or discounts the setting of a particular price as the target meant inevitably that the opportunities for negatiation by customers were circumscribed.

C. The proof of the existence of the cartel and the participation of each producer

1. *The core evidence for the existence of the cartel*

(23) It is inherent in the nature of the infringement with which the present case is concerned that any decision will to a large extent have to be based upon circumstantial evidence: the existence of the facts constituting the infringement of Article 85 may in part at least have to be proved by logical deduction from other proven facts.

In the present case besides circumstantial evidence the Commission has also obtained a substantial body of direct documentary proof relating to the facts in issue.

The question whether an infringement of Article 85 has occured falls to be considered in the light of, *inter alia*:

(a) the proposal detailed in the 1980 plan found at ICI for a new framework of regular meetings to operate a price-fixing and volume control system (recital 7);

(b) the operation by Western European PVC producers of just such a system of regular meetings (recitals 8 and 9);

(c) the proven participation in those meetings of the undertakings named in Article 1 of this Decision (recitals 8 and 9);

(d) the phenomenon of uniform industry price initiatives over the period when the undertakings were regularly meeting (recitals 17 to 22);

(e) the identical price targets introduced by certain producers due to come into effect on the same day (recital 20);

(f) the various references in documents found at or originating from ICI to a compensation system for PVC in 1981 (recitals 10 and 11);

(g) the documentation found at Solvay showing the exchange of information between the PVC producers on their individual sales in each national market between 1980 and 1984 (recitals 15 and 16);

(h) the 1984 document found at Elf Atochem showing the percentage for each producer and a comparison with actual performances (recitals 12 and 13).

(24) The undertakings have during the administrative procedure attempted to treat each single item of evidence in isolation from the rest; they argue (for example) that there is no evidence that the 1980 plan was ever implemented; that it is not proved that the meetings were corcerned with collusive discussions; that price initiatives are not shown to have any connection with meetings. Allegedly plausible hypotheses are advanced for each item of evidence which (it is argued) are consistent with the non-existence of a cartel of the non-participation of the particular producer concerned. In most cases however the arguments advanced by the undertakings in relation to a particular document find no support in the express terms of the document itself.

The Commission considers that the various items of direct and circumstantial evidence in the present case must be considered together. In particular, the system of regular meetings cannot be divorced from the overall plan proposed in 1980 ; nor can the price initiatives be isolated from the existence of the meetings, given the clear statement of their purpose in the 1980 ICI plan. Taken in this light, each element of proof reinforces the others with respect to the facts in issue and leads to the conclusion that a market sharing and price fixing cartel was being operated in PVC.

2. *The participation of the individual producers*

(25) The core evidence showing the existence of the cartel is provided by the 1980 planning documents, the evidence of a system of regular meetings between ostensible competitors and the documents relating to quota and compensation schemes.

As regards the practicalities of proof, the Commission considers that besides demonstrating the existence of a cartel by convincing evidence, it is also necessary to prove that each suspected participant adhered to the common scheme. This does not however mean that documentary proof must exist to show that each participant took part in every manifestation of the infringement. It is highly improbable that in a case of this nature the documentary evidence will be duplicated at each participant. Nor will each item of documentary evidence conveniently name all the participants in the cartel. In the present case it has not been possible, given the absence of pricing documentation, to prove the actual participation of every producer in concerted price initiatives. The Commission has therefore considered in relation to each suspected particpant whether there is sufficient reliable evidence to prove its adherence to the cartel as a whole rather than proof of its participation in every manifestation thereof.

In the present case the core evidence in fact not only demonstrates the existence of a common scheme but also identifies virtually all the participants in the cartel. Almost all of the undertakings were named in the 1980 documents, and BASF and ICI identified most of those which attended meetings. Confirmation of this evidence is found in the documents found in the 1987 investigations, particularly at Solvay and Atochem. The document found at Atochem especially is not only a crucial item of evidence in itself ; it also confirms the continued participation in the cartel of the undertakings named by ICI and BASF.

(26) Although in the context of Article 85 a cartel is the combination of the participants towards a common unlawful end, so that the infringement is essentially a joint enterprise for which the undertakings must bear a shared responsibility, the Commission has also considered the role played by each producer and the evidence of the participation of each in the cartel. Full particulars were supplied to each producer in the course of the administrative procedure.

With the exception of Shell, all the undertakings named in Article 1 of this Decision were identified as participants in meetings by both ICI and BASF [1] and in most cases were also implicated in the 1980 planning document. Shell itself admits taking part in two meetings in 1983 (although its internal documents show that before this it was informed of the price targets) and that it was in contact with Solvay on volumes from January 1982 onwards. According to ICI, Shell was however the only important producer not in the compensation scheme.

The precise regularity with with the producers attended meetings could not be ascertained, owing to the refusal of the undertakings to provide the information requested. In any event, since the cartel was a venture continuing over a number of years, the fact that some members may have missed certain meetings or even took part less frequently than others is of no practical importance.

The document found at Atochem (as Elf Atochem was then known) shows that even after the Commission began its investigations in late 1983 virtually all the undertakings — ICI and Shell are the only likely exceptions — were still operating the cartel as before.

