

***Case No COMP/M.3314 -
AIR LIQUIDE / MESSER
TARGETS***

Only the English text is available and authentic.

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

Article 6(2) NON-OPPOSITION
Date: 15/03/2004

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 15/03/2004

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In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EEC) No 4064/89 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying party

Dear Sir/Madam,

**Subject: Case No COMP/M.3314 – Air Liquide/Messer Targets
Notification of 30 of January 2004 pursuant to Article 4 of Council
Regulation No 4064/89¹**

1. On 30.01.2004, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EEC) No 4064/89², as last amended by Regulation (EC) No 1310/97³, by which the undertaking L’Air Liquide S.A., France (“Air Liquide”) acquires within the meaning of Article 3(1)(b) of the Council Regulation sole control of the activities of Messer KGaA (“the Messer group”) in Germany, the U.K. and the U.S. (together “Messer Targets” or “Messer”) by way of purchase of shares.
2. In the course of the proceedings, the parties to the concentration submitted undertakings as a result of which the deadline of the first phase was extended to 15 March 2004. The proposed modifications were designed to eliminate competition concerns identified by the Commission, in accordance with Article 6(2) of the Merger

¹ OJ L 395, 30.12.1989 p. 1; corrigendum OJ L 257 of 21.9.1990, p. 13; Regulation as last amended by Regulation (EC) No 1310/97 (OJ L 180, 9. 7. 1997, p. 1, corrigendum OJ L 40, 13.2.1998, p. 17).

² OJ L 395, 30.12.1989 p. 1; corrigendum: OJ L 257, 21.9.1990, p. 13; Regulation as last amended by Regulation (EC) No 1310/97 (OJ L 180, 9. 7. 1997, p. 1, corrigendum OJ L 40, 13.2.1998, p. 17).

³ OJ L 180, 9. 7. 1997, p. 1; corrigendum OJ L 40, 13.2.1998, p. 17.

Regulation. After examination of the notification and in the light of these modifications, the Commission has concluded that the operation falls within the scope of the Merger Regulation and does not raise serious doubts as to its compatibility with the common market and the EEA agreement.

I. THE PARTIES

3. Air Liquide and the Messer group are both active worldwide in the production and distribution of industrial and medical gases and the services connected to these products. They supply industrial gases to various industries including iron, steel, refining, chemicals, glass electronics, paper pulp, metallurgy, food processing, health care and aerospace industries. Air Liquide is the world leader in the production and distribution of industrial gases.
4. Air Liquide is a publicly listed company. The Messer group is currently owned by the Messer family (32,1%), Goldman Sachs Private Equity (33,08%), Allianz Capital Partners (33,08%) and Messer's staff and management (1,73%). The Group is solely controlled by Goldman Sachs (cf. Case no. COMP/M.2227-Goldman Sachs/Messer Griesheim).

II. THE OPERATION

5. The notified acquisition will be made by means of a cash offer by Air Liquide for all the shares in Messer Targets. On 19 January 2004 a sale and purchase agreement was signed by the parties to the concentration. The operation will be carried out by Air Liquide acquiring all shares in the Messer group company Messer Griesheim GmbH ("MGG"). According to the agreement a restructuring of MGG will take place between signing date and completion date [...]. The latter acquisition is not of community dimension.

III. CONCENTRATION

6. The notified operation is part of a series of transactions as a result of which Air Liquide will acquire sole control of Messer Targets. The notified transaction therefore constitutes a concentration within the meaning of Art. 3(1)(b) of the Merger Regulation.

IV. COMMUNITY DIMENSION

7. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 billion⁴ (EUR 7 900 million for Air Liquide in 2002 and EUR [...] for Messer Targets in 2002). The aggregate Community wide turnover of each party exceeds EUR 250 million (EUR [...] for Air Liquide in 2002 and EUR [...] for Messer Targets in 2002). They do not achieve more than two-thirds of their turnover in one and the same Member State. The notified operation therefore has a Community dimension.

⁴ Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C66, 2.3.1998, p25). To the extent that figures include turnover for the period before 1.1.1999, they are calculated on the basis of average ECU exchange rates and translated into EUR on a one-for-one basis.

V. COMPETITIVE ASSESSMENT

A. Relevant product markets

1. Description

8. Both Air Liquide and Messer Targets produce and distribute industrial, medical and specialty gases.

Industrial gases

9. “Industrial gases” comprise all the gases and mixtures of gases provided by gas suppliers for applications in industry and research applications. There is a very wide variety of such applications. The most commonly used industrial gases are oxygen, nitrogen, argon, carbon dioxide, acetylene, helium and hydrogen, and mixtures including them. Strictly speaking industrial gases do not include medical gases and gases which possess a purity above the standard degree or which are mixed to a precision greater than that of industrial gases.
10. Industrial gases can be obtained from the air, from synthetic processes, or from natural sources. Atmospheric gases are extracted from the air mainly by using cryogenic air separation technology, which involves relatively complex process, during which air is liquefied and separated into its component parts. Air is composed of 20.95% oxygen, 78.09% nitrogen, 0.93% argon and 0.03% other noble gases such as neon, krypton, xenon or helium. Acetylene and hydrogen are produced by chemical processes. Carbon dioxide comes from natural sources or occurs as a by-product of other chemical processes. Helium is extracted from natural sources. Carbon Monoxide is produced in combination with hydrogen, by reforming hydrocarbons, generally natural gas.
11. The following table summarises the main uses of oxygen, nitrogen, argon, hydrogen, carbon dioxide, acetylene, helium, carbon monoxide and syngas.

Gas	Main industries where used
Oxygen	Metallurgy (steel production), chemicals, metalworking (cutting and welding), paper (bleaching), glass (melting), electronics, waste water purification, fish farming
Nitrogen	Electronics, chemicals, food (improving shelf life by protecting from oxygen and cryogenic freezing), metalworking (pressing of aluminium parts), building (soil freezing, cooling for the setting of concrete, shielding of prestressing steels against oxidation)
Argon	Metallurgy (steel production), metalworking (shielding of weld seams against oxidation), electronics (shielding of semiconductors against impurities), inflation of air bags
Hydrogen	Chemicals (purification), food (edible oil production), glass (grinding)
Carbon dioxide	Metalworking (shielding of weld seams against oxidation), steel production, chemicals, drinks manufacturing, food (cryogenic freezing), dry ice, waste water purification (neutralisation of alkaline wastes)
Acetylene	Metalworking (cutting and welding), glass (lubrication of moulds)
Helium	Aerospace, lifting gas for balloons, health care
Carbon Monoxide	Environmental monitoring systems, industrial hygiene gas mixtures, semiconductor fabrication, manufacturing of metal carbonyls, polycarbonate, polyurethane and oxy-alcohol.
Syngas	Synthetic gas used in chemical reactions

Medical gases

12. The medical gases comprise mainly oxygen, and nitrous oxide (N₂O). The market investigation tends to show that the demand-side substitutability with so-called industrial gases is very limited since the concerned customers, for instance the hospitals, can use only the gases that have the label “medical”, which ensures the quality and traceability of the gases used. On the other hand, there appears to be a high supply-side substitutability since the medical gases, be they in bulk or in cylinders are produced by the same plants, from the same source as the industrial gases. They just undergo analyses proving that they comply with the regulatory level of quality. The question as to whether the medical gases constitute a distinct market can be left open for the purpose of the present decision since the competitive assessment does not differ depending on the definition retained and the remedies remove the serious doubts arising under either definitions.

Specialty gases

13. The parties to the concentration also sell so-called specialty gases, which comprise mainly refrigeration, electronic and lighting gases. Speciality gases contain various chemical molecules required by the electronics industry to manufacture semiconductors to be used in the different steps of the manufacturing process (so-called electronic speciality gases “ESGs”), including Silane (SiH₄), Arsine (ASH₃), Phosphine (PH₃), Nitrogen trifluoride (NF₃), Hexafluoroethane (C₂F₆), Carbontetrafluoride (CF₄), Tungstenhexafluoride (WF₆), Hexafluoroethane, and Nitrogen trifluoride.

2. Distinct relevant markets per gas

14. In line with its decisions in Case No M.1641 - Linde/AGA and in Case No M.1630 - Air Liquide/BOC and on the basis of its investigations in the present case, the Commission takes the view that because of the different chemical and physical properties of the individual industrial gases they are not generally interchangeable. The industry generally shares the view that each gas constitutes a separate product market. It may be that in a particular application there are several gases which possess the properties fundamentally required; thus nitrogen and argon may both be used for protection with an inert gas, and nitrogen and carbon dioxide can both be used for the deep freezing of foodstuffs. However, customers generally do not consider substitution to be a realistic option because in practice, price differences and the degree of integration of a particular gas with the customers’ specific application processes largely exclude substitution between gases.
15. In line with its decisions in Case No M.1641 - Linde/AGA and in Case No M.1630 - Air Liquide/BOC and on the basis of its investigations in the present case, the Commission further takes the view that there is no general interchangeability between industrial gases and non-gas-based processes.
16. Therefore, for the purpose of this case, the individual gases constitute separate product markets.

3. Distinct relevant markets according to the forms of supply

17. Industrial gases are supplied in different forms (gaseous or liquid) and via different distribution channels (tonnage, bulk and cylinders).

3.1 Tonnage

18. *Tonnage* means the delivery of large quantities of gases (mainly oxygen and nitrogen) in gaseous form either by pipeline or dedicated air separation units (“ASUs”) installed on or close to the customer’s site. Customers are mainly industrial users (for instance in the petrochemical/chemical, steel, refining and glass industries). For such customers, the gases are an essential element of their production process and they value foremost the reliability of the supply.
19. The supplier owns the on-site plants and operates them on the basis of a long-term contract (up to 15 years). It provides on-going maintenance and support. In geographical areas where the density of customers makes it economically viable to link air separation units to each other, a pipeline network may be built (e.g. Northern France, Benelux, Rhein/Ruhr area, Saar). Each gas (oxygen or nitrogen) is delivered

through a specific pipe. In such a case, gases delivered by an incumbent pipeline may benefit from a cost and reliability advantage when compared to on-site plants.

20. According to the Commission's findings in its decisions in Case No M.1641 - Linde/AGA and in Case No M.1630 - Air Liquide/BOC and the submissions of the notifying party, these two methods of supply compete with each other and are without alternative for volumes greater than 100 tons per day (tpd).

3.2 Bulk

21. The quantities of gas that may be supplied in *bulk* are not as large as in the tonnage business. Bulk mainly covers the supply of gases in liquid form to customers, whose demand is between 20 to 100 tpd.⁵ Liquefaction plants can be stand-alone or can be combined with tonnage plants (so-called "piggy-back plants"). The liquefied gases are transported by road or rail tanker from the supplier's plant to the site of the customer (air gases, in particular, require transport in low temperature cryogenic trailers). On the customer's premises, the gases are stored, before being used in liquid form or transformed into gaseous form. Each gas is transported and stored separately in specific dedicated equipment.
22. The notifying party has suggested that small on-site air separation plants, which are used to satisfy the customer's demand for oxygen or nitrogen in a range that could also be supplied in bulk, should be regarded as being part of the bulk market. According to the notifying party, small on-site plants compete with the delivery in liquid form for most applications. This definition had been retained by the Commission in its decision M.1630-Air Liquide/BOC and has been confirmed by the market investigation in the present case.

3.3 Cylinders

23. Industrial gases as well as mixtures of gases for industrial and scientific purposes, high-purity gases, noble gases and reactive gases for the semiconductor industry can also be supplied in *cylinders*. Helium is only marketed in cylinders. CO₂, on the other hand, is only delivered in liquid form.
24. Cylinders are used when the quantities requested by the customers are small, ranging from 1 m³/month to 1 000 m³/month. Cylinders may be filled at, and distributed from, the suppliers' production plant or, alternatively, liquid gases may be transported in tankers to cylinder filling centres in order to be transformed into compressed gas. From there, they are transported either directly to the customer or to depots (also called "hubs"), from which the supply to retail customers is carried out.

4. Conclusion

25. The Commission considers that the tonnage supply for CO, the tonnage, bulk and cylinder supply of oxygen and nitrogen, the bulk and cylinder supply of argon (including argon mixtures), hydrogen, carbon dioxide, acetylene, the cylinder supply of helium and of electronic speciality gases constitute the relevant product markets. However, on the basis of its enquiries and in line with its decision in Case No M.1630 -

⁵ Hydrogen constitutes an exception as it is mainly produced and transported in gaseous form.

Air Liquide/BOC the Commission notes that those markets may be inter-related since a large part of bulk is produced from tonnage plants (via so-called piggy-back) and the gases filled in the cylinders are derived from bulk.

B. Relevant geographic markets

1. Tonnage

26. As regards tonnage supply of industrial gases, the Commission found in its decisions in Case No M.1641 - Linde/AGA and in Case No M.1630 - Air Liquide/BOC that the geographic reference market was EEA-wide. All the main suppliers of industrial gases clearly had the know-how and resources necessary to build and operate such units anywhere in the EEA and to tender throughout the EEA for contracts to build and operate on-site plants.
27. In the present case, the notifying party submits that the relevant geographic market for tonnage has expanded during the last years and is now quasi-world-wide. "Quasi world-wide" refers to a worldwide market excluding Japan, China, the Middle East and the CIS where the markets show national particularities. The notifying party argues that the big gas manufacturers who operate in the EEA also supply gases in tonnage form quasi world-wide, although their market shares vary. If the Commission should not adopt the quasi-world-wide approach, the notifying party argues that the geographic market should be defined as comprising the whole of Europe ("wider EEA").
28. However, the Commission's investigation has not revealed any decisive element showing that the relevant geographic market should be defined as quasi-worldwide. Market shares, prices for industrial gases, and the risks incurred by the gas companies vary greatly between different markets. Furthermore, customers in Europe do not generally consider a supplier for the supply of tonnage industrial gases who has no local European presence.
29. The Commission even found elements that pointed towards the existence of national markets. The market structure in the market for tonnage differs significantly between the Member States, and some major players, such as Air Products and BOC are only present in some Member States but not in others. Several aspects might explain this absence, in particular the fact that any supplier needs to have a certain critical mass in the tonnage market, must maintain local maintenance staff, and, because of reliability requirements, must in particular ensure that its tonnage business is backed up by a sufficiently big bulk production for the case of unexpected downtimes of a tonnage facility.
30. In view of the enlargement process and the converging market conditions in the accessing countries, the question may also be raised as to whether the relevant geographic market should already be defined as EEA-wide including the ten accessing countries. However, for the purpose of the present decision and in absence of decisive evidence, this question can be left open since the assessment of the present case does not differ depending on the definition adopted.

2. Bulk

31. In its decisions in the Cases No M.1641 - Linde/AGA and No M.1630 - Air Liquide/BOC the Commission found that the market for bulk supplies should be defined as being national in scope.
32. According to the Commission's investigations in this case, this remains unchanged, even though the bulk markets show some local aspects. The high cost involved in bulk transport means that delivery will be economical only within a radius of about 200 km from the filling plant, at least in the case of the atmospheric gases oxygen and nitrogen.
33. The notifying party also supports the fact that the bulk markets should be defined as national but for Argon and CO₂. For these two gases, it has suggested that the markets should now be defined as being EEA-wide, mainly because these gases can more profitably be transported over distances of up to 1 000 km and are therefore subject to various supply flows across Europe.
34. As regards CO₂, the Commission found in its previous decisions relating to industrial gases⁶ that the market is national, although there may be to a limited extent some imports into Germany. No sufficient evidence in the present case was found by the Commission that would clearly point toward a broader market than Germany. Therefore, the market for bulk carbon dioxide still remains national in scope.
35. As regards Argon, the Commission found in its previous decisions relating to industrial gases⁷ that the market is national. Although there may be to a limited extent some exports outside Germany, no sufficient evidence in the present case was found by the Commission that would clearly point toward a broader market than Germany. Therefore, the market for bulk argon still remains national in scope.

3. Cylinders

36. As far as the distribution of cylinders is concerned, in its decisions in the Cases No M.1641 - Linde/AGA and No M.1630 - Air Liquide/BOC the Commission found that the relevant geographic markets for cylinder gas were to be defined as being national in scope with important local aspects. The parties submitted the same definition in the Form CO.
37. The Commission's investigation in the present case showed no results that would justify another market definition. Generally, the delivery radius from one filling station or a hub is in the range of 100-150 km. The Commission asked Air Liquide to provide, for each filling centre in Germany, the average distance between the supplied customers and the filling centre as well as the narrower radius within which 80% of the customers are located. These figures range between [50-60] km and [110-120] km, for the average, and between [80-90] km and [160-170] km⁸, for the 80%-of-customer

⁶ M.1641 - Linde/AGA and M.1630 - Air Liquide/BOC

⁷ M.1641 - Linde/AGA and M.1630 - Air Liquide/BOC

⁸ Air Liquide's submission on 01/03/2004

radius, according to the filling centre. However, the catchment areas of the various filling centres overlap to a material extent to cover the whole of Germany. Competition on these markets includes therefore both a local element and also extends over the whole of Germany, at least for the large suppliers.

38. The geographic market for Helium has in previous decisions been defined as being EEA-wide for wholesale Helium, but according to the notifying party and the Commission's investigations, the geographic market for helium cylinders (retail helium) covers Germany.
39. As regards electronic speciality gases (ESGs), on the basis of the notifying party's submission and in line with its decision in the Case No M.1630 - Air Liquide/BOC, the Commission finds that the market is EEA-wide.

C. Competitive assessment

1. Tonnage markets

1.1 Tonnage markets for standard air gases (oxygen/nitrogen)

(a) Market shares

Air Liquide/Messer would have by far the highest market shares in the European markets for air gases

40. The market shares of the parties and competitors in the EEA tonnage market are set out in the Table below, based on the revenues generated by their on-site or pipeline supply contracts:

EEA – 2003		
Player	Oxygen Tonnage	Nitrogen tonnage
Air Liquide	[30-40]%	[30-40]%
Messer Targets	[0-10]%	[0-10]%
Combined	[40-50]%	[40-50]%
Linde	[20-30]%	[20-30]%
Air Products	[10-20]%	[10-20]%
Praxair	[0-10]%	[0-10]%
BOC	[0-10]%	[10-20]%
Messer Remain Co	[0-10]%	[0-10]%
Others	[0-10]%	[0-10]%
Market size (M€)	[...]	[...]

Source: The notifying party ⁹

41. If the relevant geographic market were to be considered as EEA extended¹⁰, the market shares would be as follows:

⁹ During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission's estimates are in line with these figures.

¹⁰ The EEA + the 10 Accessing countries.

EEA + accession countries – 2003		
Player	Oxygen Tonnage	Nitrogen tonnage
Air Liquide	[30-40]%	[30-40]%
Messer Targets	[0-10]%	[0-10]%
Combined	[40-50]%	[40-50]%
Linde	[20-30]%	[20-30]%
Air Products	[0-10]%	[10-20]%
Praxair	[0-10]%	[0-10]%
BOC	[10-20]%	[10-20]%
Messer Remain Co	[0-10]%	[0-10]%
Others	[0-10]%	[0-10]%

Source: The notifying party¹¹

42. The market shares of the various players, in particular those of the merging parties, have remained stable over time despite a slight increase of the market size (10-15% over the last five years).
43. The proposed concentration would strengthen the largest tonnage supplier of oxygen and nitrogen. The combined entity would hold [40-50]% of the market shares on each of these markets. The next largest supplier – Linde – would reach half of the combined entity's sales in both markets. The remaining suppliers are more dispersed.

The existing award procedures (RFQs) do not undermine the informative value of market shares

44. In its notification, Air Liquide submits that the tonnage markets are bidding markets in which market shares do not constitute an appropriate factor to assess the competitive conditions prevailing on the markets. However, the Commission's investigation, in line with its findings when reviewing previous transactions, shows that the possibility for customers to launch informal tendering processes for large tonnage projects does not undermine the informative value of market shares on the tonnage markets.
45. First, unless there is specific evidence that the past trend no longer reflects the present situation, it is reasonable to consider that a supplier's market share that remains at a stable level is indicative of its effective position on the market. In the present case, the parties' respective market shares have not been subject to wide variations but, on the contrary, have been very stable.
46. Secondly, the assertion that the tonnage markets for air gases are bidding markets must be nuanced to a significant extent. As already underlined by the Commission in its decision Air Liquide/BOC¹², the tendering procedures used by tonnage customers are not similar to a formal bidding process. When confronted with new tonnage needs,

¹¹ During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission's estimates for Messer Targets and Air Liquide are slightly above those provided by the parties, with a combined market share of [45%-50%].

¹² Commission Decision COMP/M.1630 – Air Liquide/BOC.

tonnage customers usually launch Requests for Quotations (RFQs) to various potential suppliers. These calls for tenders are not normally published, although for large projects most major players present locally may be solicited. Those tendering procedures are not standardised with common objective and clearly laid down criteria to award a contract, but simply negotiation procedures which are conducted, to a varying degree, with different suppliers. Once offers have been received, additional negotiations will take place with the incumbent supplier (if a contract already exists) and with the other respondents. As Air Liquide itself acknowledges, each project corresponds to specific requirements which also implies case-by-case negotiations about the price, industrial and other non-price dimensions of each contract (e.g. the contractual commitments to a given level of reliability). In the course of the negotiations, suppliers have also the possibility to modify their offers and to propose different conditions in order to win the contract.

47. In addition, as confirmed by most customers, the incumbent enjoys a significant advantage when presenting an offer for a supply contract, not only when extensions have to be made to an existing supply contract, but also when the call for tender relates to the renewal of an existing contract. This is due to several factors amongst which the fact that the incumbent's plant has already been depreciated over the length of the past contract (generally 15 years). Customers also value the proven reliability of the existing plant. The incumbent's advantage may even be more significant when the customer has a pipeline supply contract with the incumbent supplier. In such situations, competitors might not even find it attractive to present an offer, because of the cost of preparing such a bid. Customers have also confirmed this concern.
48. In such a market, where some form of "bidding" may occur for new projects concerning large tonnage contracts, market shares thus reflect real purchasing decisions by customers in a given year. The fact that purchases may mostly go through a tendering procedure does not fundamentally affect the value of market shares as an indication of the merged entity's market power.
49. The combined market shares of Air Liquide and Messer Targets are at levels indicative of a dominant position. The following paragraphs will examine to what extent the elimination of Messer's competitive constraint on Air Liquide and the addition of the Messer Targets assets to Air Liquide's may significantly alter competitive conditions and further enhance Air Liquide's position on these tonnage markets.

(b) Actual competition and impact of the proposed concentration on the oxygen and nitrogen tonnage markets

50. The Commission's market investigation indicates that, although Messer does not exert a strong competitive constraint on Air Liquide in the EEA as a whole, it holds a strong position in Germany around its pipeline networks where a significant part of EEA customers are located. In other words, Messer derives its competitive strength in the tonnage markets from its pipeline networks.

Messer does not exert a strong competitive constraint in the overall EEA outside its entrenched position in Germany

51. The market investigation has confirmed the Commission's previous findings¹³ that Messer remains a second-tier player in terms of market share on the EEA tonnage markets for air gases, far behind the first-tier players, i.e. Air Liquide, Linde, Air Products, Praxair, and to some extent BOC. This is partly due to the fact that Messer is not present, or to a very limited extent, in EEA countries other than Germany. Moreover, Messer lacks the engineering capabilities and the state-of-the-art technology that the main players have. As an example, Messer has sold only [...] air separation units (ASUs) to third parties between 1996 and 2003 out of a total of about 150 ASUs.
52. The Commission requested that all the major competitors, i.e. Air Products, BOC, Linde and Praxair provide information relating to their past tonnage offers. These data corroborate the above-described analysis. All mentioned companies provided information on the RFQ which, according to their knowledge, have taken place within the past five years. They also depicted their own and the competitors' participation in the tender as well as the winner and in some instances also the second best bidder to it. The different individual data sets give an indication of the merging parties' market strength as perceived by themselves and their competitors. The analysis shows that Messer is not seen as a major constraint on Air Liquide.¹⁴ Air Liquide submits that it participated in [...] of the last rounds of RFQs in the EEA. Messer made a competitive offer in [0-10]% of these cases. According to this data set, the highest competitive pressure resulted from Linde and Air Products which presented parallel offers in, respectively, [30-40]% and [30-40]% of Air Liquide's bids. Praxair bid against Air Liquide in [0-10]% ([...] bids) of Air Liquide's bids and BOC did so in [0-10]%.
53. This view derived from the merging parties' data-set is also reflected by information submitted by other companies'.¹⁵ According to these data sets Messer bid against Air Liquide in [0-10]% to [10-20]% of the number of Air Liquide-bids as reported by the different competitors, whereas for example Linde and Praxair reached up to [90-100]%. BOC and Air Products were also seen as strong competitors to Air Liquide since they were present in up to [80-90]% of the Air Liquide bids.
54. For some of the reported calls for tender the companies also indicated the second best bidder. Air Liquide was the successful bidder in [20-30]% to [40-50]% of the tenders as reported by the different gas producers. In these cases, Messer was perceived as a second best only by the notifying parties themselves and only in [0-10]% of the bids where Air Liquide won, whereas Linde was perceived as the major second best bidder

¹³ Commission Decision COMP/M.1630 – Air Liquide/BOC at para. 114.

¹⁴ Not included are: tenders which have been cancelled, not yet been decided or tenders which led to the result of self-production by the customer. In all of these RFQs only little information was submitted concerning participation. Moreover, these categories of RFQ have been obviously treated differently by the submitting companies which in most cases chose not to report about these tenders at all. The gathered data is therefore not complete in this respect and was for this reason excluded from the analysis.

¹⁵ Since Praxair did not submit any data on second best bidders the focus of this paragraph is on the other competitors' data-sets.

([10-20]% of successful Air Liquide bids). Respondents unanimously did not see Messer as the closest competitor to Air Liquide in any reported tender but either Air Products or Linde, which were seen as the runner-up in up to [60-70]% (Air Products) and [20-30]% (Linde) of the respective number of successful Air Liquide bids for tonnage contracts.

