

Understanding past merger remedies: report on case study research

January 2007

Abstract

1. The CC is committed to a rolling programme of research into past remedies, with the aim of ensuring that learning points are captured and fed into the development of remedies policy and practice. The CC chose as its first four case studies *Alanod*, *Sibelco*, *Coloplast* and *Centrica*. These four studies cover all the most frequently used types of remedy: divestiture, remedies to restrict vertical behaviour, and remedies to control outcomes. The need to ensure that the remedies studied were sufficiently mature for their effects to be clear meant that it was necessary to study remedies put in place under the Fair Trading Act 1973 (FTA). There are some important differences in the way that remedies are handled under the Enterprise Act 2002 compared with the FTA—the CC is now determinative and is responsible for implementing its remedies. However, since in recent times mergers had in practice been assessed under the FTA using a competition test, most of the learning points from these remedies are valid under the Enterprise Act regime.
2. Initial desk research into each case study was followed by a series of interviews with those involved in implementing the remedy. Interviewees included not only those subject to the remedy but also their customers and competitors and those involved in any ongoing monitoring.
3. Broadly, the studies have highlighted: the importance of effective interim remedies, the need for parties to have appropriate incentives to implement remedies, and the riskiness of remedies that depend on third parties. Specifically in relation to divestiture remedies, they have shown: the need to be clear about the constituents of the divestiture package and ensure that it is maintained until the divestiture is complete, the importance of thorough assessment of potential purchasers, and the importance of including provision for sale of the package by divestiture trustees at no minimum price. Specifically in relation to behavioural remedies, they have shown that: behavioural remedies are more complex and resource-intensive than divestiture remedies but that they can work especially where the company has a compliance culture and where there are expert monitors, and that it is important for price controls to reflect the nature of the market (eg how the product is sold and what the cost drivers are).

Acknowledgements

4. The CC would like to thank all those who participated in this study. In particular, the CC would like to thank the representatives of various companies who were interviewed and also the Office of Fair Trading (OFT) Mergers Branch.

Contents

	<i>Page</i>
1. Introduction	4
2. Overview of aims and methodology	4
3. Learning points	6
4. Comparisons with other remedies research	10
Appendix 1: Summary of remedies used in merger inquiries, 1999–2003	17
Appendix 2: Research methodology	21
Appendix 3: Case study results	25

1. Introduction

1. With the coming into force of the Enterprise Act 2002 on 20 June 2003 the Competition Commission (CC) acquired the power to implement remedies in relation to mergers that were expected to result in a substantial lessening of competition (SLC).¹ Whereas under the FTA the CC (and before it the Monopolies and Mergers Commission (MMC)) recommended remedies to the Secretary of State for Trade and Industry, who remitted the Director General of Fair Trading (DGFT) to negotiate undertakings or prepare orders implementing remedies, the CC now has responsibility both for the choice of remedies and for making them work.
2. In April 2004, mindful of this new responsibility, Professor Paul Geroski (then Chairman of the CC) gave an interview with the *Financial Times* in which he disclosed that the CC intended to undertake research into the effectiveness of past remedies. Development of remedies policies and procedures in the CC is overseen by the Remedies Standing Group (RSG) which comprises the CC's Chairman, Deputy Chairs, two members of the CC and members of staff in attendance. In 2004, the RSG agreed an initial phase of a rolling programme of research with the aim of ensuring that learning points from past remedies were captured and fed into the CC's policy and practice.
3. This report presents the results of that initial phase. It begins by providing an overview of the aims of the research and the methodology used. It then summarizes the key learning points from the case studies. The report then finishes with a discussion of how this research fits with that of Federal Trade Commission (FTC) and DG Comp into the effectiveness of merger remedies. Appendix 1 provides a summary of remedies used in CC merger inquiries from 1999 to 2003. Appendix 2 sets out in detail the research methodology. Appendix 3 contains detailed reports on each of the four case studies.
4. This research complements and will contribute to the development of the CC's 'remedies tool-kit'.²

2. Overview of aims and methodology

Aim of research

5. This research aims to assist in the development of the CC's expertise, policy and practice on remedies and also to make clear to third parties the basis for the CC's approach. In so doing it will help the CC to ensure that it implements remedial action that has an effective and timely impact on competition concerns.
6. In line with the CC's evidence-based approach to the development of policy and practice, a case study methodology was used. The research aimed to capture any learning points from the experience of choosing, designing, implementing and monitoring the remedies used in each case. In relation to each study, the research sought to understand whether the CC's chosen remedy had worked to address the competition concerns identified by the inquiry, whether the remedy had worked as expected, and if not, why not.