The fact that internal price documentation was almost non-existent at most of the undertakings first contacted in 1987 does not exonerate them from this aspect of the cartel's operation. The Commission does not accept that these producers could have conducted business in this price-sensitive product without any internal direction of their pricing policy. The degree of responsability borne by each participant does not however depend on the documents which — fortuitously or otherwise — are available at that undertaking but rather on its participation in the cartel seen as a whole. Thus, the fact the Commission did not obtain

[1] Although BASF identified LVM as as participant in meetings it did not name its parent companies DSM and SAV, both featuring in the 1980 plan and named by ICI as participants.

evidence as to the pricing conduct of certain firms does not diminish their involvement, since they are shown to have been full members of a cartel in which price initiatives were planned.

D. Procedural issues

(27) In the course of the administrative procedure several undertakings asserted that the Commission had infringed their rights of defence by rejecting their demands for full access to its administrative files.

The Commission's position on this question was set out in the covering letter sent with the statement of objections to all undertakings involved in the case, each of which received all the documentation necessary to support the allegations made in the statement of objections together with a full set of replies made under Article 11 of Regulation No 17. The Commission also provided an inventory of the documents on file, indicating those to which each undertaking might have access if it so wished ; but it was made clear that for reasons of confidentiality no undertaking would be allowed sight of internal commercial documentation obtained from its competitors under Articles 11 and 14 of Regulation No 17, with the exception of the documents attached to the statement of objections. The Commission subsequently and of its own initiative provided each undertaking with further documents which might be of assistance to the defence.

After the expiry of the time allowed for replying to the statement of objections, the majority of the undertakings made a joint approach to the Commission and, on the basis of reciprocal waivers of confidentiality, demanded that the Commission permit each to inspect all the documents obtained by the Commission from the other signatories. The Commission immediately informed these undertakings that they each had copies of the documents which they had supplied to the Commission and if they considered that any useful purpose would be served by reciprocal disclosure it would have no objection to their arranging any such exchange of documents amongst themselves.

It should be pointed out that any waiver by undertakings of confidentiality for their internal business documents is subject to the overriding public interest in ensuring that competitors are not informed of each other's commercial activities and intentions in such a way that competition between them is restricted.

Had there existed in the Commission files any document not disclosed to all the undertakings which could have cast doubt upon the allegations made in the statement of objections the undertaking from which it originated would no doubt have drawn attention to it during the administrative procedure. No such documents were forthcoming.

The Court of Justice has emphasized on frequent occasions (see e.g. Judgment of 17 January 1984 in Joined Cases 43 and 63/82, VBVB and VBBB v. Commission [1984] ECR 19 ; Judgment of 3 July 1991 in Case C 62/86, Akzo v. Commission [1991] ECR I-3359) that there is no provision requiring the Commission to divulge the whole contents of its administrative files to the undertakings. The rights of defence are fully protected if the undertakings have had the opportunity to make known their views on the documents relied upon by the Commission to support its findings in any subsequent decision. To the extent that in a decision the Commission bases its findings on documents not disclosed to the parties, that decision may be annulled. In the present case the Commission has gone beyond the requirements set by the Court of Justice and has disclosed to the undertakings not only the documentation supporting the allegations made in the statement of objections but has also provided them with documents (originating from one or other of them) which were not cited in the statement of objections but which were considered to be of possible assistance to the defence. These documents were relied upon by the undertakings and full account has been taken of them in this Decision.

II. LEGAL ASSESSMENT

A. Article 85

1. *Article 85 (1)*

(28) Article 85 (1) of the EC 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.

2. *The nature and structure of the agreement*

(29) From about the end of 1980 the producers of PVC supplying the Community have been party to a complex of collusive schemes, arrangements and measures which were worked out in the framework of a system of regular meetings.

The arrangements involved :

— the setting of target prices,

— the modalities of concerted price initiatives intended to raise price levels up to the agreed targets,

— the division of the Western European markets according to annual volume targets,

— the exchange of detailed information on their market activities in order to facilitate the coordination of their commercial behaviour.

(30) It is not necessary, in order for a restriction to constitute an agreement within the meaning of Article 85, that the parties should consider it legally binding. Indeed, in a secret cartel where the parties are well aware of the illegality of their behaviour they clearly cannot intend their collusive arrangements to have any contractual force. An agreement within the meaning of Article 85 may exist where 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 enforcement procedures such as might be foreseen in case of a civil law contract are required. Nor is it necessary for such an agreement to be made in writing.

In the present case, the continuing restrictive arrangements of the PVC producers over a period of years clearly originated in the proposal made in 1980 and constitute its implementation in practice.

The Commission considers that the complex of schemes and arrangements agreed by the producers therefore constitutes a single continuing agreement prohibited by Article 85 (1).

(31) In the context of this overall plan the producers from time to time planned various price initiatives and the annual quota system may also have been revised to take account of changes in the industry. In relation to one or other aspect of the arrangements a particular producer or group of producers may from time to time have had resevations or been dissatisfied about some specific point (e.g. ICI's pressing for a quota increase in 1981). The collusion is however to be considered not so much as a series of discrete agreements each with different adherents, but as the execution of a broad continuing agreement with the same participants, the same procedures and the same common object, namely to establish a mechanism for volume control and concertation on pricing.