The change brought about by the transaction is centred around Messer's pipeline networks in Germany

Messer holds a structural and incumbency advantage around its pipelines

55. Messer's activities in the tonnage business are concentrated in Germany where it is the only industrial gas company to own pipeline networks delivering oxygen and nitrogen to tonnage customers. This strategy was used in industrial basins where clusters of volume users of air gases are located such as steel producers, chemical companies, and paper or glass manufacturers. Messer thus owns a [500-600] km pipeline network in the Rhine-Ruhr area and a smaller network in the Saar area (about [0-100] km)¹⁶. As a result, despite being a second-tier competitor in the overall EEA market, Messer was able to retain the same market share over the years thanks to this entrenched position in Germany.
56. The market investigation has confirmed that these infrastructures indeed give a decisive advantage and specific strength to Messer when competing for contracts awarded by tonnage customers located in the catchment area (about 30 km) of these pipelines. First, economies of scale can be achieved by constructing larger ASUs than would be possible if individual units had to be built for each customer. The additional investment required in order to connect an industrial customer located in the area of the pipeline is limited compared with the construction of a dedicated plant on the customer site, which is the only alternative open to competitors. Secondly, such interconnected pipelines present important advantages for customers in terms of reliability. The control of interconnecting pipelines allows to meet demand peaks as well as to provide back-up when maintenance work is made on a particular tonnage plant, or more importantly, in the event of plant breakdown. In view of the higher cost of liquid back-up, this advantage plays a significant role when industrial customers ultimately decide to award a contract. Pipeline coverage of an industrial basin such as the Rhine-Ruhr area, or the Saar region is therefore a significant advantage when competing for potential customers.
57. The specific strength held by Messer around its pipeline network has also been confirmed by the data provided by the parties in the course of the investigation. Out of the reported [...] contracts awarded to Messer in the last five years, [...] of them related to projects located in the catchment area of Messer's pipelines.
58. The structural advantage held by Messer in Germany thanks to its pipelines is further reinforced by the fact that, in the EEA tonnage markets, an incumbent supplier typically holds a significant advantage over its competitors.

¹⁶ Linde also owns a pipeline in the Eastern side of Germany (Leuna) of a size similar as that of Messer's Saar pipeline.

59. By virtue of its on-going working relationship with the customer, the incumbent is the first to learn of the customer's intention to extend or modify an existing supply agreement. Incumbent suppliers are almost always included amongst the industrial gases companies from which an offer is requested and, because of their on-going relationship with the customer, may often be involved in the project planning stage. Since they have detailed knowledge of the customer, they have an advantage in responding to such a request and in the subsequent negotiations. Because of the tested reliability of the incumbent supplier, a customer will not change its supplier unless a competitor submits an offer which is materially advantageous, rather than merely equivalent.
60. Customers have also confirmed that the incumbent supplier is usually able to offer more advantageous financial terms for the follow-up contract because its initial investment has been fully depreciated. The incumbent is also best placed to make the most economical offer if the customer's demand evolves in such a way as to necessitate a change to the contract before expiry of the contractual term. For instance, if additional capacity is required, the incumbent can offer either to extend the capacity of the existing plant or, alternatively, to build a single new plant for the aggregate capacity. Any competitor could only offer to build a second additional plant on the same site, which is an obviously less economical solution. Even where a customer's demand is so high that it requires a second plant on the same site, it will normally prefer to use the same supplier to build this second plant in order to reduce its administrative costs and operate the two plants in a coordinated, and therefore more economical, way. This is all the more true when the incumbent supplier operates through pipelines rather than with on-site plants.

Air Liquide exerts an effective competitive constraint on Messer Targets that would be eliminated post-merger

61. The Commission's market investigation has shown that, in the recent years, Air Liquide has overall exercised a significant competitive constraint on Messer in RFQs for new tonnage contracts. Although Linde has been Messer's closest competitor insofar as it was considered as the second best supplier in most instances where Messer was awarded a tonnage contract, Air Liquide was nevertheless a close competitor to Messer. According to the data provided by the parties, Air Liquide was even the most frequent winner in all tenders where Messer presented an offer in the past five years.
62. When considering more specifically the areas where the merger would bring about significant changes on the market, the Commission is of the view that the operation would raise even more serious doubts as to its compatibility with the common market.
63. In the Rhine-Ruhr region, Air Liquide was able to win a large tonnage contract with an on-site plant (Rheinberg), located within a 15 km range from Messer's pipeline despite the structural advantage held by the latter in this area. In several other tendering procedures, Air Liquide presented competing offers by proposing on-site plants against Messer's pipeline, thereby adding important uncertainty in the outcome of the tendering process. By contrast, competitors such as Praxair, Air Products or BOC were not present or to a much more limited extent in those tendering procedures.
64. The Commission also sought to examine whether, in the absence of the merger, Air Liquide would have been able to place competing offers to industrial customers located in the Rhine-Ruhr region through a possible extension of the Belgian section of its

pipeline network going from Northern France to the Netherlands (“pipeline-to-pipeline competition”). In [...] cases, Air Liquide had indeed studied pipeline solutions to answer specific customer needs near Messer’s pipelines, in view of the gap in electricity cost¹⁷ then existing between Belgium and Germany. However, because of the cost of such extensions, these projects have never been able to be competitive either with Air Liquide own on-site solutions (Rheinberg), Linde’s on-site plants (Stolberg) or with Messer’s pipeline. In view of the fact that this gap in electricity costs no longer exists and is not expected to reappear following deregulation of the electricity market, the ability of Air Liquide to be competitive through these means now seems even more unlikely.

65. Some competitors have also suggested that, post-merger, Air Liquide would enjoy a larger customer base that would provide the economic incentive for connecting its current pipeline with Messer’s Rhine-Ruhr pipeline. However, if such a connection were to take place, foreclosure would occur in the catchment area of the pipeline only if Air Liquide were to undercut its competitors’ offers for on-site plants for the benefit of customers. If Air Liquide’s prices were to be raised, other industrial gas companies would nevertheless still have the ability to bid successfully for new projects through on-site plants as it has been the case until now. In any case, such risk of foreclosure is now removed following the remedies presented by the notifying party.
66. Finally, a third party considered that, thanks to its established Hydrogen (H₂) pipeline network - formerly owned by BOC - which is close to Messer’s O₂/N₂ network, Air Liquide/Messer Targets would have the ability to bundle its products and deter competitors in these markets to the detriment of customers in this region. However, the Commission’s investigation does not confirm such concern. First, it appears that a vast majority of oxygen or nitrogen customers in that area do not source their hydrogen from Air Liquide. Secondly, as shown by the data relating to the tonnage contracts awarded in the last five years, the fact that Air Liquide has owned this H₂ pipeline since 1999 has not allowed it to gain air gas businesses in this region. As a result, it is far from established that a significant part of customers would need oxygen or nitrogen together with hydrogen and that such a bundling strategy could be effective. In addition, if bundling between products were to take place, foreclosure would be highly unlikely since it would occur in the catchment area of both pipelines only if Air Liquide/Messer Targets were to undercut its prices. This strategy would not be to the detriment of customers but rather to their benefit. If, in the longer term, prices were to be raised, the proportion of customers that would need both oxygen/nitrogen and hydrogen would still have the alternative to be supplied through on-site plants by other industrial gas companies.
67. In the Saar region, by contrast with the competitive situation prevailing in the Rhine-Ruhr region, the likelihood that “pipeline-to-pipeline competition” would become effective in a near future is far from excluded. Indeed, Messer’s Saar pipeline being next to Air Liquide’s Lorraine pipeline (and indeed already connected to it), it is not disputed that it would have been economically feasible for the latter to compete on comparable terms with Messer for new tonnage contracts in this area by proposing to extend the existing pipeline. Air Liquide’s incentives to present highly competitive offers towards customers located in Saar would have even been significantly increased

¹⁷ The notifying party submitted a comparison of the past prices between Belgium and Germany showing that electricity was 30% more expensive in Germany than in Belgium at that time.

in the coming years following the recent announcement of plant closures in Lorraine by one of Air Liquide's major customers.

68. It follows from the above-mentioned elements that, as a result of the proposed concentration, the increasing competitive constraint that Air Liquide exerted on Messer (Rhine-Ruhr) or was likely to exert in the near future (Saar) would have been definitely removed, thereby allowing Air Liquide/Messer Targets to hold an even stronger position in the EEA market.

The merged entity's entrenched position in key regions of the EEA would prevent any effective competition by the remaining competitors

69. According to the data provided by the notifying party, Air Liquide was providing by far the largest proportion of tonnage contracts for standard air gases in France ([85-95]% of oxygen and [85-95]% of nitrogen in 2003) or Belgium ([60-70]% and [70-80]% respectively in 2003), where, thanks to its unrivalled pipeline network, it now holds an entrenched position that is hardly contestable for competitors such as Linde.

70. The merged entity would thus combine Air Liquide's strong market position and technological capabilities with Messer's existing entrenched position in the Rhine-Ruhr and Saar regions, where significant multi-national customers are located. Added to the global presence of Air Liquide and to its incentive to secure a similar market position in those areas, Messer Targets's already strong position there would constitute an additional obstacle and disincentive for other market players to effectively compete. As shown by the market investigation, given the cost of preparing a serious offer in response to an RFQ (up to EUR 500 000), some market players may even find it unattractive to bid against the odds.

71. Although, until now, Linde has been able to maintain some uncertainty in the tendering process for RFQs launched in those areas, the combined entity would nevertheless hold, as an incumbent and the operator of these industrial gas pipelines, a strong competitive advantage that would render even more unlikely the reduction of the anti-competitive effects of the proposed concentration. In addition, its extended entrenched market position would provide the merged entity with increased ability to retaliate against Linde (be it for some tonnage contracts or on adjacent bulk markets) in case it would contest its position. As to other competitors, their current market position in Germany and their very limited presence in tendering procedures launched by German industrial customers show that they would obviously be even more unlikely to compete effectively with the new entity.

The existing award procedures would be insufficient to constrain the merged entity's strength

72. The existing award procedures do not seem to be sufficient to constrain the merged entity's strength on the market. As already explained and confirmed by most customers during the market investigation, an incumbent enjoys a significant advantage in bidding for new tonnage contracts. This is all the more true when a supplier operates a pipeline network. Since Messer was able, despite its technological drawbacks, to retain the same market position over time, there is no reason to believe that, combined with Air Liquide's position, this situation could be constrained by tonnage customers in a more effective way.

73. On the contrary, given the depreciation of its existing plants, it is far from excluded that Air Liquide/Messer Targets would virtually be in a position to secure any new significant tonnage contract to be awarded in the area of Messer's current pipelines.

Conclusion

74. In view of the all these factors, the elimination of one effective alternative to Messer in the Rhine-Ruhr and the Saar regions and the combination of Air Liquide's already strong position in the EEA market with Messer's entrenched position in those areas would, absent the proposed remedies, raise serious doubts as to the compatibility of the proposed concentration with the common market. Without appropriate remedies allowing for effective competition in areas where Messer is present through its pipeline network, there is the risk that the merger would create a dominant position in the overall EEA tonnage market for oxygen and nitrogen.
75. This conclusion holds true even when considering an EEA extended market for tonnage because of the very similar market structure and the very low volume of sales in the 10 Accessing countries in tonnage as compared with the EEA¹⁸.

1.2 Tonnage markets for other gases (Hydrogen/Carbon Monoxide/Syngas)

76. Messer is not active in the tonnage business for Hydrogen and Syngas. Therefore, if Hydrogen and Syngas were considered as separate markets, the operation does not raise serious doubts as to its compatibility with the common market in these markets.
77. The market shares of the parties and competitors on the tonnage market for carbon monoxide in the EEA are set out in the Table below:

Player	CO
Air Liquide	[50-60]%
Messer Targets	[10-20]%
Combined	[70-80]%
Linde	[20-30]%
Air Products	[0-10]%
Praxair	[0-10]%
BOC	[0-10]%
Messer Remain Co	[0-10]%
Others	[0-10]%
Market size (M€)	[...]

Source: The notifying party. 2002¹⁹

78. As Messer holds a [10-20]% market share in the tonnage market for carbon monoxide, the merged entity would hold a [70-80]% market share. Although the CO tonnage

¹⁸ The sales in the 10 Accessing countries only represent about [10-20]% of the sales of the EEA extended market.

¹⁹ During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission's estimates are in line with these figures. The market shares on a hypothetical EEA extended market would be almost identical to these figures.

market can be considered as an emerging market, such a level of combined market shares is a strong indication of the creation of a dominant position, and therefore raises serious doubts as to the compatibility of the proposed concentration with the common market.

79. However, these serious doubts are removed since the notifying party has committed to divest Messer's existing on-site plant for CO tonnage.

2. Bulk markets

2.1 UK, France and Belgium

80. The proposed operation would not give rise to overlaps in the UK where only Messer is active and, in the absence of vertical issues, would thus not raise serious doubts as to its compatibility with the common market
81. As to France and Belgium²⁰, Messer's activities on those markets are not acquired by Air Liquide and therefore not directly concerned by the proposed operation.
82. Nevertheless, the Commission sought to verify whether, despite the fact that the Messer Group would still be active as an independent entity in these countries, the operation would enable Air Liquide to further reinforce its already strong market position there and result in the creation or the strengthening of a dominant position on those markets. In that respect, one competitor suggested that the Messer Group would become dependent upon supplies of the merged entity because, prior to the merger, it sourced the liquid gases necessary for its bulk activities in France and Belgium from its plants in Germany (either from Oberhausen for its Belgian activities, or from Dillingen for its bulk business in France).
83. However, the information gathered by the Commission establishes that the Messer group will not be dependent on supplies from Air Liquide/Messer Targets. As to Belgium, long-term supply agreements or swap agreements have been concluded for the various gas concerned with other companies. In France, the Messer Group will be sourced, depending on the gas concerned, either from [...] and on the basis of sourcing rights or swap agreements or from independent sources from third parties. Accordingly, the Messer Group will not be dependent upon supplies from Air Liquide/Messer Targets
84. Consequently, the operation does not raise serious doubts on these bulk markets.

²⁰ [...]

2.2 Germany

85. By contrast, the proposed operation would lead to further concentration of the German bulk markets. The market shares of the parties and competitors are set out in the Table below.

Bulk markets – Germany – 2003					
Player	O2 bulk	N2 bulk	Argon & Mixtures Bulk	H2 Bulk	CO2 Bulk
Air Liquide	[0-10]%	[10-20]%	[0-10]%	[0-10]%	[20-30]%
Messer Targets	[30-40]%	[30-40]%	[40-50]%	[30-40]%	[10-20]%
Combined	[40-50]%	[40-50]%	[40-50]%	[40-50]%	[40-50]%
Linde	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[20-30]%
Air Products	[0-10]%	[0-10]%	[0-10]%	[20-30]%	[0-10]%
Praxair	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[0-10]%
BOC	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[0-10]%
Hydrogas	[0-10]%	[0-10]%	Included in “Others”	[0-10]%	[10-20]%
Others	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[10-20]%
Market size (M€)	[...]	[...]	[...]	[...]	[...]

Source: The notifying party²¹

86. The HHI below also illustrate the high degree of concentration of the markets that would result from the merger:

	O2 bulk	N2 bulk	Argon Bulk	H2 Bulk	CO2 Bulk
Pre-merger	[2700-2800]	[2600-2700]	[3500-3600]	[2700-2800]	[2100-2200]
Post-merger	[3400-3500]	[3300-3400]	[3900-4000]	[3200-3300]	[2900-3000]
Delta	[600-700]	[700-800]	[300-400]	[400-500]	[700-800]

Source: The Commission’s investigation

2.2.1 Bulk markets for oxygen and nitrogen

87. The operation would give rise to substantial overlaps in the German market, where, pre-merger, Messer and Linde already held together around [70-80] % of each market with significant market positions. The remainder of the market is spread amongst a few players, with Air Liquide holding a market share between [5-15]% depending on the product concerned, therefore higher than those of Praxair and Air Products.

The concentration would lead to the elimination of the most aggressive player on the markets

²¹ During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission’s estimates are in line with these figures.

88. Despite the incumbency advantage that Messer and Linde hold on the markets thanks to their privileged customer relationship and their existing tonnage infrastructure (piggy-back plants), Air Liquide has been able to gain market shares in a relatively short period of time. Internal documents indeed confirm that Germany has been a strategic market for Air Liquide because of inter alia [...]. Although Air Liquide enjoys the same technological abilities as other competitors such as Air Products and Praxair, it was also able to gain a more important market share thanks to its more aggressive policy towards bulk customers.
89. In the course of the market investigation, a large proportion of respondents also confirmed that Air Liquide had been aggressive nationally with significant lower price offers. Air Liquide was thus considered to be a strong competitive constraint on these two players because of its readiness to undercut competitors if need be.
90. As a result of the operation, it is likely that Air Liquide's strategic positioning and incentives on the German bulk markets for standard air gases would be substantially changed as it would then combine its forces with Messer's more traditional and entrenched position. Through the concentration, it would indeed reach its strategic goal of [...]. Therefore, Air Liquide/Messer Targets's incentives would no longer be the same as Air Liquide's pre-merger incentive to gain a larger customer base. In particular, it would no longer need to play a potentially disruptive role on the markets and to lower its margins when trying to get new bulk contracts.

The creation of a joint dominant position would become likely post- merger

91. The issue of the existence of a joint dominance pre-merger between Messer Targets and Linde had been considered but rejected in a previous Commission decision²², in particular because of the growing position of Air Liquide. The substitution of Air Liquide as an aggressive player by the combined entity's incumbent positioning is likely to lead to the creation of a collective dominant position.
92. Firstly, both companies would have relatively symmetric positions in terms of market shares and capacity levels, and would thus be likely to have a common incentive not to compete effectively, in particular through customer sharing (each market player abstaining from challenging the other on its customer base). Evidence of past collusion between these firms in the same product markets provides an important indication in this respect²³.
93. Secondly, the notifying party argues that an increasing product differentiation lowers market transparency, which would render effective monitoring unlikely. However, most respondents to the Commission's market investigation confirmed that bulk products still remain very homogeneous.
94. In any case, although the pricing of bulk gases to final customers is not necessarily highly transparent, market transparency first exists when considering the production costs of the main players. This is due to the fact that the cost structure of a bulk

²² Commission Decision M. 1641 – Linde/AGA.

²³ See Commission Decision of 24 July 2002 relating to a proceeding pursuant to Article 81 of the EC Treaty, Case COMP/E-3/36.700 – Industrial and medical gases, OJ L4.2003, L84, p. 1.

supplier is essentially determined by its energetic efficiency, which can be derived from the size and the age (and thus the technology used) of its plant. Such a transparency is highly increased by the existence of frequent swap agreements between suppliers, through which bulk producers seek to secure a (back-up) source in order to guarantee supplies to their customers.

95. More importantly, the Commission's market investigation showed that bulk markets are also transparent insofar as it is fairly easy for suppliers to know the identity of each other's main customers, and the duration of the contracts (which are generally concluded for a standard duration of 3 years). Indeed, gas suppliers can be very well informed about each other's clients because gas tanks usually belong to the gas supplier and bear the company's markings. A salesman visiting a customer or a potential customer can easily see who the current supplier is.
96. This is even more so when the number of main competitors is reduced to two: it is then highly likely that these two competitors will be asked by customers to propose a price when their contracts come to an end. That transparency will be greatly increased with the notified transaction because of the reduced uncertainty on the main competitor's identity when trying to get a contract from a customer.
97. Thirdly, the Commission is of the view that coordination between Air Liquide/Messer Targets and Linde would be sustainable because of the possibility for each of these players to present an effective threat of future retaliation in case of deviation. Retaliation on the German bulk markets would be likely and effective, more particularly through a possible selective undercutting of the other member of the duopoly when one or several important customers would award new supply contracts. Because of customer transparency, a supplier is immediately informed and can react immediately if a customer with which it has a contract starts buying from a competitor. Besides, retaliation would not necessarily take place in the same geographic or product market(s) as the one where deviation would occur. Air Liquide holding a dominant position in France ([50-60]% market share in 2003) as well as a strong position in Italy ([35-45]% in 2003) and, conversely, Linde being by far the market leader in Northern countries (e.g [50-60]% in the Netherlands and [70-80]% in Sweden in 2003), each of them would have additional means of retaliating in a short period of time to any deviation disrupting the coordination²⁴.
98. Finally, competitors already active on the German market, such as Air Products or Praxair, would not have the same ability and incentive to disrupt significantly the stability of the coordinated oligopoly. As to Air Products, although it has a market position similar to Air Liquide's current position, it must be observed that it has no similar national coverage. It is mainly present in the Northern and Western parts of Germany whereas the combined entity, as well as Linde, would cover all four regions. Praxair would even be in a weaker position, not only because of its more limited market strength, but also because of the absence of any bulk infrastructure in the Southern and Eastern parts of Germany. In view of this more limited national coverage, both Air Products and Praxair would thus remain dependent, to an appreciable extent, from both members of the duopoly since, when contracting with new customers in those regions where they are not present, they would also need to

²⁴ See also Commission Decision of 24 July 2002 relating to a proceeding pursuant to Article 81 of the EC Treaty, Case COMP/E-3/36.700 – Industrial and medical gases, OJ L4.2003, L84, p. 1, paragraphs 83-84.

conclude swap agreements either with Air Liquide/Messer Targets and/or Linde in order to secure back-up for those new supplies. In addition, as explained above Air Liquide/Messer Targets and Linde would have the ability and incentive to retaliate selectively against smaller competitors.

99. It is not expected either that bulk customers would be in a position to jeopardise the competitive outcome of coordination. As shown by the market investigation, customers are highly reluctant to switch supplier at the end of the contract, although they will often seek competitive offers before renewal. Incumbency most frequently confers an advantage through the relationship with the customer and an understanding of his process and related gas equipment. In most cases where a bulk customer switches to another supplier, the bulk storage tank and any associated equipment will be removed at the expense of the customer. Moreover, the dominant oligopoly would face a much less concentrated demand, thus further reducing customer choice and bargaining power.
100. In the absence of remedies, aimed at removing the substantial change brought about by the merger on the German bulk markets for oxygen and nitrogen, the operation would therefore raise serious doubts as to its compatibility with the common market.

2.2.2 Bulk market for CO₂

101. The operation would give rise to a substantial overlap on the German bulk market for carbon dioxide and would combine the second (Air Liquide) and the third (Messer) best suppliers in terms of market shares. As a result, the combined entity would become the market leader in terms of market shares with an overall position around [40-50]% substantially higher than that of Linde (around [30-40]%). Together, Air Liquide/Messer Targets and Linde would represent almost [70-80]% of the German sales with only Hydrogas, and to a more limited extent ACP, holding an appreciable presence on the market.
102. By contrast to the bulk markets for standard air gases, the positions of the two leading players would not be perfectly symmetric in terms of market shares. However, the Commission is of the view that this would not be sufficient to exclude the likelihood that a joint dominant position would be created on this market as well, following the proposed concentration.
103. Indeed, by contrast with Air Liquide and Linde, Messer does not own its own sources of CO₂ but secures its supplies of gas through supply agreements with third parties, in particular with chemical industries (e.g [...]) or with competing producers (such as Linde). Competitive and reliable sourcing constitutes a key factor influencing market positioning. This may explain why, although being a national player, Messer remains far behind Air Liquide in terms of sales. Thanks to its large customer base, Messer was still able to develop and retain a substantial market position. However, this position does not reflect the specific strength that other suppliers such as Air Liquide and Linde will hold in the medium to long term. The absence of symmetry of the two members of the duopoly in terms of market shares must therefore be nuanced as long as such symmetry would exist to a much larger extent in terms of assets and resources.
104. Other factors conducive to collective dominance, that were mentioned in the context of the bulk market for standard air gases, would also hold true in the context of the CO₂ bulk market. In particular, the reduction from three to two of the number of main players active on the German market, as well as market transparency and the

possibility to retaliate in case of deviation would constitute significant market features. Market transparency appears to be present in several respects (existence of many supply arrangements, cost transparency, and above all, knowledge by each major player of each other's customer base). Retaliation would also be effective either through undercutting on this market or through other retaliation means on neighbouring bulk markets. Evidence of past collusion between these firms in the same product markets and of retaliation means also provide an important indication in this respect²⁵.

105. As to other competitors such as Hydrogas and ACP, the both of which have been able to gain an appreciable market position in Germany, it is far from established that they would be able to react effectively and jeopardise the creation of such collective dominant position.
106. Consequently, the Commission is of the view that the operation raises serious doubts on this market to the extent that Air Liquide/Messer Targets and Linde would together form, post-merger, a dominant oligopoly on the CO₂ bulk market in Germany.

2.2.3 Bulk Argon market

107. The operation would give rise to a limited overlap on the German bulk market for Argon since Air Liquide represented less than [0-10]% of the sales in 2003. However, the operation would lead to further concentration of the market with Air Liquide/Messer Targets and Linde holding together almost [80-90]% of the sales. In view of the stability of Messer and Linde positions pre-merger, the removal of this competitive constraint, although small, raises serious doubts to the creation of a dominant oligopoly on the basis of a German-wide market.
108. However, the proposed divestitures go beyond the change brought about by the notified operation and thus clearly remove the serious doubts raised by the notified operation on the German market for Argon.

2.2.4 Hydrogen bulk

109. Following the proposed operation, the combined entity would hold a market share of almost [40-50]% with Linde and Air Products having market shares around [30-40]% and [20-30]% respectively. Although Air Liquide only accounts for about [0-10]% of the overall German sales in this market, far behind Messer, Linde and Air Products, the combined entity would become by far the market leader before its two main competitors. In view of Air Liquide's proven capabilities in this business, in particular in France where it held a [70-80] % market share over the past five years, the risk exists that the combined entity would become dominant post merger by holding almost [40-50%] of the German customer base.
110. However, the proposed divestitures go beyond the overlap between Air Liquide and Messer Targets in Germany, and thus clearly eliminate any serious doubts as to the compatibility of the common market.

²⁵ See Commission Decision of 24 July 2002 relating to a proceeding pursuant to Article 81 of the EC Treaty, Case COMP/E-3/36.700 – Industrial and medical gases, OJ L4.2003, L84, p. 1.

3. Cylinder markets

3.1 Electronic Specialty Gases (ESGs)

111. On the markets for ESGs, the operation raises serious doubts as to its compatibility with the common market. On the market for WF6 gases, Air Liquide/Messer Targets would hold [50-60]% of European sales (2002), thereby combining Air Liquide's already strong market position ([40-50]%) with Messer's important activity ([10-20]%). The merged entity would become a clear market leader as the gap with the other competitors would further widen (Air Products: [30-40]%; BOC: [0-10]%).
112. However, the notifying party has committed to divest all Messer's activities in the ESG markets, thereby removing the change brought about by the operation and the serious doubts that it raises.

