

*Case No IV/M.832 -  
Norsk Hydro / Enichem  
Agricoltura - Terni (II)*

Only the English text is available and authentic.

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

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Article 6(1)(b) NON-OPPOSITION  
Date: 25/10/1996

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 25.10.1996

PUBLIC VERSION

MERGER PROCEDURE  
ARTICLE 6(1)(b) DECISION

To the notifying parties:

Dear Sirs,

**Subject: Case No IV\M.832 - Norsk Hydro/Enichem Agricoltura - Terni (II)  
Notification of 24.09.1996 pursuant to Article 4 of Council Regulation  
No 4064/89**

1. On 24.09.1996 Hydro Agri Nederland BV (HYDRO) notified the acquisition of Nuova Terni Industrie Chimiche S.r.l. ("NUOVA TIC"), which is being contributed the business of Terni Industrie Chimiche S.p.A. ("the TIC business"), previously belonging to Enichem Agricoltura.
2. After examination of the notification the Commission has concluded that the notified operation falls within the scope of application of Council Regulation N° 4064/89 and does not raise serious doubts as to its compatibility with the common market or with the functioning of the EEA Agreement.

**I THE PARTIES**

3. HYDRO belongs to the Norwegian group Norsk Hydro ASA (NORSK HYDRO), which is engaged in the production of chemical and mineral fertilizers, oil and gas, petrochemical and light metals industries. Hydro is a holding company which carries no business of its own.
4. NUOVA TIC is a wholly owned subsidiary of Enichem S.p.A. (ENICHEM), to which the TIC business is being transferred. NUOVA TIC will produce and market nitrogen-containing fertilizers, namely calcium nitrate (CN) and urea, as well as urea for technical use in pill form (technical urea, TU) and ammonium bicarbonate (ABC).

## **II THE OPERATION**

5. This acquisition follows a previous acquisition by NORSK HYDRO of the major part of the fertilizer business of ENICHEM - which prior to the operation was transferred to the company ARNYCA - which was granted an Article 6.1.b) decision on 29.6.1996 (case M.769, from now on "the previous decision"). The present acquisition takes place between the same undertakings within a two year period. For this reason, Article 5(2) of the Merger Regulation applies.
6. The acquisition is the result of the restructuring and liquidation of Enichem Agricoltura S.p.A. The Commission examined and approved the State aid granted to the company in connection with the restructuring plan in its decision of 21 June 1995.

## **III THE CONCENTRATION**

7. HYDRO's acquisition of sole control of NUOVA TIC constitutes a concentration within the meaning of the Article 3(1)(b) of the Merger Regulation.

## **IV COMMUNITY DIMENSION**

8. The worldwide turnover of NORSK HYDRO and of the TIC business was respectively of ECU 9,623 million and ECU 56 million in 1995. The turnover of ARNYCA, the previously acquired company, was of ECU 347 million. The combined turnovers exceed therefore 5,000 million ECU. The 1995 combined Community wide turnover of each of the undertaking concerned also exceeds 250 million ECU, as NORSK HYDRO's turnover was of 6,144 million ECU, the TIC business had a turnover of 55 million ECU and ARNYCA had a turnover of 336 million ECU. Only the TIC business and ARNYCA achieved more than two thirds of their turnovers in one and the same Member State, Italy. NORSK HYDRO did not achieve more than two thirds of its turnover in one and the same Member State. Therefore, the operation has a Community dimension.

## **V THE RELEVANT MARKETS**

### **A. Relevant product market**

9. The acquisition by NORSK HYDRO of NUOVA TIC follows the previous acquisition of the major part of Enichem fertilizer business. The TIC business is part of Enichem Agricoltura and it also mainly relates to the production and sale of nitrogen containing fertilizers.

#### Calcium Nitrate

10. Nitrogen containing fertilizers include straight nitrogen and nitrogen-containing compound fertilizers. The TIC business does not include compound fertilizers.
11. There are various types of straight nitrogen fertilizers, which vary in their chemical composition, and in particular in their content of nitrogen. Both the TIC business and NORSK HYDRO produce CN as straight nitrogen fertilizer. In the previous decision the Commission concluded that it was not necessary to conclude whether all nitrogen containing fertilizers constitute the same product market or whether the different types of straight nitrogen fertilizers constitute separate product markets.