In other words, the agreement to which the Commission takes objection relates to a continuing enterprise or partnership between the producers to prevent, restrict or distort competition in the PVC market over a period of several years.

The agreement was a continuing one and the fact that some producers were possibly less frequent participants in meetings than others, or in the absence of evidence are not shown to have implemented the price initiatives does not detract from the common nature of the enterprise in which they were engaged.

The essence of the present case is the combination of the producers over a long period towards a common unlawful end, and each participant must not only take responsibility for its own direct role as an individual, but also share responsibility for the operation of the cartel as a whole.

3. *Concerted practices*

(32) The Commission thus considers that the operation of the cartel constituted an agreement within the meaning of Article 85 (1).

Article 85 (1) refers to both agreements and concerted practices but cases may arise (particularly in the case of a complicated and long-running cartel with numerous adherents) 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 a stage where an agreement properly so-called has been concluded, knowingly substitute practical cooperation for the risks of competition.

(33) 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 may regulate its commercial conduct in the knowledge

that its competitors will 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 later Judgment of 16 December 1975 in relation to the European Sugar Cartel — Suiker Unie and Others v. Commission, Joined Cases 40 to 48, 50, 54 to 56, 111, 113 and 114/73 [1975] ECR 1663 — the Court of Justice in expanding upon the above definition of a concerted practice 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 market. This requirement of independence does not deprive undertakings of the right to adapt themselves intelligently to the existing of 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.

Collusive conduct falling short of an agreement may thus equally fall within the ambit of Article 85.

(34) The Court's definition of a concerted practice is particularly apt to cover the involvement of Shell which cooperated with the cartel without being a full member, and was able to adapt its own market behaviour in the light of its contac with the cartel.

The importance of the concept of a concerted practice does not 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.

4. *The object and effect of the agreement*

(35) Article 85 (1) expressly mentions as restrictive of competition agreements which directly or indirectly fix selling prices or share markets between producers; these are the essential characteristics of the agreement under consideration 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 create a permanent mechanism for controlling the tonnage sold and achieving concerted price increases.

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

The control of volumes also had as its objective the creation of artificial market conditions favourable to price rises and thus inextricably linked to the price initiatives.

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

(36) The Commission is well aware of the circumstances of the industry, in particular that for a considerable period the PVC operations of most producers were loss-making and that often price initiatives were only planned to keep in line with feedstock price rises.

Such considerations do not however relieve the agreement of its anti-competitive object.

If competitive conditions in a particular product area (e.g. a large number of suppliers) are such that it is difficult for producers to operate profitably, the remedy does not lie in collusion by the producers to raise price levels. In this respect the argument advanced by Montedison in particular, to the effect that if any meetings occurred they were prompted by a desire on the part of the industry to ensure fair competition (i.e. the prevention of unprofitable price cutting) must be rejected.

The fact that such price cutting may have occurred cannot in any circumstances justify an infringement of the Community rules on competition: Judgment of the Court of Justice of 17 January 1984 in VBVB and VBBB v. Commission, *loc. cit.* pp. 63-64.

(37) It is not strictly necessary, given the manifestly anti-competitive object of the agreement, for an adverse effect upon competition to be demonstrated.

In view of the non-availability of price instructions from the majority of producers the Commission did not attempt to demonstrate that all the producers applied uniform and simultaneous increases in list prices during the period covered by this Decision. Moreover, it remains a matter of speculation whether in the long term price levels would have been significantly lower in the absence of collusion.

The Commission does not however accept the assertion of some producers that their arrangements were entirely without effect on competition.

(38) In the first place, and quite apart from the success or otherwise of any concerted price initiative, the producers put into effect a continuing machinery for monitoring their individual actions in the context of a perceived mutual solidarity.

Secondly, the setting by the industry of a European target price level meant that the free play of market forces in establishing a competitive price level was restricted. In normal circumstances, if conditions of supply and demand favoured a price increase, the leading producers would test the market with different price levels and the market would eventually stabilize at the appropriate level.

Where a single target or list price is set, the operation of this process is restricted or prevented. In the present case the establishment of a single list or reference price limited the opportunities of customers to negotiate. Any discounts or special conditions would still be determined by reference to the list price.

In the third place, actual price levels rose towards the target levels on the occasion of many identified price initiatives. Even if the producers did not reach the targets in full, many documented initiaves were still judged successful by producers either in stopping a trend to lower prices or in substantially improving prices. It is however apparent from the producers' internal reports that the success or otherwise of price initiatives depended to a considerable extent on factors outside their control. Given the characteristics of the market it would be futile to attempt concerted price initiatives unless conditions were favourable to an increase.

It is unlikely however that if the arrangements were wholly ineffective, as the producers argue, they would have continued their regular meetings and concerted price initiatives for over three years.

Finally, as regards the quota scheme, the details available to the Commission show that far from being a proposal that was put forward but never followed, quota arrangements were indeed put into practice, were for some time during 1981 reinforced by an attempted compensation scheme, and were still being applied as late as May 1984.

5. Effect upon trade between Member States

(39) The agreement between the PVC producers was likely to have an appreciable effect upon trade between Member States.