3.2 Other cylinder markets

113. The proposed operation would not give rise to overlaps in the UK where only Messer is active and therefore, in the absence of vertical issues, does not raise serious doubts as to its compatibility with the common market. As to France and Belgium²⁶, Messer's activities on those markets are not acquired by Air Liquide and are not therefore directly concerned by the proposed operation. To the extent that the Messer Group would not be dependent on Air Liquide for its supplies of liquid gases and could thus conduct its cylinder business independently, the operation would not reinforce Air Liquide's already strong position in these countries.

The operation would lead to further concentration on the German cylinder gas markets

114. By contrast with the situation in the UK, the proposed operation would lead to a substantial overlap between Air Liquide and Messer Targets in Germany and to a high degree of concentration for each of the gases concerned.

²⁶ Messer was not active in the Netherlands prior to the merger.

115. The market shares of the parties and competitors are set out in the table below.

Germany – 2002					
Gas	Messer Targets	Air Liquide	Combined	Linde	Market value (m€)
Industrial O2	[20-30]%	[10-20]%	[40-50]%	[30-40]%	[...]
Medical O2	[30-40]%	[0-10]%	[40-50]%	[40-50]%	[...]
Acetylene	[20-30]%	[10-20]%	[30-40]%	[50-60]%	[...]
Argon and Argon-Mixtures	[20-30]%	[10-20]%	[30-40]%	[30-40]%	[...]
N2	[20-30]%	[10-20]%	[30-40]%	[30-40]%	[...]
H2	[30-40]%	[0-10]%	[40-50]%	[30-40]%	[...]
Helium	[30-40]%	[0-10]%	[30-40]%	[40-50]%	[...]
N2O	[30-40]%	[0-10]%	[40-50]%	[30-40]%	[...]
CO2	[0-10]%	[10-20]%	[20-30]%	[30-40]%	[...]
Other gases (excl. ESGs)	[20-30]%	[10-20]%	[40-50]%	[30-40]%	[...]
Rentals/transportation	[30-40]%	[0-10]%	[30-40]%	[40-50]%	[...]
Total	[20-30]%	[0-10]%	[30-40]%	[40-50]%	[...]

Source: the notifying party²⁷.

116. As a result of the merger, Air Liquide/Messer Targets and Linde would hold together between [60-70% and 80-90%] of the market. Except in the acetylene cylinder market where Linde would still remain a clear market leader, both players would have very symmetric market positions on the overall national market.

The removal of Air Liquide as an independent competitive force would also lead to symmetric positions on a regional basis

117. In view of the fact that competition on the cylinder market has a regional dimension because of the maximum size of the delivery radius (150-200 km) in which suppliers have an economic incentive to supply customers, the Commission also examined the positions of the various suppliers in each of the four German regions before and after the transaction.

²⁷ During the investigation, the Commission reconstructed the market shares on the basis of the data requested from each market player. The Commission's estimates are in line with these figures.

118. The table below shows, on the basis of all cylinder sales, the respective positions of the main market players in 2002.

	North	East	South	West	Total	Market size(M€)
Messer Targets	[30-40]%	[30-40]%	[20-30]%	[30-40]%	[20-30]%	[...]
AL	[0-10]%	[20-30]%	[0-10]%	[0-10]%	[0-10]%	[...]
Combined	[30-40]%	[50-60]%	[20-30]%	[40-50]%	[30-40]%	[...]
Linde	[40-50]%	[30-40]%	[50-60]%	[30-40]%	[30-40]%	[...]
AP	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[...]
Praxair	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[...]
Other	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[10-20]%	[...]
Total	[10-20]%	[10-20]%	[20-30]%	[40-50]%	100,0%	[...]

Source: The notifying party²⁸

119. Although Linde and Messer have national distribution networks (much denser than those of their competitors), Messer has been traditionally stronger in the West whereas Linde remained the market leader in the South. However, until the proposed concentration, such symmetry did not exist in the Eastern and Northern regions: whereas Linde was a clear market leader in the North, Messer was at the same level as Linde in the East because of Air Liquide's disruptive position there ([20-30]%).

120. Following the merger, the regional positioning of the two main suppliers of cylinders will be almost perfectly symmetric. Air Liquide/Messer Targets will indeed hold a [50-60]% market share in the East whereas Linde would have an almost identical market share in the South ([50-60]%). Similarly, Air Liquide/Messer Targets's position in the West ([40-50]%) would be comparable to that of Linde in the Northern region of Germany ([40-50]%). In all instances, the gap between these two companies and other competitors such as Air Products and Praxair would be further widened.

²⁸ During the investigation, the Commission reconstructed the market shares on the basis of the data requested from each market player. The Commission's estimates are in line with these figures.

The creation of a joint dominant position would become likely post-merger

121. The question of the existence of a joint dominant position between Messer and Linde on the cylinder gas markets in Germany was raised but rejected in a previous Commission decision, in particular because of the firm foothold that Air Liquide had been able to establish in this country²⁹.
122. The Commission is of the view that the presence of Air Liquide on the German cylinder gas markets before the merger was indeed the main factor for disrupting the potential creation of a dominant oligopoly on these markets. First, Air Liquide was able in the recent years to gain a critical position on the German market thanks to its pricing policy and its service capabilities. In that respect, most respondents confirmed that Air Liquide was the most aggressive player on the market. Secondly, because of its important positioning in the East and its presence in the Western and Southern regions, Air Liquide prevented Messer and Linde from having symmetric positions in Germany, thereby disrupting the likelihood that those firms would have common incentives and would dispose of an efficient disciplining mechanism to secure the sustainability of a collective dominant position.
123. As a result of the merger, it is likely that Air Liquide/Messer Targets and Linde would hold a collective dominant position. Air Liquide's pre-merger incentive to gain a larger customer base through all possible means would not be similar to Air Liquide/Messer Targets's post-merger incentives as it would no longer need to play a potentially disruptive role on the markets and to lower its margins when trying to get new contracts. In addition, both companies would have relatively symmetric positions and would thus be likely to have a common incentive not to compete effectively, for example through customer sharing or market partitioning. Evidence of past collusion between these firms in an other EEA country but on the same product markets constitutes an important indication in this respect³⁰.
124. In addition, for reasons similar to those already indicated with respect to bulk markets for air gases, a monitoring of each other's conduct on the market would be effective. In particular, by contrast to the bulk markets, price transparency appears to be more significant on the cylinder gas markets because of the price lists that suppliers provide to their agents as well as to their customers. Also, each member of the duopoly could present an effective threat of retaliation in case of deviation, for example on the same market through a possible undercutting of its prices in a region where the other member of the duopoly is the main player.
125. Finally, it is far from established that customers or competitors would be in a position to jeopardise the actions of this dominant oligopoly. Neither cylinder customers, who are typically small firms with little bargaining power, nor competitors active on the German market would have the ability and/or the incentives to disrupt significantly such coordination. The main remaining competitors – Air Products and Praxair – would still hold significantly lower market shares and would be almost absent from some regions. Air Products is thus mainly present in the Northern and the Western

²⁹ Commission Decision M.1641 – Linde/AGA, at paragraph 50.

³⁰ See Commission Decision of 24 July 2002 relating to a proceeding pursuant to Article 81 of the EC Treaty, Case COMP/E-3/36.700 – Industrial and medical gases, OJ L4.2003, L84, p. 1.

regions of Germany whereas the combined entity, as well as Linde, has a national coverage. Praxair would even be in a weaker position, being absent from the Northern and Eastern parts of Germany.

126. In the absence of remedies aimed at removing the substantial change brought about by the merger on the cylinder gas markets in Germany, the operation would therefore raise serious doubts as to its compatibility with the common market.

4. Conclusion

127. In light of the above, the notified transaction raises serious doubts as to :

- (i) the creation of a dominant position in the European³¹ markets for oxygen, nitrogen and carbon monoxide tonnage;
- (ii) the creation of a dominant position in the German market for bulk hydrogen,
- (iii) the creation of a joint dominant position in the German markets for bulk (oxygen, nitrogen, argon, carbon dioxide);
- (iv) the creation of a joint dominant position in the German markets for cylinders (all main industrial and medical gases supplied in cylinders);
- (v) the creation of a dominant position in the EEA-wide market for electronic speciality gases (ESGs).

VI PROPOSED REMEDIES

A. Initial set of remedies

128. In order to remove the serious doubts resulting from the proposed transaction, the parties have offered to the Commission a number of undertakings and divestments.

129. The first package of undertakings was filed with the Commission on February 4, 2004. It foresaw the divestiture of several Air Liquide and Messer tonnage, bulk and cylinders assets and related activities in Germany.

130. As regards tonnage activities relating to gaseous oxygen and nitrogen, Air Liquide proposed to divest the southern tip of Messer's Rhein/Ruhr pipeline network (between Köln Porz and Knapsack) as well as Messer's complete pipeline network in the Saar area. Furthermore, Air Liquide proposed to divest several tonnage plants (including related activities and equipment) located in Karlsruhe, Rheinberg, Riesa, Hürth, Mainz, Unterwellenborn, and Dillingen, as well as a second Air Separation Unit, which was under construction in Dillingen.

131. The bulk assets proposed for divestiture included production sites (piggy back plants and small on-site Air Separation Units, including related activities and equipment) at the following locations: Karlsruhe, Düsseldorf, Hürth, Dillingen and some further,

³¹ Both EEA and EEA-extended, i.e. including the 10 accessing countries.

- unspecified small on-site Air Separation Units to be selected amongst Messer's customers.
132. Furthermore, Air Liquide proposed to divest its sourcing contracts relating to a BASF Carbon Dioxide source in Ludwigshafen, as well as to the Klara CO₂ source in Linz (Austria).
 133. The proposed divestments of cylinder assets and businesses covered the filling centres in Berlin (including a sales office in Magdeburg, and a hub in Loitz), Erfurt, Völklingen and Hürth.
 134. As regards CO₂, Air Liquide proposed to divest its supply contracts relating to BASF's source in Ludwigshafen and to the Klara source in Austria.
 135. To address potential problems in the market for ESGs, Air Liquide proposed to divest parts of the sales of Messer/Nippon Sanso in WFG6 and SiH₄, if this should become necessary.
 136. The Commission market tested the proposal and found out that the market regarded the proposed divestments as insufficient. The main reason for this outcome was that Air Liquide was generally seen as the only competitor in Germany playing at the national level apart from Linde and Messer. The market pronounced concerns that the transaction would lead to a concentration in the gas markets from 3 to 2 players and that as a result of this, competition would diminish and prices would increase. The proposed remedies did not enable a new entity to substitute Air Liquide as the third player in those markets.
 137. As regards the tonnage market, even after the proposed divestitures the combined entity would still have a very high market share. Furthermore, the market players were doubtful as to whether the divested tonnage business would be viable and independent.
 138. With regard to the pipelines it was argued that the control of a pipeline network constituted a decisive advantage making on-site tonnage solutions hardly competitive in its catchment area. The divestment of only the southern tip of the Rhein/Ruhr pipeline was not regarded as being sufficient to address all competition concerns, mainly because of a lack of expansion possibilities due to alleged restrictions in the capacity of the connected tonnage plant (Hürth) and the already very high pressure in the pipeline.
 139. The other tonnage plants that were proposed for divestiture raised concerns as the viability of the businesses connected to some of the divested sites seemed threatened. For instance, concerns were expressed relating to the viability of the Karlsruhe piggy-back plant. Market participants expected the main customer, Thermoselect, to close down shortly, leaving the Karlsruhe piggy-back plant without customer for the gaseous gases. The conversion of the plant into a pure liquefier for the production of bulk was generally regarded as economically uninteresting and not viable.
 140. Air Liquide's proposal to divest several small on-site plants was, according to the market test, not suitable to solve the competition concerns in the bulk market. The transfer of several small plants, each of which were dedicated to a certain customer, would not provide the acquirer with an ability to compete in the overall bulk market.

141. As regards the cylinder business, market participants were concerned that the business proposed for divestiture did not contain sufficient filling centres and only covered parts of Eastern and Western Germany without addressing the merged entities position in Southern Germany. According to the market test, the proposed divestitures would not create a national player and not break the symmetry of positions between Air Liquide/Messer Targets (strong in West and East) and Linde (strong in the South and North).
142. Another issue in the market test was that the divested facilities proposed for divestiture did not have the new 300bar technique introduced by Messer and used by approximately 50% of its customers. Furthermore, the allocation of customers to the divested businesses remained unclear.
143. On the CO₂ market, Air Liquide offered to transfer only supply contracts, not owned sources, which, according to the market test, would reduce the number of competitors in Germany to two. These two competitors would have no incentive to compete against each other given their current swap agreements and the absence of credible potential rivals.
144. As regards ESGs, the proposed remedies were not generally viewed as solving the competition issues in a structural way.

B. Remedies as modified on 27 February, 2004

145. Air Liquide submitted on 27 February, 2004, a modified package of undertakings, which had been designed to address the outcome of the Commission's investigation.
146. As regards tonnage activities relating to gaseous oxygen and nitrogen, Air Liquide now proposed to divest a bigger part of Messer's Rhein/Ruhr pipeline network, divesting the entire southern half of it (between Köln Porz and Dormagen/Krefeld). It also added further tonnage plants to the first package: one air separation unit and one CO plant, both located in Dormagen, the former attached to the Rhein/Ruhr pipeline. Air Liquide also continued to propose to divest the tonnage plants in Karlsruhe, Rheinberg, Riesa, Hürth, Mainz, and Unterwellenborn. However, Air Liquide withdrew its proposal to divest Messer's complete pipeline network in the Saar area and the Air Separation Units (of which one was under construction) in Dillingen.
147. The bulk assets proposed for divestiture were also revised. They now included production sites (piggy back plants and small on-site ASUs, and related activities and equipment) in Karlsruhe, Hürth, and Dormagen and a supply contract with Linde in Buna. The proposal to divest the Düsseldorf and Dillingen liquefiers as well as further, unspecified small on-site ASUs to be selected amongst Messer's customers was withdrawn.
148. As regards the proposed divestments of cylinder assets and businesses, a service centre in Dresden (relating to the filling centre in Berlin) was added to the set of divestitures proposed in the first package of undertakings.
149. In order to address concerns relating to CO₂, Air Liquide now proposed to divest its own Burgbrohl CO₂ source and relating cylinder activities in addition to the sourcing contract relating to the BASF Carbon Dioxide source in Ludwigshafen. The proposal relating to the Klara CO₂ source in Linz (Austria) was withdrawn.

150. As regards ESGs, Air Liquide now proposed to divest Messer's participation in the joint-venture with Messer/Nippon Sanso relating to Electronic Specialty Gases (ESGs).
151. The Commission also market tested the second set of commitments. The outcome of the market test was that some of the problems outlined above remained and should be further addressed in order to remove serious doubts.
152. In the tonnage market, not divesting the Saar-pipeline meant that any pipeline to pipeline competition between the Saar-pipeline and Air Liquide's pipeline in Lorraine would be eliminated.
153. The market players also expressed doubts as to whether the capacity of the divested southern part of the Rhein/Ruhr pipeline would be sufficient to serve all customers located in that region. The reason for this was that the divestments only included 2 out of 8 ASUs in total connected to the pipeline. In the view of many market players, this might not be sufficient to fulfil the gas requirements of the customers. The market test furthermore raised reliability and backup issues regarding the southern part of the pipeline. Market players expressed their doubts as to whether the acquirer would be in a position to ensure continuous gas supplies in case of maintenance or unforeseen production downtime in one of the divested ASUs. A more practical issue was if the acquirer of the southern part of the pipeline would be independent from Air Liquide for feeding its gases into the pipeline.
154. As regards the bulk market, the market test clearly stated that not divesting the Dillingen plant meant that competition in the Saar/Northern France area would be limited.
155. In addition, the Karlsruhe piggy-back plant remained an issue of concern, as EnBW had publicly announced that the Thermoselect plant connected to it would be closed down as soon as possible.
156. The market test also stated that the proposed concentration might create a problematic situation in Southern Germany, leaving many customers with only one or two companies (the merged entity and Linde) from which they could source their bulk supplies.
157. According to the market test, the new proposal did not solve the problems outlined above as regards the cylinder markets.
158. As regards the CO₂ market, the market players expressed remaining doubts as to whether the proposed divestments (BASF sourcing contract and Burgbrohl source) were sufficient to address Air Liquide's high market share and would provide any potential acquirer with the necessary critical mass. It also remained unclear on which basis Air Liquide would choose the customers to be divested together with the BASF source in Ludwigshafen and to which extent it would be possible to expand the divested customer base.

C. Final version of the remedies

159. On 9 March 2004, the notifying party submitted another version of remedies, which was designed to address the outcome of both market tests and the Commission's remaining doubts resulting therefrom. Air Liquide proposes to divest the following assets as one package to one acquirer, except Messer's share in Messer/Nippon Sanso.

160. As regards tonnage activities relating to gaseous oxygen and nitrogen, Air Liquide proposes to divest the following assets and businesses (including all plant facilities, all related customer contracts – with their consent – and the operating, maintenance and support personnel related to such facilities):
- The southern half of Messer’s Rhein/Ruhr pipeline network for gaseous oxygen and nitrogen (between Köln Porz and Dormagen/Krefeld), and connected Air Separation Units producing oxygen and nitrogen tonnage in Hürth and Dormagen. Furthermore, Air Liquide offers to divest one CO plant located in Dormagen.
 - Messer’s complete pipeline network for gaseous oxygen and nitrogen in the Saar area (between Dillingen and Völklingen), and the connected ASU producing oxygen and nitrogen tonnage in Dillingen, as well as a second ASU in Dillingen, which is under construction and shall be finished in 2005.
 - An Air separation unit producing gaseous oxygen and nitrogen in Rheinberg.
161. The bulk assets and businesses (including all bulk production and storage facilities, associated bulk distribution equipment – road tankers, the bulk tanks located at customers’ premises, the relevant personnel for sales, technical support, distribution and customer service, and the relevant customer bulk contracts - with their consent if necessary) proposed for divestiture include:
- The bulk production in Hürth (piggy-back tonnage plant producing LOX, LIN, LAR, H2)
 - The bulk production in Dillingen (piggy-back tonnage plant producing LIN, LOX, LAR)
 - An Argon production facility connected to the divested Dormagen ASU
 - A long-term delivery contract for LIN, LOX. LAR sourced from Linde in Buna
162. As regards cylinder assets and businesses (including cylinder filling plant facilities, associated cylinders, distribution network and equipment -trucks- as well as the production and distribution personnel, in addition to contracts with customers in certain ZIP-code areas - with their consent if necessary), Air Liquide proposes to divest:
- A filling centre in Berlin for all cylinders, including helium (including a service centre in Magdeburg, a service centre in Dresden and the use of a hub in Loitz, which is owned by a third party).
 - A filling centre in Erfurt, for all cylinders, including helium.
 - A production and filling centre in Bopfingen for air gases, medical gases, specific ALTOP ranges and CO₂, 300-bar cylinders.
 - A filling centre in Nürnberg, dedicated to CO₂.
 - A filling centre in Hürth for all cylinders. The part of the station dedicated to atmospheric gases was idled in 2003, but the space is still available.

- A filling centre in Völklingen for all cylinders.
163. In the field of CO₂, Air Liquide proposes to divest (including associated cylinders, distribution network and equipment -trucks- as well as the production and distribution personnel, in addition to contracts with customers in certain ZIP-code areas - with their consent if necessary)
- A sourcing contract relating to the BASF CO₂ in Ludwigshafen.
 - A sourcing contract relating to the Klara CO₂ source in Linz (Austria).
 - The Air Liquide CO₂ source in Burgbrohl and the connected CO₂ cylinder filling plant.
164. As regards ESGs, Air Liquide proposes to divest Messer's share in Messer/Nippon Sanso separately from the rest of the package.
165. Apart from adjustments to the initial text, the proposed divestments were mostly a combination of what had been proposed in the commitments of 4 February and in the modified commitments of 27 February. The new additions included the Bopfingen, Nürnberg and Burgbrohl facilities which consisted of a mere addition of similar cylinder facilities to the ones that had been already submitted. The Commission therefore considers that on substance the proposal of 9 March consisted of a modification of the previous commitments.
166. On 12 March 2004, Air Liquide submitted a final version of its undertakings which included adjustments to the text of the 9 March proposal.
167. The detailed text of these undertakings is annexed to this decision. The full text of all the annexed undertakings forms an integral part to this decision.

VII ASSESSMENT OF THE PROPOSED REMEDIES

A. Tonnage

168. As a result of the remedies, the market shares of Air Liquide/Messer Targets and other competitors would be as follows on the tonnage markets in the EEA:

EEA - 2002			
Player	Oxygen Tonnage	Nitrogen tonnage	CO tonnage
Air Liquide	[30-40]%	[30-40]%	[50-60]%
Messer Targets	[0-10]%	[10-20]%	[10-20]%
Combined before divestitures	[40-50]%	[40-50]%	[60-70]%
Divestitures	[0-10]%	[0-10]%	[10-20]%
Combined after divestitures	[40-50]%	[30-40]%	[50-60]%
Linde	[20-30]%	[10-20]%	[20-30]%
Air Products	[0-10]%	[10-20]%	[0-10]%
Praxair	[0-10]%	[0-10]%	[0-10]%
BOC	[0-10]%	[10-20]%	[0-10]%
Messer Remain Co	[0-10]%	[0-10]%	[0-10]%
Others	[0-10]%	[0-10]%	[0-10]%
Market size (M€)	[...]	[...]	[...]

Source: The notifying party ³²

The divested pipeline networks will eliminate serious doubts as to the effects of the transaction on the tonnage markets

169. As explained above, the competition between Air Liquide and Messer in the tonnage market has mainly occurred in the catchment area of Messer's pipeline networks in Germany, where Air Liquide placed offers. In this area, suppliers exercising a competitive pressure on Messer have been Linde and Air Liquide. By divesting the tonnage activity in the Rhine/Ruhr area to an industrial gases company, other than the two mentioned above, the remedies prevent Air Liquide from adding to its already strong position in the EEA Messer's entrenched position in this area, where a significant part of EEA industrial customers are located, and to restore the number of players effectively competing for tonnage contracts in this region.

170. The acquirer will have the ability not only to supply customers located in the catchment area of its pipeline but also to offer to supply customers located in the northern part of the Rhine/Ruhr valley by extending its pipeline. The Commission's investigation confirmed that this extension was possible since the northern end of the divested pipeline is only 25 km³³ away from Air Liquide/Messer's customers. According to information gathered from the market tests and the notifying party the construction of a new pipeline is much easier where another pipeline already exists.

³² During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission's estimates are in line with these figures.

³³ 25 km have to be compared with the total length of the pipeline networks : [500-600] km. Several competitors also explained that the catchment area of a pipeline is about 30 km along it.

The remedies will therefore lead to “pipeline-to-pipeline competition” that did not exist prior to the merger and, given the advantage that such infrastructure confers to the supplier, the competitive constraint exerted on Air Liquide/Messer Targets (and Linde) is likely to be at least as effective as that exercised by Air Liquide pre-merger. Similarly, the divestiture of the Saar pipeline will ensure that the competition existing prior to the merger in this industrial basin will be maintained.

171. Further to the market test of the initial set of remedies, which included only a very small part of the Rhein/Ruhr pipeline network, a third party stated for instance that “*unless sufficient competition is ensured in the supply of O2/N2 through an extension of the remedy proposal, Air Liquide would be in a very strong competitive position in both hydrogen and oxygen/nitrogen for such dual customers.*” As acknowledged by this third party, the extension of the part of the pipeline network to be divested significantly reduces the potential incentives for Air Liquide to bundle its pipeline sales of O2 and N2 and ensures that no negative impact on customers will materialise.
172. The following paragraphs will examine whether the Rhine Pipeline and the Saar Pipeline divestitures are viable and effective.

Rhine-Ruhr pipeline

173. The final remedies essentially consist in a substantial increase of the divested part of the Rhein-Ruhr pipeline, corresponding to [50-60] % of its length and [30-40] % of its sales³⁴, together with the divestiture of the additional ASU connected to it (Dormagen). The tonnage contracts of the [...] customers connected to the part of the pipeline to be divested will be transferred to the acquirer. With the exception of a few small supply contracts, accounting each for less than [...], the main supply contracts to be transferred will be running for many years to come, their end dates ranging from [...] to [...]³⁵. The divested business is thus viable and will provide the acquirer with a significant customer base such as the petrochemical sites of BP, Shell (DEA), Bayer (two sites: Dormagen and Leverkusen), Degussa, Basell and the chemical park of Knapsack (Hürth). This contrasts with the Northern part of the pipeline network which is larger in terms of sales but composed of companies such steel mills and refineries the growth of which is less certain.
174. In addition, data provided by Air Liquide and Messer show that the pipeline and the ASUs connected to it match the contracted volumes. The purchaser will gain an ability to bid for customers located along the Ruhr pipeline and therefore will exercise a competitive constraint on the part of the pipeline kept by Air Liquide.
175. Two parts of the pipeline network to be divested are not fully owned by Messer. It is the case of the main O2/N2 pipelines between Hürth and Dormagen, controlled by Sauerstoff- und Stickstoffrohrleitungsgesellschaft mbH (“SRG”). SRG is a 50/50 joint venture of Messer and Bayer AG. SRG has [...]. The notifying party committed to transfer this contract along with the remainder of the divested business, even though this transfer would require the written consent of [...]. The Commission takes note of

³⁴ The notifying party’s reply on 08/03/2004 to the Commission’s questionnaire of 07/03/2004. [...] % of GOX sales and [...] % of GAN sales

³⁵ List of Messer’s customers connected to its pipeline networks and contract terms thereof, provided by Messer on 08/03/2004.

the arguments³⁶ put forward by Air Liquide as to why [...] has no reason not to accept it. A small section of the pipeline to be divested, which connects [...] to the main pipeline, is owned by [...], which leases this part of the pipeline to Messer. The notifying party submitted that it would be possible to transfer this lease contract to the purchaser of the divestiture package without any consent from [...]. The Commission underlines that the above divestitures are conditions to the clearance of the proposed transaction.