12. CN may be obtained as a by product of the creation of compound nitrogen fertilizer, as in the case of NORSK HYDRO. Thus other major NPK producers, such as BASF and Kemira are theoretically in a position to obtain CN from their NPK production facilities, although the existing variants between different NPK production processes may entail higher investments or operating costs when adjusted to produce CN. CN may also be produced as an end-product, as in the case of the TIC business, by combining limestone with nitric acid. This relatively simple process, although on a cost-basis less competitive than the first one, is normally easily available even to retailers and has indeed occurred in several countries such as the Netherlands, Belgium, Austria and Spain.
13. CN is described as a specialty product. It is used in limited quantities, if compared with others nitrogen containing fertilizers. CN contains 15.5% of nitrogen in nitrate form, immediately available to plants, and 19% water-soluble calcium. It can assume various forms according to its grade of solubility, and therefore be employed for various uses, ranging from field applications (less water-soluble CN primarily for agricultural use) to fertigation systems and to non-soil substrate cultivations (higher specification's CN for sophisticated horticulture).
14. CN is normally employed because of its content of nitrogen in nitrate form. For this purpose, it can be substituted by other straight nitrogen fertilizers, primarily by ammonium nitrate (AN) and also, though to a limited extent, by calcium ammonium nitrate (CAN). Both AN and CAN provide nitrogen in nitrate form to plants. CAN also provides calcium, however not in soluble form.
15. In certain cases CN's choice as fertilizer is driven primarily by the need to supply calcium in soluble form. This applies especially for non-soil growing systems in horticulture, whereby the water used does not contain calcium to the extent required. In fact, these cases account for a small fraction of total CN usage (less than 10%). CN can for these purposes not be substituted with other nitrogen fertilizers, none of which contains soluble calcium. However, soluble calcium can be made available from other sources, by employing other products containing soluble calcium (calcium chloride, calcium sulphate and calcium formate) or simply by producing liquid CN in-house, by reacting lime with nitric acid.
16. In conclusion, different grades of CN are generally substitutable as regards demand, and are produced through the same production processes described above. Moreover they present a high degree of substitutability with certain other nitrates, namely AN and, to a lesser extent CAN. The relevant product market includes therefore at least CN and AN, but could be extended further to include CAN or even other straight nitrogen fertilizers.
17. However, for the purpose of the present case it is not necessary to decide whether all straight nitrogen fertilizers constitute the same product market, or whether CN+AN or CN+AN+CAN constitute separate markets. In fact, as it is demonstrated in the assessment below, a dominant position would not be created or reinforced even on the narrowest product market definition.

#### Urea for fertilizer use and technical urea

18. Both parties to the transaction produce urea. Urea is a basic chemical compound which is produced by reacting ammonia with carbon dioxide (a by-product of ammonia, the basic intermediate for the production of straight nitrogen fertilizers). Urea can be used as a fertilizer or in certain technical application ("technical urea"). Whilst urea for

agricultural use can be either in prilled or in granular form, technical urea (TU) is only used in prilled form, whereas the terms "granules" and "prills" relate solely to the physical characteristics of the same basic chemical product. Both NORSK HYDRO and the TIC business produce granular urea and prilled urea.

19. TU is used as a raw material in certain chemical products notably resins and melamine and other non-agricultural products, eg. de-icers. Whilst urea in prilled form is often used as a fertilizer, granular urea can normally not be used as technical urea.
20. Urea for fertilizer use is in competition with other nitrogen containing fertilizers. In the previous decision, the Commission did not decide whether the relevant product market is limited to urea for fertilizer use or whether it has a larger configuration. This position is confirmed in the present case, since, as it is demonstrated in the assessment below, a dominant position would not be created or reinforced in any of the above configurations.
21. Also, for the purpose of the present decision, it is not necessary to decide whether technical urea in prilled form constitutes a separate market from urea for agriculture, since, as it is demonstrated in the assessment below, a dominant position would not be created or reinforced even in the narrowest market definition.