The collusive agreement in the present case extended to all Member States and covered virtually all trade in the Community in this major industrial product [1]. Most producers supply the product throughout the Community and with imbalances of supply and demand in the different national markets there is a considerable intra-Community trade.

The fixing of target prices must have distorted the pattern of trade between Member States and effect on price levels of differences in efficiency between producers. Arrangements intended to discourage so-called 'customer tourism' — such as a freeze on customers or turning away inquiries — were clearly intended to prevent the development of new trade relationships.

The volume control system from 1980 onwards was expressly based on company-by-company European quotas rather than on national quotas. Nevertheless the very existence of such constraints would operate to restrict the opportunities open to a producer. It is also clear from the documentation found at Solvay that information was exchanged on the division of each national market by the undertakings which considered themselves as national or local producers.

[1] The activities of the cartel relating to sales of PVC in non-Member States are outside the scope of this Decision.

6. *Undertaking identity*

(40) Since 1980 the Western European petrochemical industry — including the PVC sector — has undergone substantial restructuring, a process which received the support of the Commission.

The particular problem in the present case for the application of EEC competition rules is whether after this restructuring an undertaking existing today can be held liable for the involvement in the cartel of a predecessor.

(41) The subjects of EEC competition rules are undertakings, a concept which is not identical with that of legal personality for the purposes of national law. The term 'undertaking' is not defined in the Treaty. It may refer to any entity engaged in commercial activities and in the case of a large industrial group it may be appropriate (according to the circumstances) to apply the term to a parent or to a subsidiary company or to the economic unit formed by the parent and subsidiaries together. In a case where a producer has been subject to reorganization or has divested itself of its PVC activity the essential task is :

(i) to identify the undertaking which committed the infringement ;

(ii) to determine whether that undertaking in its essential form is still in existence or whether it has been liquidated.

The question of undertaking identity is one to be determined according to Community law and changes in organization under national company laws are not decisive.

It is thus irelevant that an undertaking may have sold its PVC business to another : the purchaser does not thereby become liable for the participation of the seller in the cartel. If the undertaking which committed the infringement continues in existence it remains responsible in spite of the transfer.

On the other hand, where the infringing undertaking itself is absorbed by another producer, its responsibility may follow it and attach to the new or merged entity.

It is not necessary that the acquirer be shown to have carried on or adopted the unlawful conduct as its own. The determining factor is whether there is a functional and economic continuity between the original infringer and the undertaking into which it was merged.

(42) Elf Atochem was formed in 1980 as Chloe Chimie — a joint venture company then owned by ELF, CFP and Rhône-Poulenc — and changed its name to Atochem S.A. on 30 September 1983 when it absorbed its sister company ATO Chimie and the major part of the activities of PCUK.

The August 1980 planning document found at ICI had named as participants both PCUK and 'the new French company', clearly referring to Chloe ; Chloe had from the start close links with ATO Chimie and their PVC activities were harmonized in an economic interest group (GIE) known as Orgavyl.

Under the express terms of the Chloe-ATO-PCUK merger in 1983 the legal personality of both Chloe and ATO Chimie in fact continued under the new 'Atochem' denomination, although the main issue for the purposes of EEC competition law is the functional and economic continuity of the undertaking rather than its legal identity.

The change of name to Elf Atochem SA in 1993 has no effect on the present proceedings.

Elf Atochem represents the fusion and the continuation of the economic activities of Chloe and ATO Chimie which in the PVC sector had already been linked since 1980 in the form of Orgavyl. Elf Atochem is therefore clearly responsible for the participation of these two of its constituent undertakings in the cartel prior to 1983.

As Elf Atochem is clearly liable for Ato Chimie/ Chloe/Orgavyl the Commission does not propose for the purposes of assessing the fine on Atochem to attribute to it liability for PCUK as well.

DSM transferred its PVC activity to LVM (a joint venture with SAV) at the beginning of 1983 but itself continues in existence as an undertaking. The same considerations apply to the other parent, SAV. The Commission therefore considers that DSM and SAV each remain responsible for their participation in the cartel up to the creation of LVM.

After the formation of LVM that undertaking participated in the cartel in its own right.

The acquisition by the EMC group (the parent company of SAV) of the whole of the share capital of LVM in 1989 has no effect upon the present proceedings or the designation of LVM as an addressee of this Decision.

(43) Enichem comprises the Italian State-owned chemical sector formerly operating as Anic. Notwithstanding the various reorganizations there was a functional and economic continuity between Anic and Enichem and indeed after the restructuring Enichem continued to participate in the cartel. Enichem must therefore take the responsibility for the activity of Anic. The fact that in 1986 Enichem transferred its PVC activity to EVC, a joint venture with ICI, does not affect the issue of liability since Enichem itself continues in existence as an undertaking.

ICI's liability is similarly not affected by the transfer of its PVC activity to the EVC joint venture.

Montedison also remains in existence as an undertaking and is responsible for its participation in the cartel until it left the PVC sector in March 1983.

7. *The addressees of decisions*

(44) Although the concept of an undertaking as the subject of EC competition rules does not depend upon company law, for the purposes of enforcement it is always necessary to identify an entity possessing legal personality. There might be considerable difficulties with regard to collection of a fine under Article 192 of the Treaty if the Decision were not addressed to a legal entity. In the case of a large industrial group it is therefore normal to address any Decision to the group holding company or headquarters company, although the undertaking itself consists of the unit formed by the parent and all its subsidiaries.