176. The market test on the first set of proposals showed that a divestment of the Hürth facility alone with some related pipelines would not have permitted sufficient levels of reliability for the supply of customers. With the addition of the Dormagen ASU and the related pipelines, the acquirer of the divested business would be able to offer a sufficient level of flexibility and reliability to its customers. The reliability – which is crucial for the customers – is ensured by the fact that two ASUs are distributing gas via the pipeline (whilst only one was proposed in the first set of remedies). Moreover, the undertaking to sign a back-up contract with the purchaser that is included in the final remedies would also ensure that sufficient reliability would be achieved. This contract aims at setting a clear framework in order to allow the ASUs connected to one part of the pipeline network to act as a back-up in case of a lasting³⁷ shut-down of an ASU supplying the other part. Customers will therefore benefit from a similar level of reliability of their supplies to the one prevailing pre-merger, be their supply contracts transferred to the acquirer or not.
177. The two divested ASUs at Hürth and Dormagen, have been built respectively in 1977 and 1993. The Dormagen facility is thus recent and modern and exhibits efficient levels of operating costs. The Hürth plant is an integrated site encompassing both tonnage, bulk and cylinder activities, with an on-site fill plant and a hydrogen facility. While it is older, it has undergone material modifications to be modernised and become more efficient over the past years. Messer has invested around EUR [...] million in the plant since 1977 to modernise it. In particular, the liquefier was built in 1994 and is thus recent and modern, and most of the main equipment has been replaced. If the acquirer decided to change the parts that have not been replaced so far, such as the N2 compressor, this would imply an investment limited to EUR [< 5 million]³⁸.
178. As a result, the divested plants appear to be sufficiently modern and efficient, as compared with the other tonnage and/or liquid plants of Messer in Germany, to allow the acquirer to compete on a cost competitive basis with the merged entity. Dormagen and Hürth are among the most efficient plants to produce, respectively, gaseous Oxygen (GOX, [...] €/t) and gaseous nitrogen (GAN, [...] €/t). The same holds true for liquid oxygen (LOX, [...] €/t) and liquid Nitrogen (LIN, [...] €/t) for Hürth. Dormagen produces only Liquid Argon (LAR), again at a competitive cost ([...] €/t).

³⁶ Air Liquide's submission of 05/03/2004.

³⁷ For short stops, back-up is ensured by bulk storage. In particular, the Hürth plant has large liquid storages of LIN and LOX at its disposal, covering [...] days of consumption.

³⁸ Air Liquide's submission of 27/02/2004.

Messer Variable Production Costs 2003		
(in €/t)	GOX	GAN
Oberhausen	[...]	[...]
Duisburg	[...]	[...]
Gelsenkirchen	[...]	[...]
<i>Hürth</i>	[...]	[...]
<i>Dormagen</i>	[...]	[...]
<i>Dillingen</i>	[...]	[...]

Source: Messer, 05/02/2004. In bold and italic, the divested plants

Saar pipeline

179. With respect to the tonnage market, the other area where Messer and Air Liquide have exercised a constraint on each other is the Lorraine and Saar region where each of them operate a pipeline network. As these two pipelines are close to each other, the area enjoyed pipeline-to-pipeline competition. The remedies, by divesting the Messer Saar pipeline network and thus removing the change brought about by the proposed transaction, will ensure that the pipeline-to-pipeline competition is maintained.
180. Since the pipeline was already operated separately from Air Liquide's Lorraine pipeline, there is no doubt as to its independence and viability. The main supply contracts divested along with the pipeline run until [...] ³⁹, such securing the customer base and the production of the divested plant over the coming years. In addition, Messer decided to build a second plant in Dillingen, of a similar size as the existing one. The acquirer will therefore be able to increase its production in the coming years. The planned ASU also shows that Messer expects a significant growth in the needs of the customers connected to the Saar pipeline network.

On-site plants

181. Air Liquide initially proposed to divest some of Messer's or Air Liquide's on-site tonnage plants: Rheinberg, Riesa, Mainz, Karlsruhe and Unterwellenborn. During the market test, several customers and competitors raised strong doubts as to (i) the viability of some of these assets as well as (ii) whether such divestiture would confer any competitive power to the acquirer. As regards the viability, some of the proposed tonnage plants supply customers which may close down in the coming years. This has been outlined in the case of Unterwellenborn, which supplies a steel mill, and in the case of Karlsruhe, which supplies Thermosteel, an incinerator, the shut-down of which has been confirmed on 05/03/2004. Respondents also expressed doubts as to the ability of the tonnage plant in Mainz to get back-up bulk in case of emergency, but from Linde or Air Liquide given its location. In addition to the issue of viability, it also appeared that the transfer of tonnage plants would have secured a source of steady revenues for the acquirer but would not have significantly increased its ability to bid for new tonnage projects and hence to constrain the merged entity. As a result, Air Liquide decided to withdraw the tonnage plant of Riesa, Karlsruhe, Unterwellenborn and Mainz.

³⁹ Saarstahl in Vöklingen and Dillinger Hüttenwerke in Dilligen

182. Air Liquide proposed to divest Messer’s CO tonnage plant. Since this plant is the only activity of Messer in the CO tonnage business, it clearly eliminates the change brought about by the proposed transaction.

Conclusion

183. In light of the above, the proposed remedies clearly remove the serious doubts raised by the proposed transaction on the markets for tonnage as they will create a market player with strengths similar to the ones enjoyed by Messer prior to the transaction.

B. Bulk markets

184. As a result of the remedies, the market shares⁴⁰ of Air Liquide/Messer and other competitors would be as follows on the bulk markets in Germany.

Bulk markets – Germany - 2003					
Player	O2 bulk	N2 bulk	Argon & Mixtures Bulk	H2 Bulk	CO2 Bulk
Air Liquide	[0-10]%	[10-20]%	[0-10]%	[0-10]%	[20-30]%
Messer Targets	[30-40]%	[30-40]%	[40-50]%	[30-40]%	[10-20]%
Combined before divestitures	[40-50]%	[40-50]%	[40-50]%	[40-50]%	[40-50]%
Divestitures	[0-10]%	[0-10]%	[10-20]%	[0-10]%	[0-10]%
Combined after divestitures	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[30-40]%
Linde	[30-40]%	[30-40]%	[30-40]%	[30-40]%	[20-30]%
Air Products	[0-10]%	[0-10]%	[0-10]%	[20-30]%	[0-10]%
Praxair	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[0-10]%
BOC	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[0-10]%
Hydrogas	[0-10]%	[0-10]%	Included in “Others”	[0-10]%	[10-20]%
Others	[0-10]%	[0-10]%	[0-10]%	[0-10]%	[10-20]%
Market size (M€)	[...]	[...]	[...]	[...]	[...]

Source: The notifying party⁴¹.

a) Liquid oxygen and liquid nitrogen markets

185. On the markets for liquid oxygen (LOX) and liquid nitrogen (LIN), the remedies remove most of the overlap in terms of market shares, reducing the latter from [40-50]% and [40-50]% in LOX and LIN down to [30-40]% and [30-40]% respectively. The divested entity will have at the national level a business similar in size to that of Air Liquide pre-merger, larger than that of Air Products and three to four times as large

⁴⁰ The market shares presented in the table lead to a HHI, post divestitures, very similar to the HHI prior to the merger.

⁴¹ During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission’s estimates are in line with these figures.

as BOC's past presence in Germany. It will therefore have the critical mass to be viable.

186. Initially, the merging parties had proposed to divest small-on sites, i.e. small tonnage plants, producing less than 100tpd of gaseous gas, dedicated to one single customer. Customers and competitors expressed strong doubts as to the impact of such divestitures on the structure of the market. They explained that transferring these supply contracts would provide the acquirer only with a steady source of revenues but will not increase its ability to compete on the bulk market. As result, the merging parties modified their proposal by proposing instead to divest large sources of bulk. The merging parties also withdrew the plant of Karlsruhe (tonnage plant with a liquefier, hence producing bulk) after the Commission got confirmation that the main tonnage customer (Thermoselect) was likely to close down, thus putting at risk the future viability of the plant and the source of bulk it would have represented for the acquirer.
187. The Buna source, proposed for divestiture, is operated by Linde. Nevertheless, the Commission came to the conclusion that it represents an independent and viable source of liquid for the acquirer of the divested entity. The Buna plant was put in operation in 1996 by Messer and has been sold to Linde prior to the start of operation. At the same time, a long-term delivery contract has been concluded between Messer and Linde with a duration of [...] years, beginning in [...], thus ending in [...]⁴². This contract provides the divested entity with [...] % of the total liquefaction capacity of the plant, totalling [...] tpd. The duration of the delivery contract can be regularly extended by [...] and Messer has the right to extend the contract as long as the Buna plant is running. The price which is paid to Linde is adjusted [...] and based on a specific formula [...]. The acquirer, to whom all relevant contracts will be transferred, is thus ensured to be in a position to source liquid gases from Buna on the long run and under conditions determined in advance.
188. The divested liquid plants are also efficient facilities that will provide the acquirer with liquid gases at competitive costs. Indeed, all divested plants are piggy-back plants, i.e. liquefiers liquefying gases produced in a tonnage plant. Hence they benefit from the economies of scale due to the large demand of the tonnage customers. For instance, the average variable production costs⁴³ of the Hürth plant in 2003 were [...] €/t for LOX and [...] €/t for LIN, whilst they range between [...] €/t (Oberhausen) and [...] €/t (Kornwestheim) for LOX and between [...] €/t (Frankfurt) and [...] €/t (Kornwestheim) for LIN in the Messer liquid plants acquired by Air Liquide.
189. The divested liquid sources cover most parts of Germany: the West with the plants in Hürth (close to Köln) and Dillingen (located in Saar), the South with the Dillingen ASU (and the plant in Buna for the Eastern part of the South), the East with the Buna liquefier. The northern part is not covered as neither Messer nor Air Liquide⁴⁴ owned

⁴² Contract provided by Messer, on 05/03/2004

⁴³ Information provided by Messer on 05/02/2004

⁴⁴ Messer has no liquefier in the Northern region of Germany. Air Liquide owns a small liquefier connected to its tonnage plant in Stade. This liquefier has a very small capacity and is mainly used to maintain the liquid volumes stored as a back-up for the tonnage customer. In 2003, only [...] of LOX and [...] of LIN were produced in Stade and sold on the market. (source: notifying party, 18/02/2004)

significant sources of bulk there. The vast majority of the sales achieved by Messer and Air Liquide in this area are sourced from Air Products' liquid plant in Lüneburg ([...] of LOX and [...] of LIN for Air Liquide, and [...] tpd of LOX and [...] tpd of LIN for Messer, in 2003⁴⁵). The divested business will therefore have a geographic coverage similar to that of Air Liquide pre-merger.

190. Which bulk customer is supplied by which liquid plant heavily depends on the distance between the plants and the logistics chain put in place by each player. Therefore, depending on its location, a customer may be supplied from one plant or another, according to the choice of the supplier. During the market test of the remedies, some competitors raised questions as to what extent the vague wording of the first remedies would enable the merging entity to select the divested customers and retain the more interesting ones ("Cherry-picking"). The notifying party eventually adopted a method defining clearly the customers that would be divested: all customers located within a given radius around the divested plant will be divested. The radius is computed in order to load the plant at the same level as in 2003 and ensures that it can meet the volume commitments accounted for by the divested customer base. For the sake of clarity, the corresponding zip codes have been annexed to the proposal of remedies. This method clearly removes any opportunity for cherry-picking and ensures that the divested customers are as close as possible from the divested source (to minimise the transport costs). The same method was applied to the other markets.
191. As described above, the proposed remedies lead to the creation of a player of similar size to that of Air Liquide in Germany pre-merger, with a national coverage, and having at its disposal efficient liquid plants. On the other hand, the merged entity will hold positions similar to that of Messer pre-merger. Consequently, the proposed divestitures clearly remove the serious doubts raised by the notified operation.

Assessment of the remedies at the local level

192. Since the liquid gases cannot be transported over long distances (the supply remains within a radius of 200km on average), the bulk markets, even though national in-scope, contain a local component. In particular, the Commission checked whether the proposed operation, as modified by the remedies, would not lead to a high concentration in local areas. To this end, the Commission decided to use the following method as a first approach to this issue: The Commission asked the notifying party to consider each liquid plant serving the German bulk market as the centre of a hypothetical bulk⁴⁶ market of 200km radius and to compute the hypothetical market share of each player therein, according to the level of bulk production⁴⁷ that the latter operates in this hypothetical 200km-radius market. Based on these market shares and the proposed divestitures, the concentration in each of these hypothetical local markets

⁴⁵ Reply of 18/02/2004 of each party to the concentration to a Commission's questionnaire.

⁴⁶ The notifying party submitted that it was not possible to carry out this study on LOX and LIN separately since, for a given total production capacity, the LOX/LIN ratio can be significantly modified. They nevertheless constitute distinct markets, as explained above, in particular in view of the absence of demand-side substitutability.

⁴⁷ The actual sales could not be used as their geographical scattering was not available, in particular with respect to competitors. These figures overestimate the concentration in the market since they do not take into account swaps (which allow a competitor to be present in an area without any local means of production).

has been computed using the HHI, prior to the merger (“initial”), further to the merger without any remedy (“Combined”) and in presence of remedies, divested to either Air Products (“AP”), Praxair (“PX”) or other competitors (“Other”, for instance SWF or WAG).

Concentration around each liquid plant of the merging parties									
Centres	HHI Initial	HHI Combined	ΔHHI	HHI => AP	ΔHHI	HHI => PX	ΔHHI	HHI => Other	ΔHHI
Dillingen	[3300-3400]	[3900-4000]	[600-700]	[3600-3700]	[200-300]	[3300-3400]	[0-100]	[3300-3400]	[0-100]
Dortmund	[3000-3100]	[3000-3100]	[0-100]	[2700-2800]	-[300-400]	[2200-2300]	-[700-800]	[2400-2500]	-[500-600]
Frankfurt	[3600-3700]	[4400-4500]	[700-800]	[4400-4500]	[700-800]	[4400-4500]	[700-800]	[4400-4500]	[700-800]
Hurth	[2700-2800]	[3700-3800]	[1000-1100]	[3000-3100]	[300-400]	[2700-2800]	[0-100]	[2500-2600]	-[100-200]
Kornwestheim	[2400-2500]	[2600-2700]	[200-300]	[2600-2700]	[200-300]	[2600-2700]	[200-300]	[2600-2700]	[200-300]
Oberhausen	[2900-3000]	[2900-3000]	[0-100]	[2500-2600]	-[300-400]	[2200-2300]	-[600-700]	[2300-2400]	-[500-600]
Böhlen	[2700-2800]	[3800-3900]	[1000-1100]	[3300-3400]	[600-700]	[2700-2800]	[0-100]	[2700-2800]	[0-100]
Karlsruhe	[3200-3300]	[3800-3900]	[600-700]	[3400-3500]	[100-200]	[3500-3600]	[200-300]	[3400-3500]	[100-200]

Source : The notifying party

193. The results of this study are shown in the table above. They indicate that in most areas affected by the proposed operation, the remedies significantly reduce the Delta HHI and thus the impact of the operation in terms of local concentration. The only exceptions are Frankfurt and Böhlen, where the delta HHI remains high even after the divestitures: [700-800] for Frankfurt (with an HHI of [4400-4500]) and [600-700] for Böhlen (with an HHI of [3800-3900]) when Air Products is the acquirer. These two results are actually artefacts and do not reflect the reality.

194. As regards Frankfurt (plant operated by Messer), the large delta HHI (after divestitures) is due to Air Liquide’s plant in Karlsruhe. This plant is located 175km away from Frankfurt. As a result, the large delta HHI would be reduced to zero if the radius considered had been 170km instead of 200km. Conversely, if the reference radius had been extended to 240km, the Hürth plant would have been retained in Frankfurt’s catchment area. Since Hürth is divested, the delta HHI would have been very small⁴⁸ again. In addition, it has to be borne in mind that Air Liquide finally

⁴⁸ If one were to consider a radius of 240km, the HHI post-merger without remedies would be [4400-4500] with a delta of [500-600]. Taking into account the divestitures, the delta HHI falls down to -[800-900],-[900-1000]or -[1100-1200] according to whether, respectively, Air Products, Praxair or smaller competitors acquires the bulk business.

decided not to propose Karlsruhe in the divestment package because this plant is due to close down in the coming years.

195. As regards Böhlen, the Delta HHI remains high after divestitures only when Air Products acquires the divested business. This is explained by the fact that the HHI in the hypothetical market 200km around Böhlen takes into account Air Products liquid plant located in Litvinov. Litvinov is in the Czech Republic [...]. Therefore, this high delta HHI does not reflect the reality of the market.
196. As a consequence, it can be concluded, based on this above-described analysis, that the proposed operation as modified by the divestitures does not lead to a significant increase in concentration at the local level and consequently on any broader hypothetical market.

b) Argon market

197. On the Argon market, the proposed divestitures go beyond the change brought about by the notified operation, reducing the merging parties' market share in Germany from [40-50]% down to [30-40]%. Messer held a [40-50]% share of the market pre-merger. The divested entity will hold [10-20]% of the market, i.e. three times as more as Air Liquide pre-merger. Besides, argon is produced on the same plants as those producing oxygen and nitrogen. Therefore, the same arguments as to the location of the plants and the national coverage ensured by the package hold true. This is also the case with respect to the efficiency of the divested argon facilities. For instance, the average variable production costs⁴⁹ of LAR were [...] €/t in Hürth and [...] €/t in Dormagen, while those of the Messer plants acquired by Air Liquide were ranging from [...] €/t (Duisburg) up to [...] €/t (Frankfurt). The remedies thus clearly remove the serious doubts raised by the notified operation on the German market for Argon.

c) Hydrogen bulk market

198. On the market for bulk hydrogen, the proposed divestitures go beyond the overlap between Air Liquide and Messer in Germany: an [0-10]% market share is divested while Air Liquide held [0-10]%. Indeed, the bulk hydrogen business to be divested is an inseparable part of the Hürth facility, divested to address serious doubts in oxygen and nitrogen tonnage and bulk.

d) Carbon dioxide market

199. In terms of market shares, the remedy removes a significant part of the overlap: [0-10]% out of [10-20]%. The merged entity will hold a [30-40]% market share.
200. The divested entity will enjoy three sources of CO₂: Burgbrohl, BASF in Ludwigshafen and Klara in Linz, and the customer base around each of them, corresponding respectively to [...] par annum of bulk CO₂.

⁴⁹ Data provided by Messer on 05/03/2004

201. The Burgbrohl source is one of the two natural sources of CO₂ in Germany. The divested entity will thus be able to supply the customers that may have preferences for a natural source, by contrast with industrial sources of CO₂. In addition, it will own this source while Messer has not owned any source of CO₂ so far but has been obliged to enter into supply contracts with competitors or industrial companies to source CO₂. This will confer a significant independence to the divested business.
202. BASF and Klara are two industrial sources of CO₂. The supply contracts to be transferred to the acquirer of the divested business are long term contracts⁵⁰ running respectively until [...]. In the past, Air Liquide has been able to renew these contracts. Therefore, this should also be possible for the acquirer once they come to an end. The BASF source presents a particular potential for growth since the total quantity of CO₂ sold from this source was [...] in 2003 while the total quantity available was in excess of [...]⁵¹. Expanding the supply contract seems to be relatively easy as evidenced by the fact that Air Liquide recently extended the divested contract from [...] to [...].
203. Based on the customer base and the three sources that will be divested, the acquirer will hence have a critical mass on the German market as well as a wide coverage of Germany: the Western part of Germany from Burgbrohl and BASF, Ludwigshafen and the Eastern part from Klara in Linz. Along with Hydrogas and ACP (if not acquired by one of them), the divested entity will thus be in a position to exercise a competitive pressure on Linde and Air Liquide similar to that of Messer prior to the merger, thereby removing the serious doubts.

C.Cylinders

(a) Electronic Specialty Gases

204. On the markets for ESGs, Air Liquide had initially proposed non-structural remedies which were not perceived as resolving the serious doubts raised, in particular, in WF6 where the merged entity would have enjoyed high market shares ([50-60]%). In the modified set of remedies and in reaction to the outcome of the market test, Air Liquide commits itself to divest all of Messer activities in this field, i.e. its stake in the Messer/Nippon Sanso joint venture, thus removing all serious doubts.

(b) Other Gases

205. Air Liquide initially proposed to divest several assets (filling centres) located in the Eastern part of Germany (Berlin and Erfurt) and in the Western part of it (Hürth and Dillingen). This proposal gave rise to strong concerns as to its ability to remove the serious doubts raised by transaction as notified. Firstly, the divested entity would have lacked the critical mass to be a national player and exercise sufficient competitive constraint on both Linde and Air Liquide/Messer Targets. Indeed, in the first set of remedies, the divested business corresponded to a [0-10] % market share and was concentrated in the Eastern part of Germany ([10-20]% market share in that region)

⁵⁰ Air Liquide's submission on 19/02/2004

⁵¹ Air Liquide's submission on 05/03/2004.

where the overall sales for industrial gases are declining. It would not have had any presence in the southern part of Germany and only a very limited one in the West [0-10%]. Secondly, it was pointed out that Air Liquide had proposed to divest filling centres in the Eastern part of Germany without any relating source of bulk (these centres were so far supplied by Air Liquide liquid plant in Böhlen, which is not part of the divestment package). Thirdly, some of the divested assets did not appear to be viable by lack of adequate technology, in particular the 300 bar technology used in Germany. Fourthly, the customer base was not precisely defined so that cherry-picking would have been possible. Lastly, it appeared that the limited size of the first set of remedies did not sufficiently ensure that the symmetry of Linde's and Air Liquide/Messer Targets's positions further to the proposed operation would have been broken and thus serious doubts as to a possible market sharing removed.

206. Further to the market test and the investigation carried out by the Commission, Air Liquide modified its proposed remedies with respect to the cylinder markets. The final version of the remedies thereof addresses satisfactorily all the above-mentioned issues and thus removes the serious doubts raised by the notified operation for the reasons set forth.
207. Firstly, Air Liquide proposed to divest several additional cylinder filling and service centres. The number of divested businesses thus totals 10 and covers most parts of Germany: the East with activities located in Erfurt, Berlin, Magdeburg, Loitz and Dresden, the Southern part of Germany with those located in Nürnberg, Bopfingen, Völklingen and the Eastern part with Burgbrohl and Hürth. No divestiture is proposed in the Northern part of Germany as neither Messer nor Air Liquide had filling centres in this area.
208. In addition to its geographic coverage, the final set of remedies also ensures that the divested entity will have the critical mass to be a viable and competitive player. The market share that will be divested is twice as large as that of the first proposal ([0-10] compared with [0-10] in total) and will confer to the acquirer a position close to that of Air Liquide prior to the merger for most gases, as shown in the table below. In particular, the former will hold a [10-20] share of sales in the East, a [0-10] share of sales in the West while Air Liquide's had [0-10] pre-merger.

Cylinder markets – Germany - 2003						
Gas	Messer Targets pre-merger	Combined before divestitures	Divested business	Combined after divestitures	Linde	Market value (m€)
Industrial O2	[20-30]%	[40-50]%	[0-10]%	[30-40]%	[30-40]%	[...]
Medical O2	[30-40]%	[40-50]%	[0-10]%	[30-40]%	[40-50]%	[...]
Acetylene	[20-30]%	[30-40]%	[0-10]%	[20-30]%	[50-60]%	[...]
Argon and Argon-Mixtures	[20-30]%	[30-40]%	[0-10]%	[30-40]%	[30-40]%	[...]
N2	[20-30]%	[30-40]%	[0-10]%	[20-30]%	[30-40]%	[...]
H2	[30-40]%	[40-50]%	[10-20]%	[20-30]%	[30-40]%	[...]
Helium	[30-40]%	[30-40]%	[0-10]%	[30-40]%	[40-50]%	[...]
N2O	[30-40]%	[40-50]%	[0-10]%	[30-40]%	[30-40]%	[...]
CO2	[0-10]%	[20-30]%	[0-10]%	[10-20]%	[30-40]%	[...]
Other gases (excl. ESGs)	[20-30]%	[40-50]%	[0-10]%	[30-40]%	[30-40]%	[...]
Rentals/transportation	[30-40]%	[30-40]%	[0-10]%	[30-40]%	[40-50]%	[...]
Total	[20-30]%	[30-40]%	[0-10]%	[30-40]%	[40-50]%	[...]

Source: the notifying party⁵²

209. Secondly, Air Liquide proposed to divest an additional source of liquid, namely its stake of production of the ASU in Buna, which addresses issues in the bulk markets, and at the same time secures independent sources of liquid gas for all divested cylinder businesses. The liquid gases can thus be sourced from Buna for the centres in the East and the one located in Nürnberg, from Dillingen for Bopfingen and Völklingen and from Hürth and Burgbrohl (CO2) for those located in Hürth and Burgbrohl. However, the importance of owning a liquid source should not be overestimated for a cylinder business to be viable. Indeed, the costs of liquid oxygen and nitrogen in the overall costs of a typical cylinder business is in the range of [0-10]%⁵³, whilst the filling costs and the transportation costs account for [40-50]% and [20-30]%, respectively. This is also evidenced by the fact that some smaller players do not actually own any liquefier but entered into long-term supply contracts with bulk producers. Therefore, the Commission considers that the divested bulk and cylinder businesses do not necessarily need to be acquired by one and the same company. Nevertheless, it will

⁵² During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission's estimates are in line with these figures.

⁵³ Breakdown of the costs in the cylinder business, provided by the notifying party on 13/02/2004. For O2 and N2 cylinders, the filling direct and indirect costs account for [...] % of the overall costs whilst transport costs for [...]. Liquid O2 and N2 account only for [...] of the overall costs.

pay a great attention to the fact that the acquirer of the cylinder business be in a position to source liquid gases in a viable manner.