#### Ammonium Bicarbonate

22. Both parties to the transaction produce ABC. ABC is a basic chemical product which is produced using ammonia and carbon dioxide. The latter is the main by product in ammonia production. Therefore, ABC is produced using the ammonia facilities dedicated to the production of nitrogen fertilizers. The main use of ABC is as baking powder in the biscuit industry (this accounts for 70% of the EEA consumption), followed by convenience food industry (20%) and the leather industry (10%). According to the inquiry carried out by the Commission, as regards its use in the biscuit industry, ABC's can to a certain degree be substituted by sodium bicarbonate. For other uses, its substitution by other products is rather difficult if not impossible. Therefore, an extension of the ABC relevant product market to include other products is not appropriate.

#### **B. Relevant geographic market**

23. The relevant geographic market for nitrogen containing fertilizers is at least the EEA. This conclusion was supported in the previous decision. The inquiry carried out by the Commission has demonstrated that CN's market is at least EEA-wide and tends to be larger. Some other producers are present in Eastern Europe, South Africa, Israel and India, all of them exporting into the EEA.
24. The geographic market for urea for agricultural use tends to be wider than Western European. This conclusion is substantiated in the previous decision.
25. The geographic market for technical urea appears to be the EEA, in view of the important intra-EEA trade flows. Its higher transport costs, if compared with urea for agricultural use, tend to exclude the possibility of a wider market configuration. This conclusion has been confirmed by the inquiry carried out by the Commission.
26. ABC's is a commodity which is traded EEA-wide. A limited number of producers supply the whole of Western Europe. Therefore, although freight is a significant cost element for ABC, intra-EEA trade patterns are significant and point to an EEA-wide market. On the

other hands, sporadic imports from China and Eastern Europe of lower quality's ABC are not sufficient to extend the market further.

## VI ASSESSMENT

### Straight Nitrogen fertilizers

27. If straight nitrogen fertilizer are considered as the relevant market, the acquisition of the TIC business implies a negligible increase by [...] <sup>(1)</sup> of NORSK HYDRO's share up to [...] <sup>(2)</sup> of the EEA market (NORSK HYDRO -with ARNYCA-: [...] <sup>(3)</sup>, NUOVA TIC: [...] <sup>(4)</sup>).

### CN+Nitrates (AN, CAN)

28. There are no market statistics available for CN. In 1995, NORSK HYDRO produced approximately [...] <sup>(5)</sup> ktN of CN whilst TIC's production was approximately [...] <sup>(6)</sup> ktN. The additional production accounted to NORSK HYDRO by this acquisition is therefore of limited dimension, [...] <sup>(7)</sup> in respect to NORSK HYDRO's existing CN's production. A significant proportion of NORSK HYDRO's and TIC's production was exported outside the EEA.
29. Given its limited quantities, CN market statistics are included in a general item called "other straight nitrogen fertilizers", of which CN constitutes the major part. NORSK HYDRO's and TIC's 1995 combined market share in this market in the EEA is [...] <sup>(8)</sup> (NORSK HYDRO [...] <sup>(9)</sup> and TIC [...] <sup>(10)</sup>). The market for other straight nitrogen fertilizers is substantially smaller than those of AN or of CAN (at the EEA level it corresponds to 15% of AN's market and to 11% of CAN's market). In the previous decision the Commission had concluded that no dominant position was enhanced or strengthened by the HYDRO/ARNYCA operation in any of the possible market configurations affected, i.e. CAN, AN or CAN + AN. It is clear that, given the limited dimension of CN's market, its addition to the markets for AN or for AN+CAN can not lead to an appreciable difference in NORSK HYDRO's position on these markets.

### Urea for agriculture

30. TIC's acquisition will provide an addition of approximately [...] <sup>(11)</sup> to NORSK HYDRO/ARNYCA's share on the EEA urea market, whereby NORSK HYDRO will reach a total share of [...] <sup>(12)</sup>. This slight increase can not change the Commission's

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(1) Business secret. Less than 5%.