(45) Enichem and Montedison have claimed that the appropriate addressee of any Decision should be the company inside the group which is currently responsible for thermoplastics activities. The Commission notes however that in both cases the marketing responsibility for PVC was shared by other companies of the group : for instance, while Enichem Anic SpA is responsible for Enichem's sales of PVC in Italy, its international marketing operations are directed by the Zurich-based company Enichem International SA and in each Member State PVC sales are undertaken by the appropriate national subsidiary of Enichem. The Commission considers it appropriate to address this Decision to the main holding company at the head of the Enichem and Montedison groups.

(46) The Royal Dutch/Shell group presents particular problems consisting as it does of a large number of companies in which the two group holding companies Royal Dutch and Shell hold 60 % and 40 % interests respectively. There is no single group headquarters company to which it might be appropriate to address a Decision. Shell International Chemical Company Ltd (SICC) is a service company responsible for the coordination and strategic planning of the Royal Dutch/Shell group's thermoplastic activities and although the various operating companies in the chemical sector apparently have a large degree of management autonomy, SICC represents the centre of Shell's chemical operations. In the present case it was SICC which was in contact with the cartel and attended the meetings in 1983. By reason of its overall responsibility for the planning and coordination of the activities of the Shell group in thermoplastics Shell International Chemical Company Ltd is considered by the Commission to be the appropriate addressee of this Decision.

8. *Council Regulation (EEC) No 2988/74* [1]

(47) Several producers have claimed that the Commission is precluded by Regulation (EEC) No 2988/74 from imposing fines on them in relation to any involvement in the alleged cartel before January 1982, that is, five years before the investigations which were carried out in January 1987.

Under that Regulation the imposition of fines is in the first place subject to a limitation period of five years although this can be extended. Time runs from the date of the infringement, and in the case of a continuing or repeated infringement, from the date the infringement ceases. The limitation period may be interrupted by any action taken by the Commission to investigate any party to the suspected infringement. Each action by the Commission starts time running afresh.

The arguments of these undertakings overlook the express provisions of the Regulation. They fail to appreciate that the first actions taken by the Commission to investigate the suspected cartel on 21 November 1983 interrupted the limitation period for all participants in the suspected infringement, not just the particular producers visited at the time.

The result is that only undertakings which had ceased to participate in any infringement before November 1978 could possibly benefit from the Regulation. Since the infringement alleged only commenced in 1980, the undertakings cannot invoke limitation in this case.

[1] OJ No L 319, 29. 11. 1974, p. 1. For the application of Regulation (EEC) No 2988/74 to the period during which proceedings in respect of this infringement were pending before the Court of Justice, see recitals 55 to 59.

9. Duration of the infringement

(48) Although collusive arrangements in PVC may already have existed before the 1980 proposal for a new cartel structure, the Commission will proceed on the basis that the present infringement commenced in about August 1980.

That was the date of the ICI proposals and it is apparent that the new system of meetings began about that time.

It is not however possible to establish with certainty the date on which each individual producer began to attend meetings. Most of them — against the weight of the documentary evidence — deny all participation in or knowledge of meetings. The 1980 document however implicates all the producers except Hoechst, Montedison, Norsk Hydro and Shell (and of course LVM) in the formation of the original plan. The likely dates when these producers adhered to the plan can however be ascertained from other documents. Thus Hoechst is already identified in the Solvay documents as a participant in the exchange of information on market shares in Germany in 1980. Similarly, Montedison is implicated from the beginning in the documentation relating to Italy. Shell claims not to have attended meetings before 1983 but its own documents show that it knew of and supported price initiatives during 1982 and it admits contacts with Solvay from January 1982. The Commission accepts that its participation in the cartel was limited and probably began later than the others, and indeed it was the only producer said by ICI to be outside the compensation arrangement in May-June 1981.

LVM's participation in the scheme dates from the time it took over the PVC interests of its two parent companies, DSM and SAV, in April 1983.

Some of the producers had left the PVC sector before the Commission began its investigations: Montedison had transferred its operations to Enichem at the beginning of 1983 and both DSM and SAV were no longer directly involved after transferring their PVC business to LVM.

(49) In the absence of information from the producers, it is not even possible to establish whether or not the collusion — in some form or other — has ever ended.

Clearly the cartel continued after the Commission carried out its first investigations into the PVC sector in late 1983.

The document found at Atochem shows that monitoring of sales quotas was being operated and information exchanged as late as May 1984. All the PVC producers active in the sector at the relevant time are identified in relation to this scheme. Only for Shell and ICI are there indications that they had ceased to take an active part in the arrangements, and even their involvement in volume quotas probably continued to have effect for the whole of 1984.

The phenomenon of initiatives involving several producers simultaneously attempting to raise price levels to a particular level was still being reported in the trade press at the time of the investigation in 1987. Although there is no concrete evidence of cartel meetings, it is likely that such initiatives were the manifestation of a continuing mutual solidarity between producers and are not a spontaneous occurence.