210. Thirdly, Air Liquide commits to upgrade the centres of Hürth and Völklingen to the 300 bar technology. This way, the acquirer will be in a position to serve the customers in the vicinity of these centres that have been supplied by Messer with 300 bar cylinders so far.
211. Fourthly, Air Liquide defined clearly the customers and agents that would be divested, namely all those located in a given list of zip codes (same methodology as in bulk, the zip codes correspond to the areas located within a given radius), hence removing any opportunity for cherry-picking.
212. Lastly, the final set of divestitures removes the symmetry between Linde's and Messer's market shares and thereby the serious doubts as to the risk of the creation of joint dominance by market-sharing. The proposed operation as notified would have created a situation where Messer would have been the leading player in the East ([50-60]%) or the West ([40-50]%), and Linde the strongest by far in the North ([40-50]%) and in the South ([50-60]%). The operation as modified by the proposed divestitures will strengthen the merged entity in the regions where Linde is the leader ([30-40]% instead of [20-30]% in the North; [20-30]% instead of [10-20]% in the South) and reduce its market shares as compared with the notified operation in the areas where it would have been the leading player: [30-40]% instead of [50-60]% in the East and [30-40]% instead of [40-50]% in the West, while Linde holds [30-40]% and [30-40]% market shares, respectively.

All cylinder markets – Germany - 2003						
Region	Messer Targets pre-merger	Combined before divestitures	Variation	Combined after divestitures	Linde	Market value (m€)
East	[30-40]%	[50-60]%	[10-20]%	[30-40]%	[30-40]%	[...]
West	[30-40]%	[40-50]%	[0-10]%	[30-40]%	[30-40]%	[...]
North	[20-30]%	[30-40]%	[0-10]%	[30-40]%	[40-50]%	[...]
South	[10-20]%	[20-30]%	[0-10]%	[20-30]%	[50-60]%	[...]
National	[20-30]%	[30-40]%	[0-10]%	[30-40]%	[40-50]%	[...]

Source: The notifying party⁵⁴

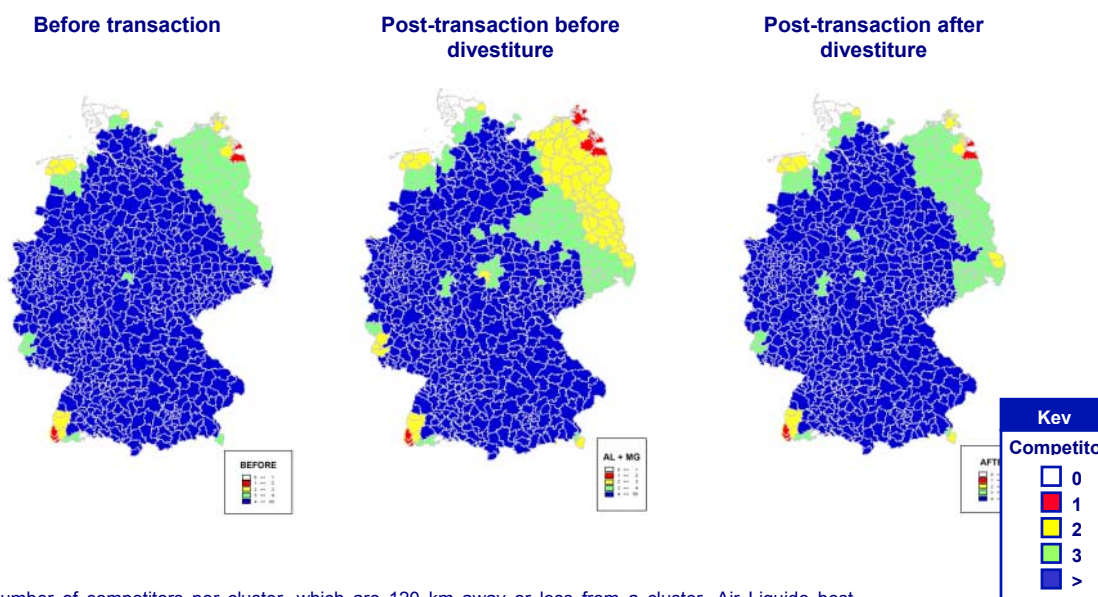
213. In light of the above, the final set of divestitures makes any coordinated behaviour very unlikely post-merger in the cylinder markets in Germany and creates a viable and competitive player which will be able to effectively constrain Air Liquide and Messer, thereby removing any serious doubts on these markets.

The proposed remedies also prevent any further concentration at the local level

⁵⁴ During the investigation, the Commission reconstructed the market shares on the basis of the sales of each market player. The Commission's estimates are in line with these figures.

214. Even though the cylinder markets have been defined as national in scope, the limited radius within which customers can be economically supplied also confers local features to these markets. As a result, the Commission checked whether the proposed concentration as modified by the remedies would lead to a high concentration in certain local areas. To this end, the Commission and the notifying agreed on a methodology in order to define the number of remaining effective players in each area further to the operation. Germany was divided in 720 clusters of customers, based on the German zip codes. In Germany, the average radius around the cylinder centre within which 80% of Air Liquide's cylinder customers are located equals [110-130] km⁵⁵. Consequently, for each cluster, the number of effective players was established as being the number of players operating a cylinder centre within 120km around the cluster. The Commission asked the notifying party not to take account of the Tauschflaschen in this computation, since the market investigation revealed that these very small players did not actually exercise a significant constraint on the industrial gases companies.

215. The study led to the following results, illustrated on the maps below: without any remedy, the operation would have led to a reduction of the number of effective players from 3 to 2 (green to yellow) mainly in the Eastern part of Germany (along with smaller impacts in the centre and the West). Similarly, there would have been a reduction from 4 or more to three players in the East, centre and the North. The remedies restore the number of effective players in the vast majority of the zip codes. As a result, the proposed remedies appear to also ensure that the level of competition be preserved locally as compared with the pre-merger situation.



Note: Number of competitors per cluster, which are 120 km away or less from a cluster. Air Liquide best estimate

Source: The notifying party

D. Divestiture package and purchaser

⁵⁵ Data submitted by the notifying party on 07/03/2004

216. In the course of the market investigation, the question arose as to the extent to which, if accepted, the divestitures proposed should be sold as a package to only one acquirer.
217. Several customers have outlined that, to the extent that the tonnage and bulk activities are closely intertwined, such a divestiture should be sold to one and single acquirer already active in this business in order to give it the critical mass necessary to compete effectively with Air Liquide/Messer Targets and Linde. In addition, most of the liquid plants that are divested are actually piggy-back plants providing a pipeline network with gas, i.e. tonnage plants from which gas is extracted to be liquefied and sold as bulk. The bulk and tonnage assets cannot be physically split in an easy and practical way. Divesting the bulk activity separately from tonnage could require divesting only the bulk customer base and putting in place a long-term supply agreement between the acquirer of the tonnage business and that of the bulk business. Such a pattern raises serious doubts as to its ability to restore the competition level prevailing prior to the merger⁵⁶.
218. The investigation carried out by the Commission indicated that the other markets, namely for cylinders, bulk CO₂ and ESGs, had specific features of their own. Therefore, it does not seem that these activities should necessarily be sold to the same acquirer. As regards ESGs, in view of the specific contractual constraints with Nippon-Sanso and the longer delays resulting therefrom, the Commission considers that a longer period for divestiture is justified.
219. In addition, since the proposed remedies are an aggregation of assets and there are important barriers to entry in the relevant market at stake, it is necessary that the acquirer(s) of the relevant Divested Businesses, as defined in the Annex, be active in the industrial gas markets and satisfy the usual purchasers' criteria, of independence, financial resources, expertise and incentives to maintain and develop these Divested Business as viable and competitive forces. These criteria are further developed in Section D of the Annex to this decision. All these elements which remain subject to the approval of the Commission, will be crucial to ensure the efficacy of the remedies. The Commission will assess these elements in light of the identity of the acquirer(s), the characteristics of the Divested Businesses, and in light of the specificities of the functioning of the relevant market.

E. Conclusion on the remedies

220. The Commission considers that the remedies submitted are sufficient to eliminate the serious doubts as to the compatibility of the transaction with the common market.
221. The remedies provided in sections B and D as well as the descriptions contained in the "Introductory general undertakings on the shared resources in the different divested businesses, that will be transferred to the Purchasers" and in schedules I, II, III and IV constitute conditions of this decision as only through full compliance therewith can the structural changes on the relevant markets be achieved. The other undertakings constitute obligations as they concern the implementing steps, which are necessary to achieve the sought changes.

⁵⁶ In the remedy package, Air Liquide proposes to divest Messer Targets's long-term supply contract with Linde in Buna. This contract existed prior to the merger. The divestment thereof does therefore restore the situation pre-merger vis-à-vis Air Liquide.

VII. CONCLUSION

222. The Commission has concluded that the remedies submitted by the parties are sufficient to address the serious doubts raised by the concentration. Accordingly, subject to the full compliance with the commitments submitted by the notifying party, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)b and Article 6(2) of Council Regulation (EEC) No 4064/89.

For the Commission
signed by

Mario MONTI
Member of the Commission

12 March 2004

European Commission – Merger Task Force
DG Competition
Rue Joseph II 70 Jozef-II straat
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CASE COMP/M. 3314 – AIR LIQUIDE / MESSER TARGETS

FINAL COMMITMENTS TO THE EUROPEAN COMMISSION

NON CONFIDENTIAL VERSION

Pursuant to Article 6(2), of Council Regulation (EEC) No. 4064/89 as amended (the “**Merger Regulation**”), Air Liquide (the “**Notifying Party**”) hereby provides the following Commitments (the “**Commitments**”) in order to enable the European Commission (the “**Commission**”) to declare the acquisition of Messer Targets (the “**Notified Concentration**”) compatible with the common market and the EEA Agreement by its decision pursuant to Article 6(1)(b) of the Merger Regulation of the Merger Regulation (the “**Decision**”).

These Commitments are given by the Notifying Party without prejudice to its position that the Notified Concentration does not, notwithstanding any serious doubts that the Commission may have, with respect to certain industrial gas markets in the EEA, create or strengthen a dominant position within the common market or a substantial part of it and is therefore compatible with the common market and the functioning of the EEA Agreement.

The Commitments shall take effect upon the date of adoption by the Commission of the Decision, provided that if completion of the Notified Concentration does not subsequently take place for any reason and is hereby abandoned, the Notifying Party shall not be bound by these Commitments.

Any terms used in these Commitments shall be interpreted in the light of the Commission Notice on remedies acceptable under Council regulation (EEC) No. 4064/89 and under Commission Regulation (EC) No 447/98.

This text shall be interpreted in the light of the Decision to the extent that the Commitments are attached as conditions and obligations, in the general framework of Community law, in particular in the light of the Merger Regulation, and by reference to the Commission Notice

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on remedies acceptable under Council Regulation (EEC) No 4064/89 and under Commission Regulation (EC) No 447/98.

Section A. - Definitions

For the purpose of the Commitments, the following terms shall have the following meaning:

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 Merger Regulation and in the light of the Commission Notice on the concept of concentration under Council Regulation (EEC) No 4064/89.

Closing: the transfer of the legal title of the Divestment Businesses to the Purchaser.

CO₂ Divested Business: CO₂ bulk business as defined in Section B and the attached Schedule II that the Notifying Party commits to divest.

Cylinder Divested Business: Cylinder business as defined in Section B and the attached Schedule III that the Notifying Party commits to divest.

Divestment Businesses: all businesses as defined in Section B and the attached Schedules that the Notifying Party commits to divest.

Divestiture Trustee: one or more natural or legal person(s), independent from the Notifying Party, who is(are) approved by the Commission and appointed by the Notifying Party and who has(have) received from the Notifying Party the exclusive Trustee Mandate to sell the Divestment Businesses to one or several Purchasers at no minimum price.

Effective Date: the date of the adoption of the Decision by the European Commission, unless the acquisition of control of Messer Targets by Air Liquide is completed more than 30 days after the said Decision, in which case the effective date will be the date of completion of the notified concentration.

ESG Divested Business: ESG business as defined in Section B and the attached Schedule IV that the Notifying Party commits to divest.

First Divestiture Period: a period of [...] and a period of [...].

Hold Separate Manager: the person appointed by the Notifying Party for the Divestment Businesses to manage the day-to-day business under the supervision of the Monitoring Trustee.

Key Personnel: all personnel necessary to maintain the viability and competitiveness of the Divestment Businesses, as listed in Annex A.

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Tonnage and Bulk Divested Business: Tonnage and bulk (excluding CO₂) businesses as defined in Section B and the attached Schedule I.

Monitoring Trustee: one or more natural or legal person(s), independent from the Parties, who is(are) approved by the Commission and appointed by the Notifying Party, and who has(have) the duty to monitor the Notifying Party's compliance with the conditions and obligations attached to the Decision.

Personnel: all personnel currently employed by the Divestment Businesses, including Key Personnel, staff seconded to the Divestment Businesses, shared personnel and the additional personnel listed in the Schedules.

Purchaser: the entity approved by the Commission as acquirer of each of the Divestment Businesses in accordance with the criteria set out in Section D.

Trustee(s): the Monitoring Trustee and the Divestiture Trustee.

Trustee Divestiture Period: the period [...] from the end of the First Divestiture Period.

The Notifying Party: the company L'Air Liquide S.A, incorporated under the laws of France, with its registered office at 75, Quai d'Orsay, 75321 Paris Cedex 07 and registered with the Paris Commerce and Companies Register under n° RCS 552134736.

Messer Targets: assets active in the field of industrial gases and related businesses as well as services related to those products, as described in the Form CO filed with the Commission on the Commission on 30 January 2004.

The Parties: the Notifying Party and Messer Targets.

Section B. - The Divestment Businesses

Commitment to divest

1. In order to restore effective competition, the Notifying Party commits to divest, or procure the divestiture of the Divestment Businesses by the end of the Trustee divestiture Period. The Notifying Party commits to divest the Tonnage and Bulk Divested Business as a going concern to one purchaser active in the industrial gas markets on terms of sale approved by the Commission in accordance with the procedure described in paragraph 14. The Notifying Party commits to divest the CO₂ Divested Business, the Cylinder Divested Business and the ESG Divested Business to either the same one purchaser of the Tonnage and Bulk Divested Business or to different purchasers active in the industrial gas markets, either separately or jointly. To carry out the divestiture, the Notifying Party commits to find one or more purchasers and to enter into one or more final binding sale and purchase agreements for the sale of the Tonnage and Bulk Divestment Business, the CO₂ Divested Business, the Cylinder Divested Business and the ESG Divested Business, within the First Divestiture Period. If the Notifying Party has not entered into such agreements at the end of the First Divestiture Period, the Notifying Party shall grant the Divestiture Trustee an

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exclusive mandate to sell the Divestment Businesses in accordance with the procedure described in paragraph 23 in the Trustee Divestiture Period.

2. The Notifying Party shall be deemed to have complied with this commitment if, by the end of the Trustee Divestiture Period, the Notifying Party has entered into the final binding sale and purchase agreements needed for the Divestment Businesses, if the Commission approves the Purchasers and the terms in accordance with the procedure described in paragraph 14 and if the closing of the sale of the Divestment Businesses takes place within a period not exceeding 3 months after the approval of the purchaser and the terms of sale by the Commission.
3. In order to maintain the structural effect of the Commitments, the Notifying Party shall, for a period of 10 years after the Effective Date, not acquire direct or indirect influence over the whole or part of the Divestment Businesses, unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Businesses is no longer necessary to render the proposed concentration compatible with the Common Market.

Structure and definition of the Divestment Businesses

4. The Divestment Businesses consist of several viable and competitive assets active in Germany, in the tonnage and bulk markets (both plants and pipeline sections, as well as liquid bulk and cylinder sourcing facilities), in the cylinder markets and in the ESGs markets. The present legal and functional structure of the Divestment Businesses as operated to date is described in Schedule I for the Tonnage and Bulk Divestment Business, in Schedule II for the CO2 Divested Business, in Schedule III for the Cylinder Divested Business and in Schedule IV for the ESG Divested Business. The Divestment Businesses, as described in more detail in Schedules I, II, III and IV include:
 - (a) all existing tangible and intangible assets (including intellectual property rights), which contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Businesses;
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Businesses;
 - (c) all contracts, leases, commitments and customer orders of the Divestment Businesses, all customer, credit and other records of the Divestment Businesses (items referred to under (a) – (c) hereinafter collectively referred to as “Assets”);
 - (d) the Personnel, and
 - (e) the benefit, for a transitional period of up to [...] years after Closing and on terms and conditions equivalent to those at present afforded to the Divestment Businesses, of all current arrangements under which the Parties or Affiliated Undertakings supply products or services to the Divestment Businesses, as detailed in the attached Schedules, unless otherwise agreed with the Purchaser of each Divestment Business.

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Section C. - Related commitmentsPreservation of Viability, Marketability and Competitiveness

5. From the date of adoption of the Decision until Closing, the Parties shall preserve the economic viability, marketability and competitiveness of the Divestment Businesses, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Businesses. In particular the Parties undertake:
- (a) not to carry out any act upon their own authority that might have a significant adverse impact on the value, management or competitiveness of the Divestment Businesses or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Businesses;
 - (b) to make available sufficient resources for the development of the Divestment Businesses, on the basis and continuation of the existing business plans ;
 - (c) to take all reasonable steps, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel mentioned in Annex A to remain with the Divestment Businesses.

Hold-separate obligations of Parties

6. The Parties commit, from the date of completion of the notified concentration until Closing, to keep the Divestment Businesses separate from the businesses the Notifying Party is retaining and to ensure that Key Personnel of the Divestment Businesses – including the Hold Separate Manager – have no involvement in any business retained and vice versa. The Parties shall also ensure that the Personnel does not report to any individual outside the Divestment Businesses.
7. Until Closing, the Parties shall assist the Monitoring Trustee in ensuring that the Divestment Businesses are managed as distinct and saleable entities separate from the businesses retained by the Parties. The Notifying Party shall appoint a Hold Separate Manager who shall be responsible for the management of the Divestment Businesses, under the supervision of the Monitoring Trustee. The Hold Separate Manager shall manage the Divestment Businesses independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by the Parties.

Ring-fencing

8. The Parties shall implement all necessary measures to ensure that they do not after the Effective Date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Businesses. In particular, the participation of the Divestment Businesses in a central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Businesses. The Notifying Party may obtain

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information relating to the Divestment Businesses which is reasonably necessary for the divestiture of the Divestment Businesses or whose disclosure to the Notifying Party is required by law.

Non-solicitation clause

9. The Notifying Party undertakes, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Businesses for a period of 24 months after Closing.

Due Diligence

10. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Businesses, the Notifying Party shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:
- (a) provide to potential purchasers sufficient information as regards the Divestment Businesses;
 - (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

11. The Notifying Party shall submit written reports in English on potential purchasers of the Divestment Businesses and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 days after the end of every month following the Effective Date (or otherwise at the Commission's request).
12. The Notifying Party shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of an information memorandum to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section D. - The Purchasers

13. In order to ensure the immediate restoration of effective competition, for each of the Divestment Businesses, the Purchaser(s), in order to be approved by the Commission, must:
- (a) be independent of and unconnected to the Parties;
 - (b) be a company active in the industrial gas markets;

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(c) have the financial resources, proven expertise and incentive to maintain and develop the Divestment Businesses as viable and active competitive forces in competition with the Parties and other competitors;

(d) neither be likely to create, in the light of the information available to the Commission, prima facie competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed, and must, in particular, reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Businesses (the before-mentioned criteria for the purchaser hereafter the "Purchaser Requirements").

14. The final binding sale and purchase agreement or agreements and all ancillary agreements shall be conditional on the Commission's approval. When the Notifying Party has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), to the Commission and the Monitoring Trustee. The Notifying Party must be able to demonstrate to the Commission that the purchaser meets the Purchaser Requirements and that each of the Divestment Businesses is being sold in a manner consistent with the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Requirements and that each of the Divestment Businesses is being sold in a manner consistent with the Commitments. The Commission may approve the sale of the Divestment Businesses without one or more Assets or parts of the Personnel, if this does not affect the viability and competitiveness of the Divestment Businesses after the sale, taking account of the proposed purchaser.

Section E. - Trustee

I. Appointment Procedure

15. The Notifying Party shall appoint a Monitoring Trustee to carry out the functions specified in the Commitments for a Monitoring Trustee. If the Notifying Party has not entered into a binding sale and purchase agreement for each of the Divestment Businesses one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by the Notifying Party at that time or thereafter, the Notifying Party shall appoint a Divestiture Trustee to carry out the functions specified in the Commitments for a Divestiture Trustee for the Divestment Businesses not yet covered by a binding sale and purchase agreement. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.
16. The Trustee shall be independent of the Parties, possess the necessary qualifications to carry out its mandate, for example as an investment bank or consultant or auditor, and shall neither have nor become exposed to a conflict of interest. The Trustee shall be remunerated by the Parties in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Businesses, the fee shall also be linked to a divestiture within the Trustee Divestiture Period.

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Proposal by the Notifying Party

17. No later than one week after the date of adoption of the Decision, the Notifying Party shall submit a list of one or more persons whom the Notifying Party proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period, the Notifying Party shall submit a list of one or more persons whom the Notifying Party proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the proposed Trustee fulfils the requirements set out in paragraph 16 and shall include:
- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
 - (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks;
 - (c) the conditions under which Messer Targets will authorise the Monitoring Trustee to start carrying out its assigned tasks regarding the Messer Targets divested assets even before the Effective Date in case the latter does not correspond to the Date of the Decision;
 - (d) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

18. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one name is approved, the Notifying Party shall appoint or cause to be appointed, the individual or institution concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, the Notifying Party shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by the Notifying Party

19. If all the proposed Trustees are rejected, the Notifying Party shall submit the names of at least two more individuals or institutions within one week of being informed of the rejection, in accordance with the requirements and the procedure set out in paragraphs 15 and 18.

Trustee nominated by the Commission

20. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom the Notifying Party shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

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II. Functions of the Trustee

21. The Trustee shall assume its specified duties in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or the Notifying Party, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

22. The Monitoring Trustee shall:

(i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision;

(ii) oversee the on-going management of the Divestment Businesses with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by the Notifying Party with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:

(a) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Businesses, and the keeping separate of the Divestment Businesses from the businesses retained by the Parties, in accordance with paragraphs 5 and 6 of the Commitments;

(b) supervise the management of the Divestment Businesses as a distinct and saleable entity, in accordance with paragraph 7 of the Commitments;

(c) (i) in consultation with the Notifying Party, determine all necessary measures to ensure that the Notifying Party does not after the Effective Date obtain any business secrets, know-how, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Businesses, in particular strive for the severing of the Divestment Businesses' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Businesses, and (ii) decide whether such information may be disclosed to the Notifying Party as the disclosure is reasonably necessary to allow the Notifying Party to carry out the divestiture or as the disclosure is required by law;

(d) monitor the splitting of assets and the allocation of Personnel between the Divestment Businesses and the Notifying Party or Affiliated Undertakings;

(iii) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision;

(iv) propose to the Parties such measures as the Monitoring Trustee considers necessary to ensure the Parties compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or

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competitiveness of the Divestment Businesses, the holding separate of the Divestment Businesses and the non-disclosure of competitively sensitive information;

(v) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process, (a) potential purchasers receive sufficient information relating to the Divestment Businesses and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and (b) potential purchasers are granted reasonable access to the Personnel;

(vi) provide to the Commission, sending the Notifying Party a non-confidential copy at the same time, a written report within 15 days after the end of every month. The report shall cover the operation and management of the Divestment Businesses so that the Commission can assess whether the businesses are held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers. In addition to these reports, the Monitoring Trustee shall promptly report in writing to the Commission, sending the Notifying Party a non-confidential copy at the same time, if it concludes on reasonable grounds that the Notifying Party is failing to comply with these Commitments;

(vii) within one week after receipt of the documented proposal referred to in paragraph 14, submit to the Commission a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Businesses after the Sale and as to whether the Divestment Businesses are sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the Sale of the Divestment Businesses without one or more Assets or not all of the Personnel affects the viability of the Divestment Businesses after the sale, taking account of the proposed purchaser.

Duties and obligations of the Divestiture Trustee

23. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at the best possible price and other terms, with no minimum price, the Divestment Businesses to (a) purchasers, provided that the Commission has approved both the purchaser(s) and the final binding sale and purchase agreement(s) in accordance with the procedure laid down in paragraph 14. The Divestiture Trustee shall include in the sale and purchase agreement(s) such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement(s) such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of the Notifying Party, subject to the Parties' unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.
24. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Parties.

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III. Duties and obligations of the Parties

25. The Parties shall provide and shall cause its advisors to provide the Trustee with all such co-operation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of the Parties or the Divestment Businesses' books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and the Parties and the Divestment Businesses shall provide the Trustee upon request with copies of any document. The Parties and the Divestment Businesses shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.
26. The Notifying Party shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Businesses which are currently carried out at headquarters level. The Notifying Party shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. The Notifying Party shall inform the Monitoring Trustee on possible purchasers, submit a list of potential purchasers, and keep the Monitoring Trustee informed of all developments in the divestiture process.
27. The Notifying Party shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale, the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, the Notifying Party shall cause the documents required for effecting the sale and the Closing to be duly executed.
28. The Notifying Party shall indemnify the Trustee and its employees and agents (each an "**Indemnified Party**") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to the Notifying Party for any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.
29. At the expense of the Notifying Party, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to the Notifying Party's approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should the Notifying Party refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard the Notifying Party. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 28 shall apply mutatis mutandis. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served the Notifying Party during the

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Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

IV. Replacement, discharge and reappointment of the Trustee

30. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a conflict of interest:
- (a) the Commission may, after hearing the Trustee, require the Notifying Party to replace the Trustee; or
 - (b) the Notifying Party, with the prior approval of the Commission, may replace the Trustee.
31. If the Trustee is removed according to paragraph 30, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 15-20.
32. Beside the removal according to paragraph 30, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section F. - The Review Clause

33. The Commission may, where appropriate, in response to a request from the Notifying Party showing good cause and accompanied by a report from the Monitoring Trustee:
- (i) Grant an extension of the time periods foreseen in the Commitments, or
 - (ii) Waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments.

Where the Notifying Party seeks an extension of a time period, it shall submit a request to the Commission no later than one month before the expiry of that period, showing good cause. Only in exceptional circumstances shall the Notifying Party be entitled to request an extension within the last month of any period.