¹Except in relation to public interest cases and special public interest cases. For more detail see CC2, *Merger References*, part 5, available at:

www.competition-commission.org.uk/rep_pub/rules_and_guide/pdf/15073compcommguidance2final.pdf.

²As outlined in the CC's Corporate Business Plan 05-06, available at:

www.competition-commission.org.uk/our_role/corporate_plan/index.htm.

7. The learning points from this research will feed into the development of CC policy and practice on remedies and will inform other proposed guidance on remedies. The learning points are essentially qualitative in nature as the limited number of cases available for review and the variety and complexity of individual cases militates against robust quantitative insight.

Overview of methodology

8. This section provides an overview of the methodology used by the CC in this research. Further background to the study and a more detailed exposition of the methodology used is provided in Appendix 2.
9. In line with the CC's evidence-based approach to the development of policy and practice, a methodology based on case studies was used. For this initial phase of the research, four case studies were chosen. The studies chosen were selected in order:
 - (a) to be sufficiently far in the past to allow meaningful research on their success but sufficiently recent to ensure that they were relevant;
 - (b) to cover a cross-section of different types of remedy and to be focused on those type of remedy most frequently used by the CC, ie divestiture remedies, remedies restricting vertical behaviour, and remedies that control outcomes (eg price controls);
 - (c) to include examples of remedies that were thought to have been successful and examples of remedies that were thought to have been unsuccessful; and
 - (d) to include examples of relatively straightforward cases and relatively complex cases.
10. In practice, the need for the studies to involve remedies sufficiently far in the past for a meaningful assessment of success meant that the case studies chosen were all remedies put in place under the FTA, rather than under the Enterprise Act. The Enterprise Act introduced a system of merger control based on a 'substantial lessening of competition' test to replace the 'public interest' test used under the FTA. However, in recent times, the OFT and the CC had in practice assessed the impact of a merger on the public interest by reference to its impact on competition. By choosing remedies relating to inquiries completed since 2000, the CC ensured that its case studies were relevant to the Enterprise Act regime.
11. As well as changing the test for merger control, the Enterprise Act also saw the CC become a determinative body. Rather than, as under the FTA, the CC recommending remedies to the Secretary of State, who would remit the DGFT to accept undertakings or issue orders, the CC now implements its chosen remedies. Although the vast majority of observations in relation to the case studies are relevant to the current regime, this change in the approach to implementation means that some observations are no longer relevant. These are noted and discussed separately in Section 3.
12. Applying the criteria set out in paragraph 8 led to the choice the four case studies detailed in Table 1.

TABLE 1 Summary of case studies

<i>Inquiry</i>	<i>Date of report</i>	<i>Nature of adverse finding</i>	<i>Type of remedy</i>	<i>Other comments</i>
Alanod*	2000	Horizontal concerns, vertical concerns, unilateral effects	Restricting behaviour to end-customers Restricting vertical behaviour Controlling outcomes (price control)	Completed merger where acquired business had been integrated prior to inquiry
Sibelco†	2001	Horizontal concerns, unilateral effects	Divestiture	Widely thought not to have been successful
Coloplast‡	2002	Horizontal concerns, unilateral effects	Behavioural remedies, initially to facilitate competition by renegotiation of an exclusive contract, ultimately price control	Initial remedy known to have been unsuccessful
Centrica§	2003	Vertical concerns, unilateral effects	Behavioural remedies to control outcomes upstream but facilitate competition downstream	Complex remedy involving Chinese wall provisions

Source: CC.

*Alanod Aluminium-Veredlung GmbH & Co and Metalloxyd Ano-Coil Ltd.

†SCR-Sibelco SA and Fife Silica Sands Ltd and Fife Resources Ltd.

‡Coloplast A/S and SSL International plc.

§Centrica plc and Dynergy Storage Ltd and Dynergy Onshore Processing UK Ltd.