The Commission will however make a distinction between duration for the purposes of assessing fines under Article 15 (2) of Regulation No 17 and for the purposes of a termination order under Article 3: see recital 54.

B. Remedies

1. Article 3 of Regulation No 17

(50) 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 denied that any infringement of Article 85 occurred. Most have continued to dispute — against the weight of the evidence — that the regular meetings even touched on matters affecting competition. Others deny any knowledge of meetings. While a few undertakings have informed the Commission that steps have been taken to ensure that their representatives avoid suspect contacts with competitors, it is not known whether meetings or at least some communication between firms on prices and volumes have in fact ever ceased.

It is therefore necessary to include in any decision a formal requirement that those undertakings still active in the PVC sector terminate the infringement and refrain in the future from any collusive arrangements having a similar object or effect.

2. Article 15 (2) of Regulation No 17

(51) Under Article 15 (2) of Regulation No 17, the Commission may by Decision impose on undertakings fines of from ECU 1 000 to ECU 1 million or a sum in excess thereof but not exceeding 10 %

of the turnover in the preceding business year 3of 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 this Decision is addressed deliberately infringed Article 85. They deliberately set up and operated a secret and institutionalized system of regular meetings to fix prices and volume targets in an important industrial product. Several of the undertakings concerned — BASF, Hoechst and ICI — had already been the subject of fines imposed by the Commission for collusion in the chemicals industry (Dyestuffs — Commission Decision 69/243/EEC [1]).

The Commission also takes account of the evidence that most of the undertakings to which this Decision is addressed continued to be involved in collusive arrangements until at least six months after the Commission had begun its investigation in November 1983. Only Shell and ICI seem to have distanced themselves from the cartel at this time.

(52) In fixing the general order of fines to be imposed the Commission has also taken into account the following considerations :

— collusion on pricing and market-sharing are by their very nature serious restrictions of competition,

— PVC is a major industrial product with sales of over ECU 3 000 million annually in Western Europe,

— the undertakings participating in the infringement accounted for virtually the whole of this market,

— the collusion was institutionalized in a system of regular cartel meetings which set out to organize in detail the market for PVC.

It is, however, accepted in mitigation of fines that over a large part of the period covered by this Decision the undertakings concerned reported substantial losses in the PVC sector.

The Commission also takes into account the fact that the majority of the undertakings have already been the subject of substantial fines for their participation in another cartel in the thermoplastics sector (polypropylene) during much the same period as that covered by this Decision.

(53) In assessing the fines to be imposed on individual undertakings, the Commission has considered the degree of involvement of each one and taken into consideration the role (so far as can be ascertained) played by each in the collusive arrangements and their respective importance in the PVC market.

Although some indications point to ICI and Solvay playing the role of prime movers in the cartel, the Commission cannot, in the present case, identify with certainty any ringleaders who should bear the major responsibility for the infringement.

No substantial distinction be made between the producers attending meetings on the basis of the perception by themselves or by others of their degree of individual commitment to the arrangements. Individual interests may have diverged from time to time but all the producers attending the meetings were involved in a common venture.

As indicated above, the Commission does however draw a distinction between the full members of the cartel and Shell which operated on the periphery. In Shell's case it is reasonable to impose a fine of a significantly lower order than those appropriate for most of the other producers.

(54) The absence of detailed information as to the participation of producers in meetings has made it impossible to determine the precise date on which (with the exception of those producers leaving the PVC sector) their involvement in the infringement ceased, if indeed it ever did.

Account will be taken of the indications that the involvement of Shell probably began at a later date than that of the other producers. Montedison was involved from the start but left the sector at the beginning of 1983. As for DSM and SAV, their role in the cartel was taken over by LVM when it was formed by them as a joint venture in mid-1983.

Similarly the Commission will assess fines on ICI and Shell on the basis that their active participation in meetings and other contacts probably ceased in October 1983.

For the remaining producers named in the document found at Elf Atochem the Commission will assess fines on the basis that their participation in the cartel continued until at least May 1984.

[1] OJ No L 195, 7. 8. 1969, p. 11.

C. **Proceedings before the Court of Justice**

(55) On 21 December 1988 the Commission adopted Decision 89/190/EEC [1] pursuant to Article 85 of the Treaty finding that an infringement had been committed by 14 undertakings and imposing fines on the addressees of this Decision as well as on Solvay and Norsk Hydro. The Decision was notified to the undertakings in February 1989.

All the addressees of that Decision, with the exception of Solvay, applied to the Court of Justice for the annulment of the Decision. On 15 November 1989 the Court transferred their applications to the Court of First Instance.

Norsk Hydro's application for annulment was dismissed as inadmissible by the Court of First Instance on 19 June 1990 as it had been filed out of time.

By its judgment of 27 February in 1992 in Case BASF and Others v. Commission (Joined Cases T — 79/89, 84/89, 85/89, 86/89, 89/91, 91/89, 92/89, 94/89, 96/89, 98/89, 102/89 and 104/89 — [1992] ECR II-315), the Court of First Instance declared Decision 89/190/EEC non-existent.