Robert Saint-Esteben

Marc Pittie

Duly authorised for and on behalf of the Notifying Party

12 March 2004

Brussels, 12 March 2004

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List of Schedules and Annexes

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European Commission – Merger Task Force
DG Competition
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CASE COMP/M. 3314 – AIR LIQUIDE / MESSER TARGETS

FINAL COMMITMENTS TO THE EUROPEAN COMMISSION

NON CONFIDENTIAL VERSION

12 March 2004

SCHEDULES TO FINAL COMMITMENTS
CASE COMP/M.3314 –
Air Liquide – Messer Targets

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**INTRODUCTORY GENERAL UNDERTAKINGS ON THE SHARED RESOURCES IN THE
DIFFERENT DIVESTED BUSINESSES,
THAT WILL BE TRANSFERRED TO THE PURCHASERS**

The Tonnage and Bulk Divested Business will be sold in any case to one single purchaser. The CO2 Divested Business, Cylinder Divested Business and ESG Divested Business might be sold separately from each other, and from the Tonnage and Bulk Divested Business, or jointly with the Tonnage and Bulk Divested Business.

A. Shared Resources

With regard to the Tonnage and Bulk Divested Business, the purchaser will benefit from a self-sufficient package, including the management structure and all the existing personnel attached to the divestitures. All the existing IP rights necessary to operate the business will also be licensed/transferred to the purchaser.

The management structure and personnel that Air Liquide commits to divest will be composed of around [...] for the Tonnage and Bulk Divested Business, [...] for the CO2 Divested Business, [...] for the Cylinder Divested Business and [...] for the ESG Divested Business.

All shared resources will be chosen in consultation with the Monitoring Trustee.

1. Tonnage and Bulk Divested Business

As regards the Tonnage and Bulk Divested Business, the divested personnel will be allocated as follows:

Transferred Organisation

The transferred organisation regroups the employees in the 2 main business activities: tonnage and bulk.

The current list of transferred employees insures the continuity of the Tonnage and Bulk Divested Business, the possibility of expanding the business and the necessary know-how transfer to run the business.

For all businesses, so-called “shared” functions allow each plant or business line to benefit from the knowledge of experts and the opportunity to achieve economies of scale at national level.

On the top of this organisation, the Notifying Party suggests a team composed of a general manager, a financial controller and a sales manager. This team will supervise both activities of tonnage and bulk.

Upon request of the buyer, the list below may be reviewed and adapted in accordance with its own management and personnel structure.

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Tonnage Business of the Tonnage and Bulk Divested Business

The number of employees working on the pipeline and on the on-site plant corresponds to the number of employees running the plants today.

One manager will supervise the activity of all sites.

To operate the activity on a German scale, controlling and administration people will be transferred. As the German activity requests presence in Germany, [...] salesmen will be part of the structure, [...] in [...], [...] in [...] and [...] in [...].

The maintenance activity should be managed centrally but with the help at local level of maintenance experts present on the facilities.

Tonnage	Hürth	Dormagen	Rheinberg	Dillingen	Shared	Total
Management	[...]	[...]	[...]	[...]	[...]	[...]
Controlling	[...]	[...]	[...]	[...]	[...]	[...]
Sales/Admin	[...]	[...]	[...]	[...]	[...]	[...]
Production control/Maintenance	[...]	[...]	[...]	[...]	[...]	[...]
Operators	[...]	[...]	[...]	[...]	[...]	[...]
TOTAL	[...]	[...]	[...]	[...]	[...]	[...]

H2 Cylinder Business of the Tonnage and Bulk Divested Business

The H2 filling Centre of Hürth cannot technically be separated from the rest of the Hürth site. Consequently the employees currently working on the Hürth site for the H2 filling Centre will be divested with the Tonnage and Bulk Divested Business as it mainly serves the bulk H2 Business.

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H2 filling	Hürth
Management*	[...]
Production	[...]
Maintenance	[...]
TOTAL	[...]

* If the Cylinder Divested Business is sold separately, the H2 filling Centre of Hürth will be managed by the tonnage plant manager. If the Cylinder Divested Business is sold to the same purchaser, the H2 filling Centre of Hürth will be managed by the cylinder plant manager.

Bulk Business of the Tonnage and Bulk Business

One manager will supervise the bulk activity and will rely on salesmen and administrative people.

The dispatching activity will be centralised and shared by all gases like it is common in the business.

The maintenance activity should be managed centrally with a team of several employees to cover the delivery areas of the divested plants.

As sales representatives in both Messer and Air Liquide typically cover bulk and cylinder, they will have to be allocated between kept and divested representatives in consultation with the Monitoring Trustee.

Bulk	Shared	TOTAL
Management	[...]	[...]
Production	[...]	[...]
Distribution Logistics	[...]	[...]
Sales/Admin	[...]	[...]
Maintenance	[...]	[...]
Applications	[...]	[...]
TOTAL	[...]	[...]

2. CO2 Divested Business

One manager will supervise the liquid CO2 bulk activity and will rely on salesmen and administrative people.

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The dispatching activity will be centralised like it is common in the business.

The maintenance activity should be managed centrally with a team of several employees located in [...] and [...] to cover the delivery areas.

CO2	Burgbrohl	Ludwigshafen	Klara	Shared	TOTAL
Management	[...]	[...]	[...]	[...]	[...]
Production	[...]	[...]	[...]	[...]	[...]
Distribution Logistics	[...]	[...]	[...]	[...]	[...]
Sales/Admin	[...]	[...]	[...]	[...]	[...]
Maintenance	[...]	[...]	[...]	[...]	[...]
Applications	[...]	[...]	[...]	[...]	[...]
TOTAL	[...]	[...]	[...]	[...]	[...]

3. Cylinder Divested Business

The employees working currently on the centres and the sales area for the Cylinder Divested Business will be divested.

As sales representatives in both Messer and Air Liquide typically cover bulk and cylinder, they will have to be allocated between kept and divested representatives in consultation with the Monitoring Trustee.

One manager will supervise the activity of all sites and will be supported in each main task by [...] sales managers [...], a finance & administration manager and a technical manager.

Sales managers and technical functions for the production and the logistics are the key functions of the Cylinder Divested Business and will be divested.

Sufficient administrative employees and operators are also part of the package.

To ensure the development of the business, [...] experts will undertake the marketing of applications on a national basis.

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Cylinders	Erfurt	Berlin	Magdeburg	Burgbrohl	Dresden	Vöklingen	Nürnberg	Bopfingen	Hürth	Shared	TOTAL
Management	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Production	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Dispatching/ Logistics	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Sales/Admin	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Applications	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
TOTAL	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

4. ESG Divested Business

All people currently employed by Messer Nippon Sanso KG will be transferred to the purchaser.

B. Allocation of contract

If as a result of the divestitures one contract covering different bulk products (LIN/LOX/LAR) on the same site of a customer would be allocated to several suppliers, then the Notifying Party will use all reasonable efforts under the supervision of the Monitoring Trustee to find an acceptable industrial solution in order to restore as much as possible the supply pattern of the customer, while preserving the supply from the divested entity. This solution shall preserve the balance of the divested assets proposed by the Notifying Party. The set of solutions proposed will be submitted to the Commission for approval within [...] along with the opinion of the Monitoring Trustee.

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**SCHEDULE I: TONNAGE AND BULK
DIVESTED BUSINESS**

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SCHEDULE I.1.**DIVESTITURE OF THE RHEINBERG FACILITIES****Ownership structure**

The Rheinberg facilities are fully owned by Air Liquide. Ownership will be transferred to the purchaser of the divested business. Land is leased by Solvay [...]. All the tangible assets and contracts pertaining to the facilities will be transferred to the purchaser of the divested business.

The Tonnage Business**Technical description**

The Rheinberg ASU started operating in 1991 and is located next to the customers' premises.

The plant has the following capacities:

Gas	Capacity in tonnes per day
Oxygen	[...]
Nitrogen	[...]

The plant has liquid storage capacities of LOX [...] litres and LIN [...] litres.

Management structure and personnel

The following employees working at the Rheinberg plant will be transferred:

Tonnage	Rheinberg
Management	[...]
Controlling	[...]
Sales/Admin	[...]
Production control/Maintenance	[...]
Operators	[...]
TOTAL	[...]

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Contracts that will be transferred to the purchaser

All the tonnage supply contracts with Solvay and Kemira, Rheinberg's two tonnage customers, will be transferred to the purchaser. The terms of the contracts entered into with [...] have a [...] duration. The contract entered into with Kemira beginning in 2000 had an initial [...] duration and has been renewed [...].

Intellectual property rights

There are no IPR issues in relation to the ASU.

Main Suppliers

The plant's main supplier is [...], which supplies [...] as well as the cooling water.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Rheinberg plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

None required.

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SCHEDULE I.2

DIVESTITURE OF A PART OF MESSER TARGET'S RHEIN-RUHR PIPELINE

Description of pipeline to be divested

All the tangible assets linked to the part of the pipeline to be divested (*Divestiture Pipeline Rhein*) will be divested.

An overview on Messer's Rhein-Ruhr pipeline is provided in the map attached in Annex 3.

Divestiture Pipeline Rhein is south of the middle point section between Krefeld and Dormagen to the Southern part of the pipe in Köln Porz (see indication on the attached map). Therefore, the existing pipeline system will be cut north of the pipeline connecting the main pipeline with Dormagen. It crosses in particular the large chemical sites around Dormagen, Leverkusen, the north of Cologne, Knapsack and Wesseling.

In these regions the pipeline serves the following customers:

- Dormagen: [...]
- Leverkusen: [...]
- North of Cologne: [...]
- Knapsack: [...]
- Wesseling: [...]
- Additional customers on the other side of the Rhein river: [...]

The part of the pipeline to be divested combines all chemical areas between Bonn in the south and Dormagen/Leverkusen in the north on both sides of the Rhein river, being one of the most important chemical region in Western Europe.

The main sections of the Divestiture Pipeline Rhein were put in operation in the early 1970s. The pipeline's diameter is 250 mm. The pipeline section between Dormagen and Hürth has a diameter of 300 mm. The operating pressure of the oxygen pipe between Hürth and Wesseling is 63 bar. All other sections of the pipeline to be divested have an operating pressure of 40 bar.

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Supply of Divestiture Pipeline Rhein

The pipeline is fed by the ASU in Hürth and the ASU in Dormagen, which have a total capacity of [...] tpd for oxygen and of [...] tpd for nitrogen.

For oxygen, the contracted commitments on the pipe were [...] tpd in 2003, going to [...] tpd in 2004 because of the [...] of [...] tpd of the commitments to [...] in [...] and a [...] of [...] tpd of the commitments of [...].

In 2003, the customers on the pipeline only consumed [...] tpd (and only [...] tpd in 2002), well over a [...] tpd less than actually contracted. As the ASUs on the "Rhein-Pipeline" are presently [...] loaded and the actual production in 2003 amounted to [...] tpd of oxygen, there was an amount of [...] tpd of oxygen available for other uses than the supply of "Rhein"-customers via pipeline. Of these [...] tpd of oxygen, [...] tpd were used for liquefaction to produce LOX and the remaining [...] tpd were supplied to the northern section of the pipeline, the "Ruhr-Pipeline". Actually, there was a [...] tpd transfer of oxygen from the South to the North in 2003. Under the current rate of actual consumption and the current load this amount would be available for growth.

For nitrogen, the 2003 contracted volumes of the customers connected to the pipeline amount to [...] tpd with the actual consumption in 2003 amounting to [...] tpd. Contracted volumes in 2005 will be [...] tpd due to [...] of [...] tpd at [...], and of [...] tpd at [...].

Therefore, the capacity of the Hürth and Dormagen ASUs suffices to supply the actual needs of all customers connected to the pipeline, and to feed the liquefier. Due to the supply from two separate ASUs the likelihood of additional back-up from the Northern section of the pipe seems to be very limited.

Operation of the pipeline

The Hürth and Dormagen facilities currently have their own control rooms which could be expanded easily to monitor and operate the pipeline section being divested. The upgrade will be limited to the purchase and set up of certain IT capacities; the amount of the investment would not exceed € 1 million. The operation of the pipeline could be monitored by the existing employees of the Hürth and Dormagen plants.

Ownership of pipeline

Messer has the ownership of the Divestiture Pipeline Rhein. As part of the divestiture, ownership in the pipeline would be transferred to the purchaser.

The section at the Northern end of the pipeline between Hürth and Dormagen is owned by SRG (Sauerstoff- und Stickstoffrohrleitungs-GmbH, being a 50/50 joint venture of Messer and Bayer AG). However, the connection between the main pipeline and Leverkusen as well as the connection between the main pipeline and Dormagen is owned by Messer directly. Another small section (the pipe connecting Degussa's Wesseling plant to the main pipeline) is leased from InfraServ Knapsack, a subsidiary of Hoechst.

Air Liquide and Messer commit to obtain the approvals of third parties having rights in the pipeline or having land use rights.

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Principal governmental licences, permits and authorisations

Existing governmental authorisations in relation to the operation of the pipeline will be transferred to the purchaser.

Customers connected to pipeline and to be transferred to the purchaser

The pipeline supplies the tonnage customers set out in the following table:

Table 1 – Customers supplied through Divestiture Pipeline Rhein

	Oxygen			Nitrogen		
	Volume 2002 (tpd)	Volume 2003 (tpd)	Contracted Volume (tpd)	Volume 2002 (tpd)	Volume 2003 (tpd)	Contracted Volume (tpd)
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]

* Contracted volumes rounded to the nearest “5” multiple.

** Contracted volume starting in 2004: [...] tpd GOX and [...] tpd GAN.

*** Contracted volume starting in 2004: [...] tpd GOX and [...] tpd GAN.

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External service providers / suppliers

The maintenance of the pipeline is provided by Messer with the exception of the maintenance of the pipeline section Knapsack – Hürth – Degussa Wesseling which is provided by InfraServ. The maintenance contract would be transferred to the purchaser.

Intellectual property rights

There are no intellectual property rights involved in the operation of the pipeline.

Separation of the Divestiture Pipeline Rhein from the remainder of the Rhein-Ruhr-Pipeline

The separation of the pipeline would be done by inserting isolation valves, which can be closed or opened in accordance with back-up needs.

The Divestiture Pipeline Rhein is a viable business since the air separation units in Hürth and Dormagen have sufficient capacity to supply all customers connected to the pipeline.

Anticipated transitional and ancillary agreements with purchaser of Divestiture Pipeline Rhein

The merged entity commits to enter into an agreement effective at Closing concerning back-up supplies for the case of any shutdown (for whatever reason) of ASUs, over a period of [...] years. This agreement will be conditional upon the European Commission's approval.

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SCHEDULE I.3

DIVESTITURE OF MESSER TARGETS SAAR PIPELINE

Description of pipeline to be divested

All the tangible assets linked to the pipeline to be divested will be divested.

An overview on Messer Targets Saar pipeline is provided in a map in Annex 3. The pipeline is located in the Saar area and extends from Dillingen to Völklingen. It has a connection to Air Liquide's Lorraine pipeline. Its oxygen pipes have a total length of approximately [...] km and its nitrogen pipes a length of approximately [...] km.

The first sections of the Divestiture Pipeline Saar were put in operation in approximately 1970 . The pipeline's diameter is between 230 and 300 mm. The operating pressure is max. 40 bar.

Supply of Divestiture Pipeline Saar

The pipeline is fed by the two ASU's in Dillingen. They have a capacity of [...] Nm³ per hour ([...] tpd) (for oxygen) and of [...] Nm³ per hour ([...] tpd) (for nitrogen). There is a third ASU under construction in Dillingen which will come on stream in the middle of next year. The new ASU will have a capacity of [...] Nm³ per hour ([...] tpd) for oxygen and a compressor capacity of [...] Nm³ per hour for nitrogen ([...] tpd).

For oxygen, volumes contracted in 2003 by the customers amount to [...] tpd with the actual consumption in 2003 amounting to [...] tpd. The contracted volumes in 2005 will increase to [...] tpd.

For nitrogen, the contracted volumes of the customers connected to the pipeline amount to [...] tpd with the actual consumption in 2003 amounting to [...] tpd.

Therefore, including the new ASU, the capacity of the Dillingen ASU's will suffice to supply the needs of all customers connected to the pipeline.

Operation of the pipeline

The Saar pipeline is operated independently from a control centre located in Dillingen. The control centre would be transferred to the purchaser together with the pipeline.

Ownership of pipeline

Through its wholly-owned subsidiary Oxysaar GmbH, Messer has the sole ownership of the Divestiture Pipeline Saar. As part of the divestiture, ownership in the pipeline would be transferred to the purchaser.

No approvals of third parties are needed for the transfer of full ownership.

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Principal governmental licences, permits and authorisations

Governmental authorisations in relation to the operation of the pipeline will either be transferred or can be obtained by the purchaser.

Customers connected to pipeline and to be transferred to the purchaser

The pipeline supplies the tonnage customers set out in the following table:

Table 2 – Customers supplied through Divestiture Pipeline Saar

	Oxygen			Nitrogen		
	Volume 2002 (tpd)	Volume 2003 (tpd)	Contracted Volume (tpd)	Volume 2002 (tpd)	Average Hourly Volume 2003 (tpd)	Contracted Volume (tpd)
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]
[...]	[...]	[...]	[...]	[...]	[...]	[...]

* Contracted volume going up to [...] tpd GOX in 10/2003 and to [...] tpd in 7/2005.

** Contracted volume going up to [...] tpd GOX in 10/2003 and to [...] tpd in 7/2005.

External service providers / suppliers

The maintenance of the pipeline is provided by subcontractors. The maintenance contracts will be transferred to the purchaser.

Intellectual property rights

There are no intellectual property rights involved in the operation of the pipeline.

Relationship to Air Liquide's Lorraine pipeline

There are no specific contracts between Air Liquide and Messer concerning the link between the Divestiture Pipeline Saar and Air Liquide's Lorraine pipeline. Instead, products are traded at the intersection on an ad-hoc basis.

Anticipated transitional and ancillary agreements with purchaser of Divestiture Pipeline Saar

In order to maintain the same reliability of supply for the divested customers, the existing ad hoc sales/purchases from Air Liquide will be maintained.

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SCHEDULE I.4**DIVESTITURE OF THE HÜRTH FACILITIES****Ownership structure**

The Hürth facilities are fully owned by Messer. Ownership of the facilities would be transferred to the purchaser of the divested business. All the tangible assets pertaining to the Hürth facilities will be transferred to the purchaser of the divested business.

Part A - The Tonnage Business**Technical description**

The Hürth ASU was built in 1977 by Linde and completely modernised and supplemented in 1996. Moreover, several additional assets have been installed in the subsequent years. In particular, three oxygen compressors were newly built in 2003/4.

The plant has the following capacities:

Gas	Capacity in tonnes per day⁵⁷
Oxygen	[...]
Nitrogen	[...]

There is sufficient space on the production site to build an additional ASU.

The IT systems of the Hürth plant are fully independent and would be transferred to the purchaser.

Contracts that will be transferred to the purchaser

All the tonnage supply contracts with the customers connected to the Divestiture Pipeline Rhein will be transferred to the purchaser.

Intellectual property rights

There are no IPR issues in relation to the ASU.

⁵⁷ And including [...] tpd of liquid argon

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Main Suppliers

The plant's main supplier is [...], which is [...]. Ancillary site services are provided by [...]; the relevant service contracts will be transferred to the purchaser.

Principal governmental licences, permits and authorisations

All necessary licences, permits and authorisations required under applicable legislation in relation to the Hürth plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

No transitional agreements will be needed.

Part B - The Bulk Business (LOX, LIN, LAR, H2)

Ownership

The liquefier and - for hydrogen - the compressor station are owned by Messer. Ownership will be transferred to the purchaser.

Technical description of liquefier / compressor station

The ASU in Hürth is a piggy-back plant with a liquefier. The ASU was built in 1977 and revamped in 1994. The liquefier was built in 1996. The GOX compressor was replaced in 2003-2004. The maximum capacity of the liquefier is [...] tonnes per day for LIN/LOX (LIN equivalent) and [...] tonnes per day for LAR. The site has four filling stalls for LIN and two for LOX, an automatic trailer fill, an argon recovery system and a scale. The site has an on-site storage capacity of [...] Nm³ LOX, [...] Nm³ LIN and [...] Nm³ LAR.

The compressor station for the transfill of hydrogen was built in 1975 and revamped in 1999 with new compressors. The maximum capacity is [...] m³ per hour (each compressor between [...] and [...] m³). There are 11 filling stalls for hydrogen trailers.

Assets to be transferred

All the tangible assets and bulk contracts pertaining to customers supplied in each of the relevant zip codes defined in Annex 4 will be transferred to the purchaser of the divested business, including but not limited to:

- [...] LOX road tankers, [...] LIN road tankers, [...] LAR road tankers and [...] hydrogen trailers attributed to the Hürth site, and
- all equipment at the sites of the customers such as storage tanks, vaporisers, blending systems and high pressure bundles.
- The H2 filling assets, including :
[...]

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Customer contracts to be transferred

The customers to be divested comprise all Bulk customers situated in the zip code areas around the source (the liquefier), defined in Annex 4. These areas form a coherent territory around the source.

With respect to the Hürth facility all customers located in the zip code areas defined in Annex 4, will be transferred to the purchaser.

Please refer to Annex 5 for a map illustrating the geographical impact of Messer's bulk divested assets.

Intellectual property rights

There are some [...] customers ([...]) who use application technologies patented for Messer. The purchaser of the divested business will be granted all necessary licenses (as ancillary agreement).

Main Suppliers

All carrier contracts will be transferred.

There are no bulk-specific suppliers for LOX and LIN.

Crude hydrogen is supplied to Messer's Hürth plant by [...] via [...] at atmospheric pressure. The supply contract with an actual (renewable) term until [...] would be transferred to the purchaser of the divested business.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Dillingen plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

If the Hürth tonnage / bulk activities on one side and the Hürth cylinder activity on the other side are sold to two different purchasers, a transitional agreement may be entered into between the two purchasers for the filling of the H2 cylinders, under the Commission's approval.

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Part C – Management structure and personnel

The following employees working in the Hürth site will be transferred:

Tonnage	Hürth
Management	[...]
Controlling	[...]
Sales/Admin	[...]
Production control/Maintenance	[...]
Operators	[...]
TOTAL	[...]

H2 filling	Hürth
Management	[...]
Production	[...]
Maintenance	[...]
TOTAL	[...]

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SCHEDULE I.5

DIVESTITURE OF THE DORMAGEN FACILITIES

Ownership structure

The Dormagen facilities are owned by Messer under a building lease contract (*Erbbaurechtsvertrag*) which expires in [...]. Ownership of the facilities and of all tangible assets attributed to these facilities would be transferred to the purchaser of the divested business.

Part A - The Air Gases Tonnage Business

Technical description

The Dormagen ASU was built in 1993 by Air Products. A full revision has just taken place (ended mid of February 2004).

The plant has the following capacities:

Gas	Capacity in tonnes per day ⁵⁸
Oxygen	[...]
Nitrogen	[...]

The IT systems of the Dormagen plant are fully independent and would be transferred to the purchaser.

Contracts that will be transferred to the purchaser

All the tonnage supply contracts with the customers connected to the Divestiture Pipeline Rhein will be transferred to the *purchaser*.

Intellectual property rights

There are no IPR issues in relation to the ASU.

Main Suppliers

The plant's main supplier is [...], which is [...]. Ancillary site services are provided by [...]; the relevant service contracts will be transferred to the purchaser.

⁵⁸ and including [...] TPD of liquid argon.

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Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Dormagen plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

No transitional agreements will be needed.

Part B - The Argon Bulk Business

The ASU in Dormagen is constructed with an Argon production facility rating capacity of [...] tpd. The Argon is sold as bulk.

All the tangible assets and bulk contracts pertaining to customers supplied in each of the relevant zip codes defined in Annex 4 will be transferred to the purchaser of the divested business, including but not limited to:

[...]

Customer contracts that will be transferred

The customers to be divested comprise all bulk customers supplied in each relevant zip code areas around the source (the liquefier), as defined in Annex 4 (joint LAR area for Hurth and Dormagen). These areas form a coherent territory around the source.

With respect to the Dormagen facility all customers situated in the same zip code areas as for Hürth (LAR) (see map above) will be divested.

Additionally, [...] transitional services supply to MIG (Messer RemainCo) will be transferred to the Purchaser.

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Part C - The CO Tonnage Business

On the same property a CO plant is run which has started in 2002.

Ownership

The steam reformer for CO production is owned by Messer. Ownership will be transferred to the purchaser.

Technical description

The steam reformer in Dormagen was built in 2001 and has started running in [...]. The maximum capacity of the steam reformer is [...] tonnes per day. The interrelated steam capacity is maximum [...] tpd which is sold to Bayer. The CO capacity of the steam reformer is utilized by [...].

The CO is supplied to the customer in two pressure qualities of [...].

Customer contracts that will be transferred

The customer contract with Bayer (both for the [...] quality) will be transferred to the buyer.

Intellectual property rights

All required IP rights in relation to the plant will be licensed/transferred as needed.

Main Suppliers

Main supplier for natural gas is [...]. CO₂ is sourced from [...] based on a supply contract between [...]. That contract will be transferred to the purchaser.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Dormagen plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

No transitional agreements are needed for the effective transfer of the divested business.

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Part D – Management structure and personnel

The following employees working in the Dormagen site will be transferred:

Tonnage	Dormagen
Management	[...]
Controlling	[...]
Sales/Admin	[...]
Production control/Maintenance	[...]
Operators	[...]
TOTAL	[...]

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SCHEDULE I.6**DIVESTITURE OF THE DILLINGEN FACILITIES****Ownership structure**

The Dillingen facilities are fully owned by Messer. Ownership of the facilities and all the tangible assets pertaining to them would be transferred to the purchaser of the divested business.

Part A - The Tonnage Business**Technical description**

The Dillingen ASU's was built in 1976 by Air Liquide and completely modernised and supplemented in 2003. The nitrogen compressor was newly built in 2000.

The plant has the following capacities:

Gas	Capacity in tonnes per day
Oxygen	[...]
Nitrogen	[...]
Argon	[...]

The capacities of the plant are fully utilised.

An additional ASU is in the process of being built and will come on stream in [...]. The completion of the new ASU will be fulfilled in accordance with the terms of the existing engineering agreement. It has an expected capacity of approx. [...] tpd (oxygen) and [...] tpd (nitrogen compression capacity). [...]

The IT systems of the Dillingen plant are fully independent and would be transferred to the purchaser.

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Management structure and personnel

The following employees working in the Dillingen facilities will be transferred:

Tonnage	Dillingen
Management	[...]
Controlling	[...]
Sales/Admin	[...]
Production control/Maintenance	[...]
Operators	[...]
TOTAL	[...]