(2) Business secret. Between 25% and 35%.

(3) Business secret. Between 25% and 35%.

(4) Business secret. Less than 5%.

(5) Business secret. Less than 200.

(6) Business secret. Less than 50.

(7) Business secret. Less than 15%.

(8) Business secret. Between 25% and 35%.

(9) Business secret. Between 20% and 30%.

(10) Business secret. Less than 5%.

(11) Business secret. Less than 5%.

(12) Business secret. Between 30% and 40%.

assessment on this market as contained in the previous decision. It has to be recalled that urea's market tends to be wider than Western European.

#### Technical urea

31. NORSK HYDRO's share of this market would be about [...] <sup>(13)</sup>. TIC's market share is about [...] <sup>(14)</sup>. The combined market share of the parties will be less than 25%. The major competitors in this market are Kemira and SKW Piesteritz with market shares of around 10%. A significant market share is covered by imports from non EEA countries, in particular from Eastern Europe.

#### ABC

32. Both NORSK HYDRO and the TIC business are active in this small market (EEA consumption in 1995 has been estimated at approx. 19 kt). Their combined market share is estimated at about [...] <sup>(15)</sup> (NORSK HYDRO [...] <sup>(16)</sup>, TIC [...] <sup>(17)</sup>). The competitors are BASF [...] <sup>(18)</sup>, Brotherton [...] <sup>(19)</sup> and Leuna [...] <sup>(20)</sup>.
33. ABC is a mature market with relatively stable demand, though demand for non-food uses is shrinking. Prices are kept under pressure and since capacity utilization is low (estimated at 65%) profitability is rather depressed. Although under such conditions market entry is not particularly attractive, all Ammonia producers are in the position to start producing ABC relatively easily. Start-up investments are relatively low (estimated at 10 to 20 MECU), technology is freely available and the chemical procedure to produce ABC is rather easy.
34. Demand substitution, in particular through sodium bicarbonate in respect of ABC for food-uses, constitutes an important restraint to the competitive behaviour of the producers.
35. In the light of the above consideration, the operation, though leading to a significant concentration, does not create or strengthen a dominant position on the ABC market.

### **VII ANCILLARY RESTRAINTS**

36. The parties have stipulated a non-competition clause which imposes on ENICHEM and its affiliates, including TIC, a global non-competition obligation for any activity of manufacturing and trading of fertilizers and ammonia, for a period of [...] <sup>(21)</sup>, except for the activity of the company Sariaf. This clause confirms the non-competition clause stipulated in the framework of the previous acquisition by HYDRO of ARNYCA and extends it to cover the activities of the TIC business.

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(13) Business secret. Between 15% and 25%.

(14) Business secret. Less than 5%.

(15) Business secret. Between 35% and 45%.

(16) Business secret. Between 15% and 25%.

(17) Business secret. Between 15% and 25%.

(18) Business secret. Between 20% and 30%.

(19) Business secret. Between 10% and 20%.

(20) Business secret. Between 10% and 20%.

(21) Business secret. Not more than five years.

37. This non-competition obligation on ENICHEM and TIC is designed to assure the transfer of the full value of the fertiliser business, in particular its goodwill and know-how. It appears therefore necessary for the acquisition to take place. In addition, its duration is limited to a period of [...] <sup>(22)</sup> from the transfer <sup>(23)</sup>. Its geographic scope, however, must be limited to the area where ENICHEM and TIC were active before the sale <sup>(24)</sup>.

## VIII CONCLUSION

38. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the functioning of the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation No 4064/89.
39. This decision is without prejudice of the position of the Commission as regards the fulfilment by the Italian government of the conditions set out in the above mentioned State aid decision.

For the Commission,

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(22) Business secret. Not more than five years.

(23) See Commission Notice regarding restrictions ancillary to concentrations, OJ C 1990 203/5, III.A.2

(24) See Commission Notice regarding restrictions ancillary to concentrations, OJ C 1990 203/5, III.A.3.