The Commission appealed against that judgment — Case C-137/92P. On 15 June 1994 the Court of Justice set aside the judgment of the Court of First Instance and annulled the Decision of the Commission, the latter on the ground that the Commission had not complied with Article 12 of its then Rules of Procedure which required the Decision to be authenticated in the authentic language versions by the signatures of the President and the Secretary-General (referred to as the 'Executive Secretary').

(56) Under Regulation (EEC) No 2988/74 (see recital 47) where the limitation period for the imposition of fines is interrupted by any action of the Commission for the purpose of the preliminary investigation or of the proceedings, time will start running afresh after each action. However, the imposition of a fine will be definitively time-barred on the day on which a period equal to twice the limitation period has elapsed without the Commission having imposed a fine (i.e. 10 years from the date the infringement ceased). This period shall be extended by the term during which the decision of the Commission is the subject of proceedings pending before the Court of Justice (including the Court of First Instance). That provision enables the Commission to re-adopt a decision where (as is the present case) it was annulled by the Court on procedural grounds (see Fourth Competition Report, p. 33).

(57) Article 2 (1) of the Regulation identifies certain actions of the Commission which will interrupt the running of the prescription period against all the participants in the infringement, including (a) written requests for information or a Commission decision requiring the requested information, (b) authorizations to investigate or a decision ordering an investigation, (c) the commencement of proceedings, and (d) notification of a statement of objections. The list is not exhaustive and *a fortiori* the adoption by the Commission of its decision under Article 85 on 21 December 1988 (i.e. well within five years of the earliest date on which most of the undertakings can be taken to have ceased to participate in the cartel) must also be considered as an action which interrupted prescription. It is not however even necessary to adopt this interpretation of the Regulation, since even if the notification of the statement of objections (expressly mentioned in Article 2 (1) (d)) on or about 5 April 1988 is taken as the last action which qualifies under Article 2 to interrupt the running of time, the Commission would, as against almost all the addressees, have until April 1993, plus the period (five years and two months) during which proceedings were pending before the Court of Justice, to re-adopt a decision, i.e. until June 1998.

(58) In the case of Montedison, which left the sector (and thus the cartel) at the beginning of 1983, and possibly of DSM and SAV which were replaced in the cartel by their joint venture LVM in mid-1983, the statement of objections was notified just after five years had elapsed since its last proven involvement. It would not therefore (at least as against Montedison) make time run afresh. However under Article 2 (1) (a) of Regulation (EEC) No 2988/74, a written request for information or a decision requiring that information expressly interrupts the running of the limitation period. A decision pursuant to Article 11 (5) of Regulation No 17 was in fact notified to Montedison itself on 20 November 1987 and started time running afresh. The additional five-year period set off by that decision expired at the end of November 1992 but with the addition of the time during which the proceedings were pending before the Court, the ultimate date for re-adopting a decision imposing fines against Montedison (and possibly DSM and SAV if the statement of objections does not qualify to stop time running as regards them) is January 1998.

[1] OJ No L 74, 17. 3. 1989, p. 1.

(59) Since Solvay did not make an application to the Court of Justice for the annulment of the decision, and Norsk Hydro's application was declared inadmissible, Decision 89/190/EEC remains valid as against them. It is not therefore necessary for this Decision to re-impose fines on those undertakings as the fines originally imposed are payable. However it is appropriate for the purposes of defining the infringement with which this Decision is concerned to name Solvay and Norsk Hydro as participants therein. As against them Article 1 of the operative part of this Decision is therefore only descriptive in nature, and since they are already the subject of a valid termination order pursuant to Article 3 (1) of Regulation No 17, it is also unnecessary for Article 2 of this Decision to apply to them. This Decision is therefore not addressed to Solvay or Norsk Hydro,

HAS ADOPTED THIS DECISION :

Article 1

BASF AG, DSM NV, Elf Atochem SA, Enichem SpA, Hoechst AG, Huels AG, Imperial Chemical Industries plc, Limburgse Vinyl Maatschappij NV, Montedison SpA, Société Artésienne de Vinyl SA, Shell International Chemical Co., Ltd, and Wacker Chemie GmbH infringed Article 85 of the EC Treaty (together with Norsk Hydro AS and Solvay & Cie) by participating for the periods identified in this Decision in an agreement and/or concerted practice originating in about August 1980 by which the producers supplying PVC in the Community took part in regular meetings in order to fix target prices and target quotas, plan concerted initiatives to raise price levels and monitor the operation of the said collusive arrangements.

Article 2

The undertakings named in Article 1 which are still involved in the PVC sector in the Community (apart from Norsk Hydro and Solvay which are already the subject of a valid termination order) shall forthwith bring the said infringement to an end (if they have not already done so) and shall henceforth refrain in relation to their PVC 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 price or market-sharing inside the Community. Any scheme for the exchange of general information to which the producers subscribe concerning the PVC sector shall be so conducted as to exclude any information from which the behaviour of individual producers can be indentified, 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 1 :

(i) Basf AG : a fine of ECU 1 500 000 ;

(ii) DSM NV : a fine of ECU 600 000 ;

(iii) Elf Atochem SA : a fine of ECU 3 200 000 ;

(iv) Enichem SpA : a fine of ECU 2 500 000 ;

(v) Hoechst AG : a fine of ECU 1 500 000 ;

(vi) Huels AG : a fine of ECU 2 200 000 ;

(vii) Imperial Chemical Industries plc : a fine of ECU 2 500 000 ;

(viii) Limburgse Vinyl Maatschappij N.V. : a fine of ECU 750 000 ;

(ix) Montedison SpA : a fine of ECU 1 750 000 ;

(x) Société Artésienne de Vinyl S.A. : a fine of ECU 400 000 ;

(xi) Shell International Chemical Company Ltd : a fine of ECU 850 000 ;

(xii) Wacker Chemie GmbH : a fine of ECU 1 500 000.