Contracts that will transferred to the purchaser

All the tonnage supply contracts with the customers connected to the Divestiture Pipeline Saar will be transferred to the purchaser.

Intellectual property rights

There are no IPR issues in relation to the ASU.

Main Suppliers

The plant's main supplier is [...], which is [...].

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Dillingen plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

No transitional agreements will be needed. Air Liquide will continue to supply and purchase products on an ad-hoc basis at the intersection of Messer's Saar pipeline and Air Liquide's Lorraine pipeline.

Part B - The Bulk Business**Ownership**

The liquefier is owned by Messer. Ownership will be transferred to the purchaser.

Technical description of liquefier

One of the two ASU's in Dillingen is a piggy-back plant with a liquefier built in 1976. The maximum capacity of the liquefier is [...] tonnes per day (LIN equivalent). [...] The site has [...] filling stalls for each product (LIN and LOX), an automatic trailer fill, an argon recovery system

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and a scale. The site has an on-site storage capacity of [...] Nm³ LOX, [...] Nm³ LIN, [...] Nm³ LAR and [...] Nm³ bulk hydrogen for LAR production.

A second liquefier is under construction that will double capacities by [...].

Assets to be transferred

All the tangible assets and bulk contracts pertaining to customers supplied in each of the relevant zip codes defined in Annex 6 will be transferred to the purchaser of the divested business, including but not limited to:

[...]

Customer contracts to be transferred

The customers to be divested comprise all bulk customers supplied in each of the relevant zip code areas around the source (the liquefier), defined in Annex 6. These areas form a coherent territory around the source.

With respect to the Dillingen facility all customers located in the zip code areas defined in Annex 6, will be transferred to the purchaser. For LAR, this includes [...] and [...].

Please refer to Annex 5 for a map illustrating the geographical impact of Messer's bulk divested assets.

Intellectual property rights

There are some [...] customers ([...]) who use application technologies patented for Messer. The purchaser of the divested business will be granted all necessary licenses.

Main Suppliers

Carriers contracts will be transferred.

There are no bulk-specific suppliers.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Dillingen plant will be transferred to the purchaser of the plant.

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Anticipated transitional arrangements

No transitional agreements are needed for the effective transfer of the divested business.

During the construction period, if need be, Air Liquide will make available to the purchaser quantities of LIN/LOX at current industry wholesale prices to support the liquid customers if needed out of Frankfurt or Richemont, until start up of the new ASU and liquefier.

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SCHEDULE I.7

DIVESTITURE OF MESSER'S LONG-TERM DELIVERY CONTRACT OF LIN/LOX/LAR EX ASU BUNA ([...])

Air Liquide will divest a long-term delivery contract of around [...] Nm³ per year LOX, [...] Nm³ per year LIN and [...] Nm³ per year LAR sourced from [...] in Buna. Messer's share of the total liquefaction capacity of the plant is [...].

The Buna plant was put in operation in 1996 by Messer and has been sold to [...] prior to the start of operation. At the same time, a long-term delivery contract has been concluded between Messer and [...] with a duration of [...] years (beginning in [...], thus ending in [...]). [...] of the total contractual volumes are take-or-pay (LOX: [...] Nm³ per year; LIN: [...] Nm³ per year; LAR: [...] Nm³ per year).

The duration of the delivery contract can be regularly extended [...]. In addition, Messer has the right to extend the contract as long as the Buna plant is running. All Messer rights under such agreement will be transferred to the purchaser.

The price which is paid to [...] is [...].

Assets to be transferred

All the tangible assets and bulk contracts pertaining to customers supplied in each of the relevant zip codes defined in Annex 7 will be transferred to the purchaser of the divested business, including but not limited to:

- [...] LOX road tankers, [...] LIN road tankers and [...] LAR road tankers attributed to the Buna site, which would be transferred to the purchaser.
- all equipment at the sites of the customers such as storage tanks, vaporisers, blending systems and high pressure bundles.

Customer contracts that will be transferred

The customers to be divested comprise all bulk customers supplied in each of the relevant zip code areas around the source (the liquefier), defined in Annex 7. These areas form a coherent territory around the source.

With respect to the Buna contract all customers located in the zip code areas defined in Annex 7, will be transferred to the purchaser.

Please refer to Annex 5 for a map illustrating the geographical impact of Messer's bulk divested assets.

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SCHEDULE II: CO2 DIVESTED BUSINESS

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SCHEDULE II.1.**DIVESTITURE OF AIR LIQUIDE CO2 SOURCING: ONE AIR LIQUIDE OWNED SOURCE IN BURGBROHL, ONE SUPPLY CONTRACT IN LUDWIGSHAFEN AND ONE SUPPLY CONTRACT IN KLARA**

Air Liquide will divest around [...] tonnes of CO2 mainly sourced at the source of Burgbrohl (Germany) for its liquid CO2 customers mainly in West Germany and at BASF in Ludwigshafen (Germany) and at Klara (Austria) for its liquid CO2 customers in South Germany.

Technical description

The source of Burgbrohl started in 1958 and is located in the volcanic area of the Eifel in West Germany, whose origin is appreciated by main sparkling water producers in Germany. Around 2 millions euros were invested in 2001 in water cleaning and filtering system. [...] tonnes of CO2 were sourced in Burgbrohl in 2003.

Regarding Burgbrohl, the CO2 assets and the Cylinder assets in Burgbrohl are not located at the same side of the road and can therefore easily be divested to two separate purchasers, if need be.

All the tangible assets pertaining to Air Liquide's CO2 businesses in Burgbrohl, Ludwigshafen and Klara will be transferred to the purchaser of the divested business, including but not limited to:

- tanks and equipment installed at customer sites, and
- [...] trailers ([...] in Burgbrohl, [...] in Ludwigshafen and [...] in Klara).

Management structure and personnel

One manager will supervise the liquid CO2 bulk activity and will rely on salesmen and administrative people.

The dispatching activity will be centralised like it is common in the business.

The maintenance activity should be managed centrally with a team of several employees located in [...] to cover the delivery areas.

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CO2	Burgbrohl	Ludwigshafen	Klara	Shared	TOTAL
Management	[...]	[...]	[...]	[...]	[...]
Production	[...]	[...]	[...]	[...]	[...]
Distribution Logistics	[...]	[...]	[...]	[...]	[...]
Sales/Admin	[...]	[...]	[...]	[...]	[...]
Maintenance	[...]	[...]	[...]	[...]	[...]
Applications	[...]	[...]	[...]	[...]	[...]
TOTAL	[...]	[...]	[...]	[...]	[...]

Contracts that will be transferred to the purchaser

The following contracts will be transferred to or entered into with the purchaser:

- All existing customers sourced from Burgbrohl ([...] tons per year), all existing customers supplied from Ludwigshafen within a radius of [...] km (corresponding to [...] tons per year), all existing customers supplied from Klara within a radius of [...] km (corresponding to [...] tons per year);
- Transportation contracts with [...];
- CO2 supply agreement:
 - Agreement with BASF for a total quantity of [...] tons per year with a T.O.P of [...] T/Y starting from [...] and valid until [...]. The whole contract will be transferred to the potential purchaser. Such an amended contract should cover the whole CO2 bulk divestitures package sourcing needs for its Ludwigshafen customers.
 - A long term agreement with Air Liquide for a quantity of [...] tons per year from the Air Liquide contingent supplied by Klara as long as the source exists and as long as Air Liquide has a contract (initial term [...] and any renewal, if any). Please see in Annex 8, the term sheet of such an agreement to be entered into with the purchaser of the CO2 Divested Business.

A list of all CO2 clients divested is provided in Annex 9.

Anticipated transitional arrangements

Necessary training and technical support for the trailers and for the production facility will be provided to the purchaser, if so required.

Geographic customer allocation

Please refer to the three maps below.

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All current Air Liquide customers for **Ludwigshafen** are located in the following geographic area (all customers of the blue area on the map are divested):

[...]

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All current Air Liquide customers for **Klara** are located in the following geographic area (all customers of the purple area on the map are divested):

[...]

12 March 2004

All current Air Liquide customers for **Burgbrohl** are located in the following geographic area (all the Air Liquide customers represented as dots on the map are divested):

[...]

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**SCHEDULE III: CYLINDER DIVESTED
BUSINESS**

12 March 2004

SCHEDULE III.1

DIVESTITURES OF THE AIR LIQUIDE CYLINDER BUSINESS IN BERLIN

All the tangible assets pertaining to the Air Liquide Cylinder Divested Business in Berlin will be transferred to the purchaser of the divested business whether located at customers' sites, agents' sites or Air Liquide's site except as mentioned below.

These assets include notably:

- Filling facilities for industrial air gases, medical gases, CO₂, helium transfilling station and Altop cylinder ranges in Berlin owned by Air Liquide including cylinders inventory at the fill plant and agents;
- Speciality gases (Pure Gases, mixtures...) in Berlin owned by Air Liquide;
- A Service Center in Magdeburg owned by Air Liquide and a Service Center in Dresden;
- The use of a Hub in Loitz (property of third party);
- [...] trucks in Dresden.

These assets do not include:

[...]

Business overview

Filling facilities:

Berlin has the particularity to offer a very large range of products. This site produces industrial air gases, medical gases, CO₂, helium and special gases. Berlin is characterised by a high density of small customers within Berlin delivered with dedicated trucks and big customers and distributors outside of the city. The geographical position of the centre being close to the highway network allows the site to deliver in the whole region. The technical capacity is very high, so that Magdeburg could be delivered without supplementary facilities investment.

Berlin can be used as the main source of pure gases and mixtures as well as helium for the complete package

Loitz, as a Hub, is attached to the centre. It belongs to third parties working close with a salesman and his assistant in Mecklenburg-Vorpommern.. There is no Air Liquide facility in Loitz. The salesman [...].

Service Centres:

- Magdeburg is a sales office with a small filling device for bundle. The centre is well established in this area and offers several proximity services like deliveries with a small truck to local customers.

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- Dresden is a centre in east of Germany in a region with a dense cylinder business. The center of Dresden is very modern (state of the art “Air Liquide”) and was built in 1998. He is located in an industrial park in the suburb of Dresden. The centre is also used as a storage for cylinders and could be used as a hub.

Investments of around [...] have been made during the construction phase in 1998. One Air Liquide owned small truck is part of the package.

Technical description

Investments of € [...] have been made during reconstruction phase 1991-1992 of Berlin and further € [...] over the period 1998-2003 in filling equipment, analytical devices and O2 pump. Due to higher volumes produced in the past, the filling capacity can easily be increased further.

Assets to be transferred

All the tangible assets pertaining to the Air Liquide cylinder business in Berlin will be transferred to the purchaser of the divested business, including but not limited to:

- Liquid storage and pumps (incl. vaporizers):
 - LOX : [...] tanks with a 4l/mn pump
 - LAR : [...] tanks with a 16l / mn pump
 - LIN : [...] tanks with a 16l / mn pump
 - LCO2 storage
- Filling ramps:
 - Number of filling ramps per product type :
 - [...] filling ramps for CO2
 - [...] filling ramps for air gases
 - [...] filling ramps or devices for special gases and helium
 - Filling ramps output is about [...] per day.
- Analytical devices: [...] gas chromatographs, [...] O2 analysers, [...] humidity analysers, [...] NO analyser, [...] H2 analyser.
- Trucks: [...] trucks owned by Air Liquide

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Management structure and personnel

The following employees working in the Berlin Centre will be transferred:

Cylinders	Berlin	Magdeburg	Dresden
Management	[...]	[...]	[...]
Production	[...]	[...]	[...]
Dispatching/Logistics	[...]	[...]	[...]
Sales/Admin	[...]	[...]	[...]
Applications	[...]	[...]	[...]
TOTAL	[...]	[...]	[...]

Contracts that will be transferred to the purchaser

Contracts with agents and customers located in the zip code areas defined in Annex 1 will be transferred to the purchaser.

Intellectual property rights

All the IP rights necessary to operate the business will be provided to the purchaser in particular those related to the differentiated cylinder caps.

Main Suppliers

Necessary transportation contracts will be transferred. Liquid gases for the fill plant can be supplied from Buna.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Berlin activity will be transferred to the purchaser of the assets.

Anticipated transitional arrangements

If required by the purchaser, Air Liquide will enter into gas supply agreements, according to the foreseen needs of the purchaser.

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Geographic customer allocation

All current Air Liquide Customers [...] are located in the following geographic area. They include all Air Liquide customers [...] currently in the existing zones supplied by the different facilities plus one commercial zone formally supplied from Hamburg but situated in East Germany as defined by the Commission. The map below illustrates the geographic coverage for the divested customers of the Berlin/Magdeburg/Loitz centres. Please also refer to Annex 2 for a map illustrating the geographic impact of all divested Air Liquide cylinder businesses.

[...]

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The map below illustrates the geographic coverage for the divested customers of the Dresden centre.

[...]

Customers include all Air Liquide customers [...] currently in the existing zones supplied by the different facilities plus one commercial zone formally supplied from Bohlen.

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SCHEDULE III.2**DIVESTITURES OF THE AIR LIQUIDE CYLINDER BUSINESS IN ERFURT****Business overview**

Erfurt is a centre in the middle of Germany in a region with a dense cylinder business, producing air gases, medical gases, specific Altop ranges and CO2. Because of its low production costs, Erfurt is very efficient. The capacity of the centre could be easily upgraded and the radius of delivery could be extended.

Technical description

Investments of € [...] have been made during the reconstruction phase 1991-1992 and further € [...] over the period 1998-2003 in process optimisation and filling equipment.

Assets to be transferred

All the tangible assets pertaining to Air Liquide's cylinder business in Erfurt wether located at customers' sites, agents' sites or Air Liquide's site will be transferred to the purchaser of the divested business, including but not limited to:

- Number of filling ramps per product type
 - [...] filling ramps for CO2
 - [...] filling ramps for air gases
- Filling ramps output is about [...] per day
- Existing cylinders, pallets and bundles

Management structure and personnel

The following employees working in the Erfurt Centre will be transferred:

Cylinders	Erfurt
Management	[...]
Production	[...]
Dispatching/Logistics	[...]
Sales/Admin	[...]
Applications	[...]
TOTAL	[...]

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Contracts that will be transferred to the purchaser

Contracts with agents and customers located in the zip code areas defined in Annex 1, will be transferred to the purchaser.

Intellectual property rights

All the IP rights necessary to operate the business will be provided to the purchaser in particular those related to the differentiated cylinder caps.

Main Suppliers

Necessary transportation contracts will be transferred. Liquid gases for the fill plant can be supplied from Buna.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Erfurt activity will be transferred to the purchaser of the assets.

Anticipated transitional arrangements

If required by the purchaser, Air Liquide will enter into gas supply agreements, according to the foreseen needs of the purchaser.

Geographic customer allocation

All current Air Liquide Customers [...] are located in the geographic area illustrated in the map below. They include all East Germany customers [...] currently supplied from Erfurt plus one commercial zone currently supplied by Kassel but situated in East Germany as defined by the Commission. Please also refer to Annex 2 for a map illustrating the geographical impact of all divested Air Liquide cylinder businesses.

[...]

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SCHEDULE III.3

DIVESTITURES OF THE AIR LIQUIDE CYLINDER BUSINESSES IN BOPFINGEN AND NÜRNBERG

Business overview

Bopfingen is a centre in the middle of South Germany, bought from [...] in 1999 and upgraded in 1999 to the Air Liquide Standard, producing air gases, medical gases, specific Altop ranges and CO₂, 300-bar cylinders. Nürnberg is a filling centre dedicated to CO₂, delivered from Bopfingen in air gases. This centre could be easily upgraded or transform in a hub.

Technical description

In Bopfingen, investments of € [...] have been made during the upgrade phase in 1999 after the take over of the facility from [...]. In Nürnberg, investments of € [...] have been made during the period 1998-2003 for retrofit programs on the filling ramps.

Assets to be transferred

All the tangible assets pertaining to Air Liquide's cylinder businesses in Bopfingen and Nürnberg whether located at customers' sites, agents' sites or Air Liquide's site will be transferred to the purchaser of the divested business, including but not limited to:

Filling ramps in Bopfingen:

- Number of filling ramps per product type
 - [...] filling ramps for CO₂
 - [...] filling ramps for air gases
- Filling ramps output is about [...] per day
- Existing cylinders, pallets and bundles
- [...] trucks in Bopfingen

Filling ramps in Nürnberg:

- Number of filling ramps per product type
 - [...] filling ramps for CO₂
- Filling ramps output is about [...]per day
- Existing cylinders, pallets and bundles

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Management structure and personnel

The following employees working in the Bopfingen and Nürnberg Centres will be transferred:

Cylinders	Nürnberg	Bopfingen
Management	[...]	[...]
Production	[...]	[...]
Dispatching/Logistics	[...]	[...]
Sales/Admin	[...]	[...]
Applications	[...]	[...]
TOTAL	[...]	[...]

Contracts that will be transferred to the purchaser

Contracts with agents and customers located in the zip code areas defined in Annex 1, will be transferred to the purchaser.

Intellectual property rights

All the IP rights necessary to operate the business will be provided to the purchaser in particular those related to the differentiated cylinder caps.

Main Suppliers

Necessary transportation contracts will be transferred. Liquid supplies can be supplied from Dillingen or Buna.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Bopfingen and Nürnberg activity will be transferred to the purchaser of the assets.

Anticipated transitional arrangements

If required by the purchaser, Air Liquide will enter into gas supply agreements, according to the foreseen needs of the purchaser.

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Geographic customer allocation

All current Air Liquide Customers [...] are located in the geographic areas illustrated in the maps below. Please also refer to Annex 2 for a map illustrating the geographical impact of all divested Air Liquide cylinder businesses.

Bopfingen

[...]

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Nürnberg

[...]

12 March 2004

SCHEDULE III.4**DIVESTITURES OF THE AIR LIQUIDE CYLINDER BUSINESS IN BURGBROHL****Business overview**

The centre of Burgbrohl, located in West Germany, is directly linked to the liquid CO₂ source on this site. Historically, a large part of the business in the centre was realised in CO₂. This center shall be supplied with cylinders from the Messer divested facility in Vöklingen. It was formally supplied from [...].

Technical description

In Burgbrohl, investments of € [...] have been made during the period 1998-2003 for retrofit programs.

Assets to be transferred

All the tangible assets pertaining to Air Liquide's cylinder business in Burgbrohl whether located at customers' sites, agents' sites or Air Liquide's site will be transferred to the purchaser of the divested business, including but not limited to:

Filling ramps in Burgbrohl:

- Number of filling ramps per product type
 - [...] filling ramps for CO₂
- Filling ramps output is about [...] per day
- Existing cylinders, pallets and bundles

Management structure and personnel

The following employees working in the Burgbrohl Centre will be transferred:

Cylinders	Burgbrohl
Management	[...]
Production	[...]
Dispatching/Logistics	[...]
Sales/Admin	[...]
Applications	[...]
TOTAL	[...]

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Contracts that will be transferred to the purchaser

Contracts with agents and customers located in the zip code areas defined in Annex 1, will be transferred to the purchaser.

Intellectual property rights

All the IP rights necessary to operate the business will be provided to the purchaser in particular those related to the differentiated cylinder caps.

Main Suppliers

Necessary transportation contracts will be transferred.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Burgbrohl activity will be transferred to the purchaser of the assets.

Anticipated transitional arrangements

If required by the purchaser, Air Liquide will enter into gas supply agreements, according to the foreseen needs of the purchaser.

Geographic customer allocation

All current Air Liquide customers [...] are located in the geographic area: illustrated in the map below. Please also refer to Annex 2 for a map illustrating the geographical impact of all divested Air Liquide cylinder businesses.

[...]

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SCHEDULE III.5

DIVESTITURE OF THE VÖLKLINGEN CYLINDER BUSINESS

Technical description

The cylinder filling centre to be divested is located in Völklingen. The centre was built by Messer in 1989. The site comprises an administrative building containing offices for technical and sales personnel, which could be used by the purchaser as head office for the Saar business to be divested. The production capacity is approximately [...] cylinders per day with the main products oxygen, nitrogen, argon and argon mixtures. As the pumps will be changed prior to divestiture, cylinders might be filled at a pressure of [...] bar maximum. The filling centre has a storage capacity of [...] litres LOX, [...] litres LIN, [...] litres LAR and [...] tonnes CO₂. The site includes additional equipment such as storage tanks, pumps, vaporisers, filling facilities and analytical equipment. Völklingen also serves currently as distribution hub; the respective surface areas and employees with distribution know-how would be transferred to the purchaser.

Assets to be transferred

All the tangible assets attributed to Messer's cylinder business in Völklingen whether located at customers' sites, agents' sites or Messer's site will be transferred to the purchaser of the divested business.

This should include notably:

- Liquid storage and pumps (incl. vaporizers):

[...]

- Filling ramps:

- Number of filling ramps per product type:

[...]

- Filling ramps output is about [...] per day and [...] bundles per day

- Analytical devices. [...]

- [...] truck

Main Suppliers

The filling centre is supplied with liquid gases by Messer. After the divestiture, the purchaser will be able to source its requirements for Völklingen either from its sources or from the Dillingen plant, at producer's cost.

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All transport services (such as the transport of the cylinders to the customers) are outsourced to freight forwarders. The respective contracts will be transferred to the purchaser.

Liquid gases can be supplied from the Dillingen liquid source.

Management structure and personnel

The following employees working in the Völklingen site will be transferred:

Cylinders	Völklingen
Management	[...]
Production	[...]
Dispatching/Logistics	[...]
Sales/Admin	[...]
Applications	[...]
TOTAL	[...]

Customer contracts that will be transferred

With respect to the Völklingen facility all customers and agents situated in the zip code areas which start with the following three digits will be transferred: [...] [...].

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« ZIP » Zone to be divested Völklingen Cylinders Gases

[...]

Intellectual property rights

Intellectual property rights do not play a role in the cylinder business at Messer Targets.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Völklingen plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

There are no transitional arrangements needed for the effective transfer of the divested business.

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SCHEDULE III.6

DIVESTITURE OF THE HURTH CYLINDER BUSINESS

Technical description

The filling centre in Hürth was built by Messer in **1986**. For atmospheric gases, the station was idled in **2003**. For hydrogen and hydrogen mixtures, the centre was kept in operation.. Despite the idling of the filling line for atmospheric gases, the space occupied for this operation is still available. The restart of the filling of atmospheric gases is easily possible within 3-4 months at an investment of no more than € [...] including upgrade of the pumps for 300-bar capability. This will be done by Air Liquide at Air Liquide's costs if purchaser so requires.

The site comprises an administrative building containing offices for technical and sales personnel, which could be used by the purchaser as head office for the Rhein business to be divested. The production capacity for hydrogen and hydrogen mixtures is approximately [...] cylinders per day. If the filling station for atmospheric gases is restarted, it could fill additional [...] cylinders per day.

The filling centre has a storage capacity of [...] litres LIN and [...] litres LAR. The site includes additional equipment such as pumps, vaporisers, filling facilities and analytical equipment. Hürth also serves currently as distribution hub; the respective surface areas and employees with distribution know-how would be transferred to the purchaser.

Assets to be transferred

All the tangible assets pertaining to Messer's cylinder business in Hürth whether located at customers' sites, agents' sites or Messer's site, will be transferred to the purchaser of the divested business. This should include cylinders, pallets, bundles inventory to cover [...] of production for the rotating stock.

These assets include notably:

- Liquid storage and pumps (incl. vaporizers):

[...]

Main Suppliers

The filling centre is supplied with liquid gases by Messer. After the divestiture, the purchaser will be able to source its requirements out of the Hürth ASU. Hydrogen is supplied via [...] by [...] (the contract will be transferred to the purchaser of the divested business).

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All transport services (such as the transport of the cylinders to the customers) are outsourced to freight forwarders. The respective contracts will be transferred to the purchaser.

Management structure and personnel

The following employees working in the Hürth cylinder business will be transferred:

Cylinders	Hürth
Management	[...]
Production	[...]
Dispatching/Logistics	[...]
Sales/Admin	[...]
Applications	[...]
TOTAL	[...]

Customer contracts that will be transferred

The cylinder divestments are structured in the same way as in the bulk business. The bundle of customers was structured on the basis of the principle that it would include all customers and agents in a number of zip code areas surrounding the filling sources to be transferred.

All customers and agents located in the zip code areas surrounding Hürth mentioned below are to be divested without exception.

With respect to the Hürth facility all customers and agents situated in the zip code areas which start with the following three digits will be divested: [...].

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« ZIP » ZONE TO BE DIVESTED HÜRTH CYLINDERS GASES

[...]

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Intellectual property rights

Intellectual property rights do not play a role in the cylinder business.

Principal governmental licences, permits and authorisations

All existing necessary licences, permits and authorisations required under applicable legislation in relation to the Hürth plant will be transferred to the purchaser of the plant.

Anticipated transitional arrangements

If requested by the purchaser, Messer will offer to the purchaser to ensure the filling of the cylinders for the transferred customers during the interim period of 3-4 months until the filling lines for atmospheric gases at Hürth have been restarted.

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SCHEDULE IV: ESG DIVESTED BUSINESS

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SCHEDULE IV

ESG DIVESTED BUSINESS

Air Liquide commits itself to divest Messer's share in Messer Nippon Sanso KG separately.

List of people to be supplied to the commission and being part of our commitments

Position	Place	Aligned	Non aligned	Comments	Name
----------	-------	---------	-------------	----------	------

[...]

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Annex A – List of Key Personnel at Messer Targets

I TONNAGE ASSETS

[...]

II BULK ASSETS

[...]

III CYLINDERS ASSETS

[...]