Article 4

The fines imposed under Article 3 shall be paid in ECU within three months of the date of notification of this Decision to the following bank account of the Commission of the European Communities :

310-0933000-34,
Banque Bruxelles Lambert,
Agence Européenne,
Rond Point Schuman 5,
B-1040 Bruxelles.

On expiry of that period, interest shall automatically be payable at the rate charged by the European Monetary Institute on its ecu operations on the first working day of the month in which this Decision was adopted, plus 3,5 percentage points, i.e. 9,25 %.

Article 5

This Decision is addressed to :

— BASF AG, Karl-Bosch-Strasse 39, D-67063 Ludwigshafen,

— DSM NV, Het Overloon 1, NL-6411 TE Heerlen,

— Elf Atochem SA, 10 La Défense, Puteaux, Cedex 42, F-92091 Paris La Défense,

— Enichem SpA, Piazza della Repubblica 16, I-20124 Milano,

— Hoechst AG, Brüningstrasse 64, D-65929 Frankfurt am Main,

— Huels AG, Paul Baumann Strasse, D-45772 Marl 1,

— Imperial Chemical Industries plc, 9 Milbank, London SW1P 3JF Great Britain,

— Limburgse Vinyl Maatschappij NV, Square de Meeus 1, B-1040 Bruxelles,

— Montedison SpA, Via Degli Ariani 1, I-48100 Ravenna,

— Société Artésienne de Vinyl SA, 62 rue Jeanne d'Arc, F-75013 Paris,

— Shell International Chemical Company Ltd, Shell Centre, London SE1 7PG Great Britain,

— Wacker Chemie GmbH, Hans Seidelplatz 4, D-81737 München.

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

Done at Brussels, 27 July 1994.

For the Commission

Karel VAN MIERT

Member of the Commission

ANNEX

TABLE 1

PVC : identified price initiatives

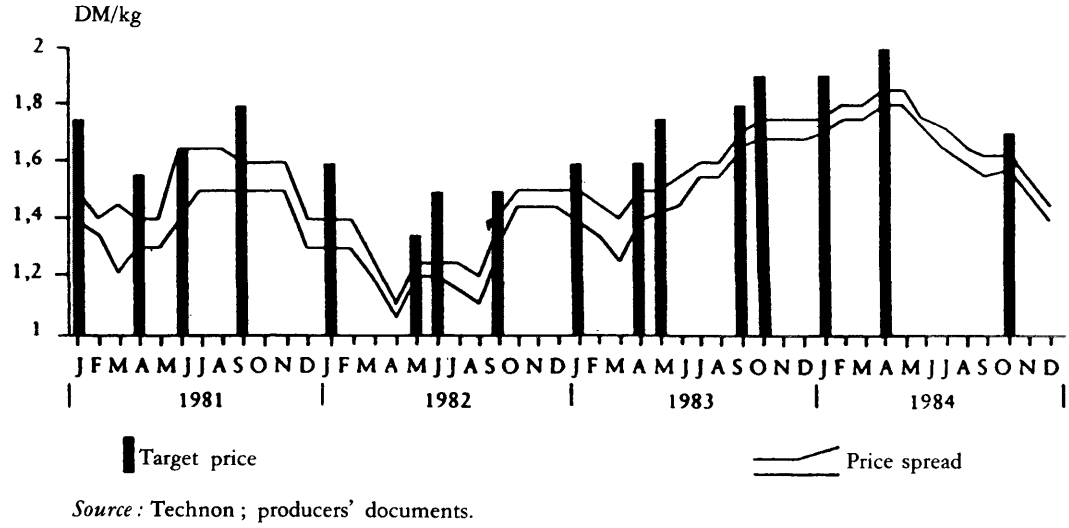
(DM/kg)

Date	Prevailing price	Target price
1 November 1980	1,00	1,50
1 January 1981	1,50	1,75
1 April 1981	1,40	1,55
1 June 1981	1,40	1,65
1 September 1981	1,65	1,80
1 January 1982	1,30	1,60
1 May 1982	1,00	1,35
1 June 1982	1,35	1,50
1 September 1982	1,35	1,50
1 January 1983	1,40—1,50	1,60
1 April 1983	1,25—1,35	1,60 (min. 1,50)
1 May 1983	1,50	1,75 (min. 1,65)
1 September 1983	1,65	1,80
1 November 1983		1,90
1 January 1984	1,70	1,90—2,00
1 April 1984	1,85—1,90	2,00
1 October 1984	1,55—1,60	1,70

TABLE 2

PVC : general purpose pipe grade

Market prices/targets January 1981 to December 1984



Source : Technon ; producers' documents.