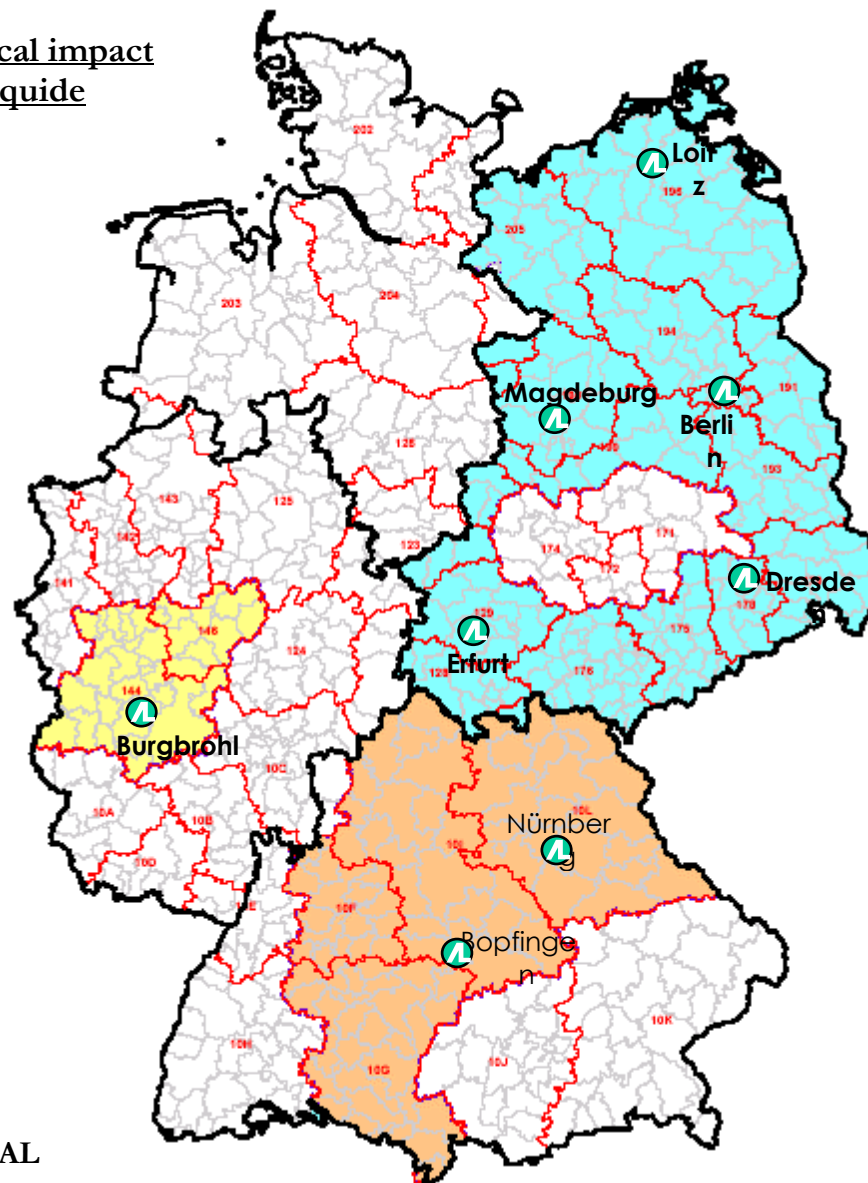
12 March 2004

Annex 1- Air Liquide Cylinder Zip Codes

[...]

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Annex 2: Geographical impact of all divested Air Liquide cylinder businesses.



Case COMP/M.3314

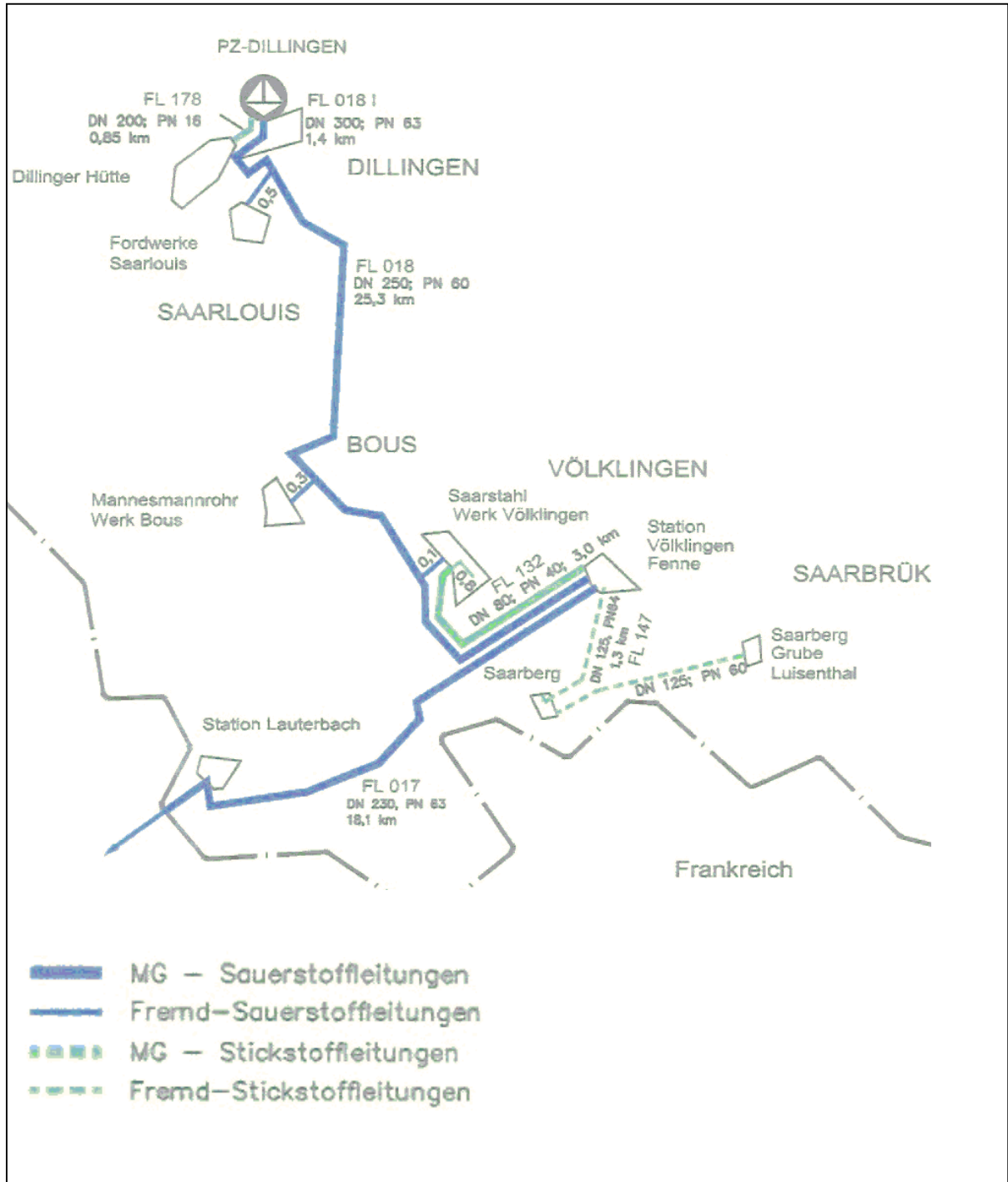
NON-CONFIDENTIAL

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Annex 3

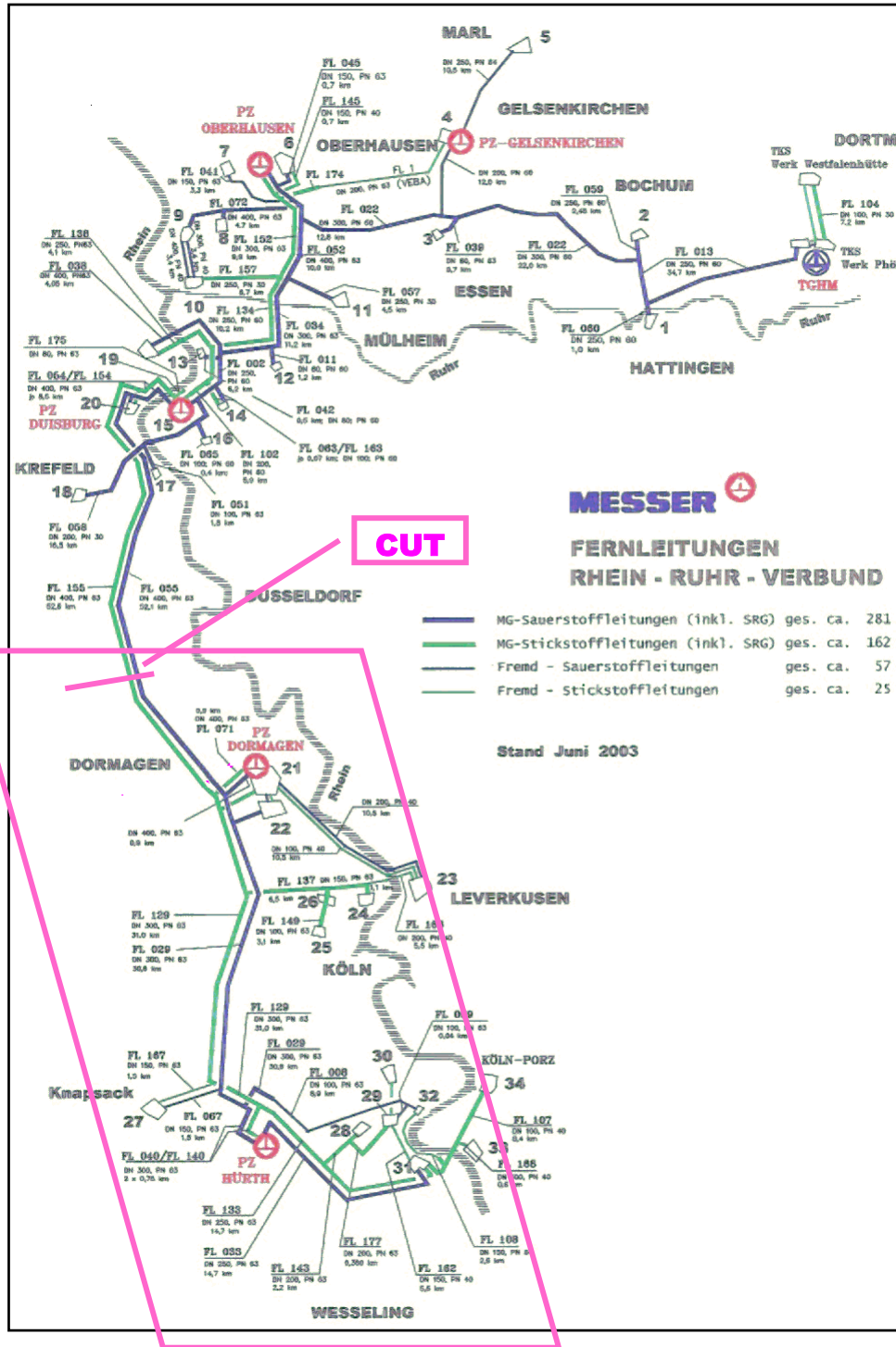
Maps of Messer Targets pipeline segments to be divested

Messer Target's Saar pipeline



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Messer Target's Rhein/Ruhr pipeline

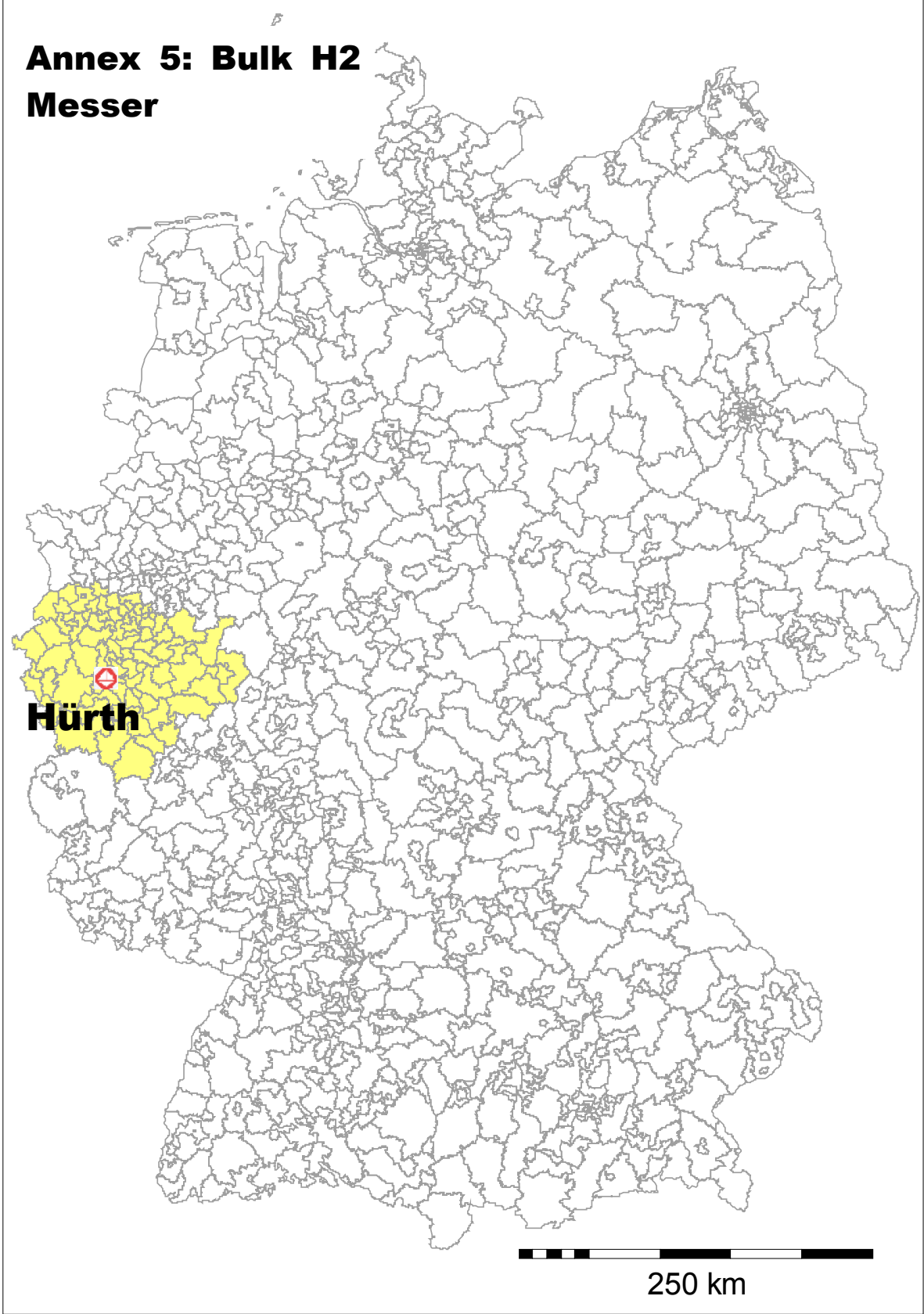


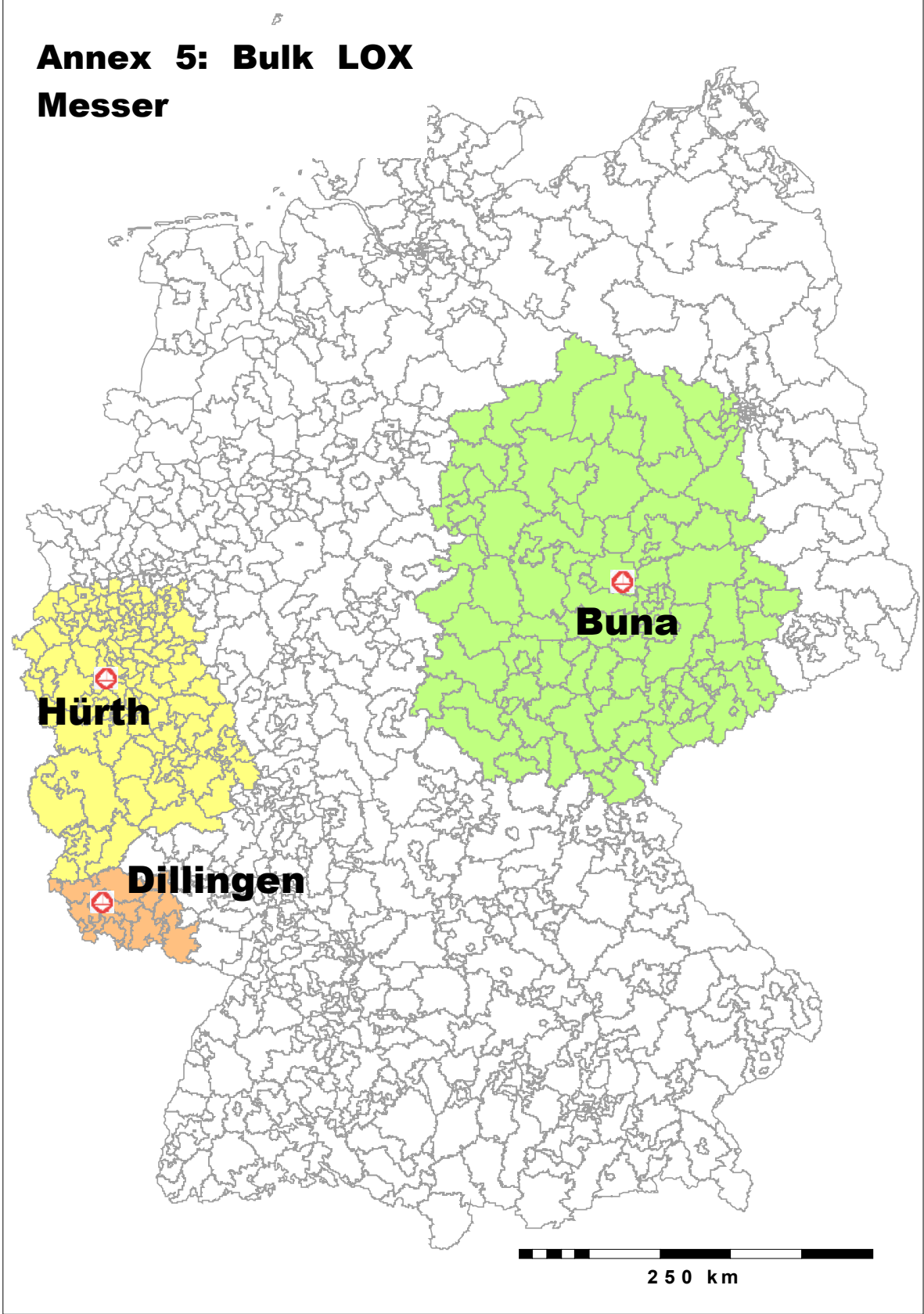
12 March 2004

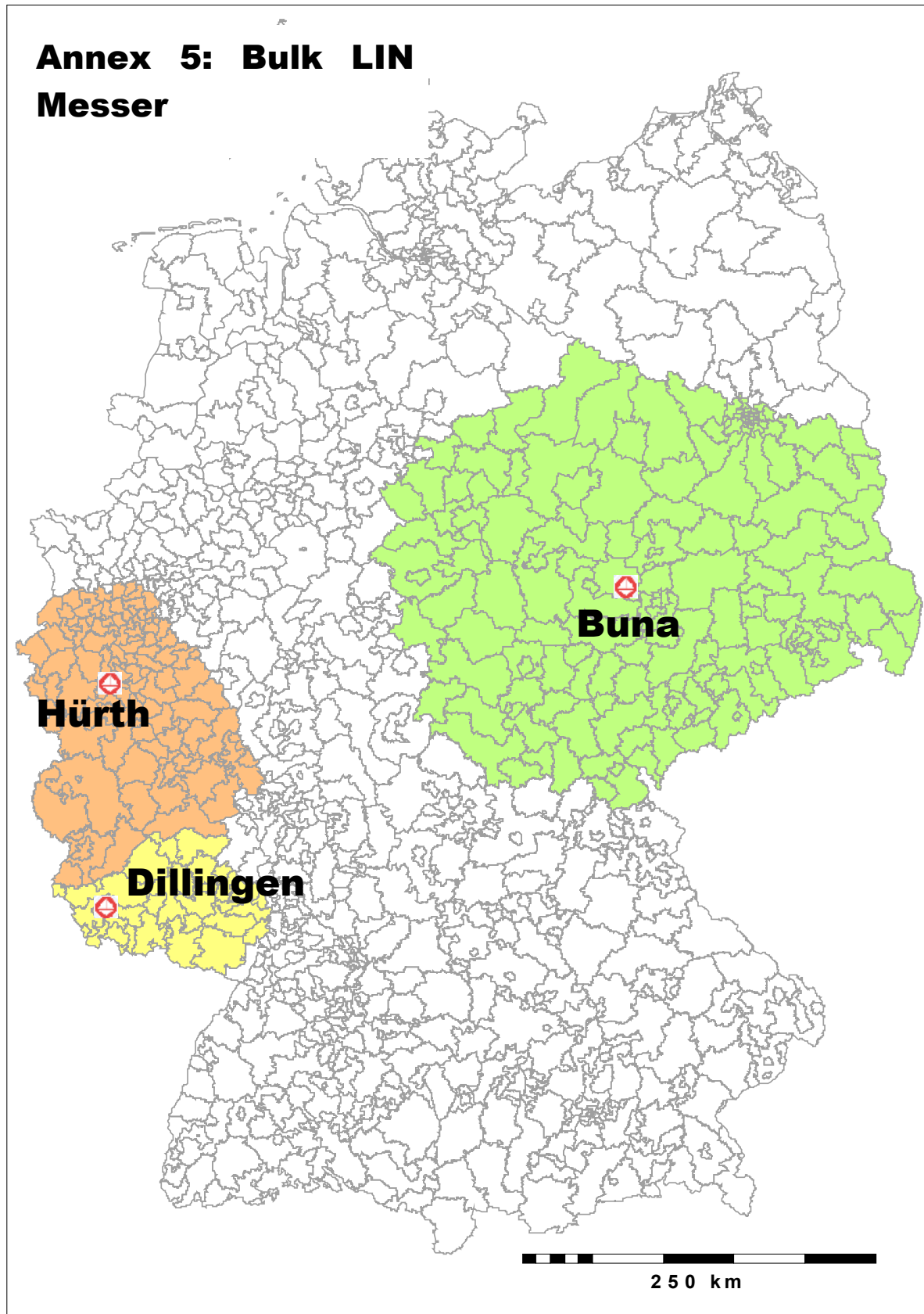
ANNEX 4 to Commitments

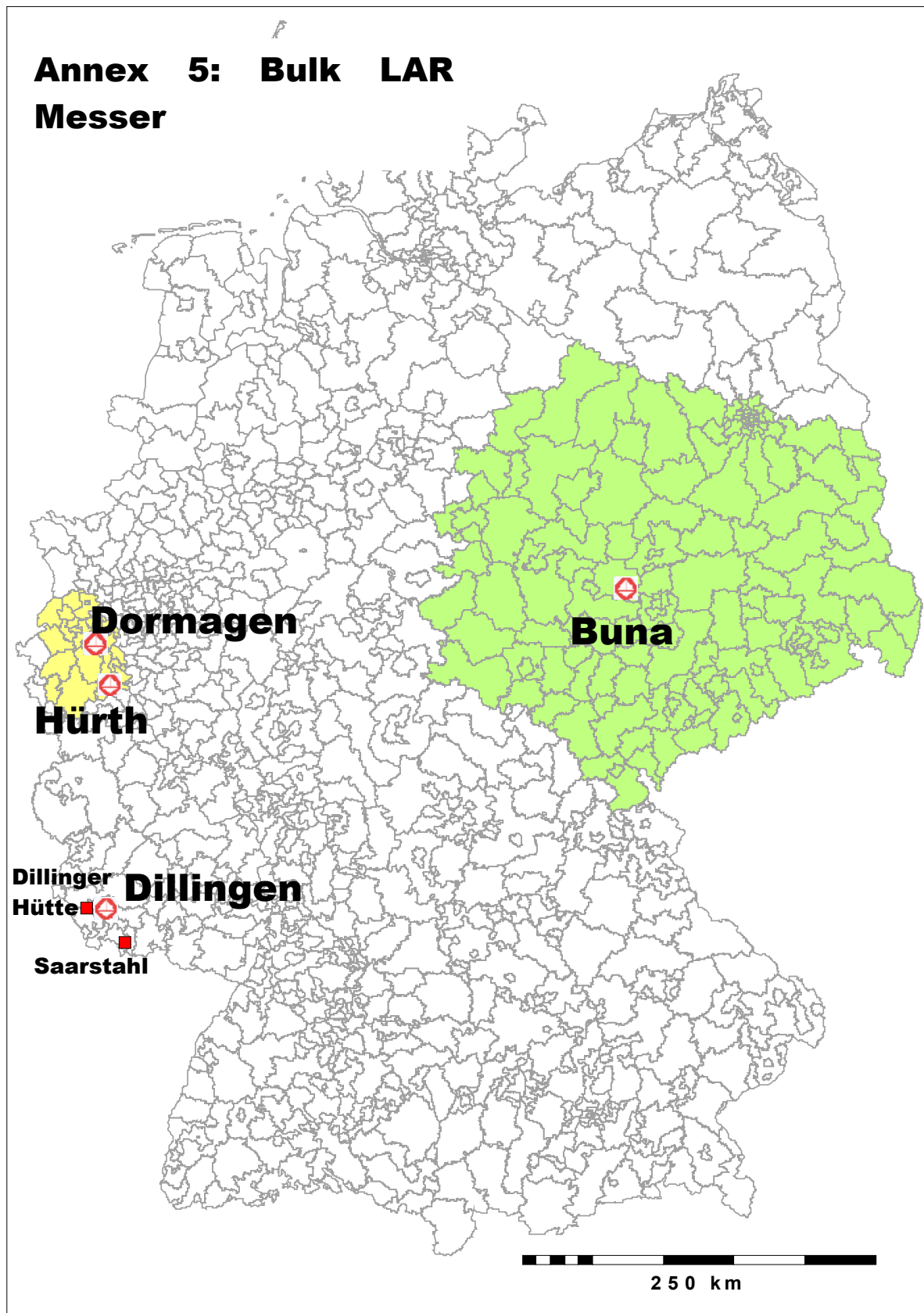
Messer Bulk Business in Hürth: List of zip codes divested

[...]









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ANNEX 6 to Commitments

Messer Bulk Business in Dillingen: List of zip codes divested

[...]

12 March 2004

ANNEX 7 to Commitments

Messer Bulk Business in Buna: List of zip codes divested

[...]

12 March 2004

Annex 8 to Commitments

Klara CO2-supply agreement: term sheet

[...]

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ANNEX 9 to Commitments

Air Liquide CO2 Business: List of customers divested

[...]

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Annex 10

Cylinder Divested Assets

[...]