13. Initial background research was undertaken in relation to each study, involving CC staff in reviewing the final report and the inquiry files and discussing with staff who participated in the inquiry. Following this, interviews were conducted with key people involved in the design and implementation of the remedies. The questions for each interviewee were tailored to reflect their role in relation to the remedy. Broadly, interviewees were asked questions about the choice of the remedy, what had happened since the undertakings had been put in place, whether the remedy had been working as expected and if not, why not.

3. Learning points

14. For each of the case studies, a detailed account of the main points of the relevant inquiry, the key facts in the CC's choice of remedy and what happened after the CC's final report is presented in Appendix 3. This section takes the results of those studies and summarizes the key learning points.
15. The learning points are grouped thematically, as follows:
 - (a) interim remedies;
 - (b) choice and design of final remedies;
 - (i) divestitures; and
 - (ii) behavioural remedies;
 - (c) negotiation of final undertakings; and
 - (d) ongoing compliance and monitoring.
16. Those points which are specific to the FTA regime and are less relevant to the Enterprise Act regime, as discussed in paragraph 11, have been grouped together under a separate heading at the end of this section.

Interim remedies and the impact of completed mergers

17. The *Sibelco* case study suggests that, in the absence of restrictions on their behaviour, firms may be able to run the business in such a way as to undermine the effectiveness of a divestiture package. The study demonstrates the importance of putting measures in place to protect against this and also the importance of ensuring that compliance with such measures is actively monitored.
18. The *Alanod* case study shows that, even where there is no specific intention to undermine any divestiture package, pursuing the normal course of integration following completion of a merger might remove any scope for an effective divestiture remedy by removing the scope to create a separable, viable divestiture package from the merged entity.

Choice and design of final remedies

19. The *Coloplast* and *Centrica* case studies show that the existence of a credible contingency remedy option is important in ensuring that parties will give effect to a proposed remedy. Such contingency options might include enforcement of the remedy by order or the implementation of a 'back-up remedy' that is more intrusive than the initial remedy. The *Centrica* study demonstrates how leaving open the option of divestiture focused the firm's mind on the need to work with the OFT to create an effective set of behavioural undertakings. The *Coloplast* case illustrates the point that, if a back-up remedy is preferred by a firm, it could, without adequate incentives to do otherwise, not work towards achieving the initial remedy, so that the back-up remedy will be implemented.
20. The *Coloplast* study also shows that where the effectiveness of a remedy depends on action by a third party that is not subject to the remedy there is a risk that the remedy will not be effective.

Divestitures

21. The *Sibelco* study has generated a number of learning points in relation to divestiture remedies. It shows that it is necessary to ensure that final divestiture undertakings include measures to ensure that the divestiture package is maintained until divestiture. It also shows that compliance with these measures must be actively monitored (see 'interim remedies' above) in order to ensure their effectiveness.
22. The study also demonstrates the importance of clarity about all those elements that should be included in a divestiture package, and all the key criteria that should be used in assessing the suitability of purchasers.
23. Although a number of potential purchasers were approved at the outset of the process by the OFT in the *Sibelco* divestiture, the case study shows how approval only of the favoured bidder would increase the riskiness of divestiture remedies by introducing delay should the approved purchase fall through. It is better to approve several potential purchasers (eg those shortlisted). Although this involves more work, it increases the chances of successful completion.
24. The *Sibelco* study also shows the importance of a thorough assessment of potential bidders for a divestiture package. High-level statements of interest are not sufficient indicators of genuine interest in a divestiture package and it is important to take account of what a firm's incentives are and the information available to it in gauging whether it is likely to be a willing and able purchaser.

25. In addition, the *Sibelco* study demonstrates the importance of taking account of the interests of the management of a business to be divested in the design of the divestiture remedy. Were the management of the business being divested to be opposed to the divestiture, this would increase the risk of an ineffective sale process. In such circumstances it might be appropriate to consider the use of monitoring (and ultimately divestiture) trustees.
26. The *Coloplast* study shows how publication of a time period within which a divestiture must be completed can weaken the bargaining power of the divesting party. Similarly, it suggests that revealing the outcome of required negotiations might have the same effect.
27. Perhaps the most important point resulting from the *Sibelco* study is the importance of retaining the option of appointing divestiture trustees to sell the divestiture package at no minimum price. Where there is an inadequate incentive on parties to manage an effective sale process themselves, the option of appointing a divestiture trustee can provide the sole means of implementing the remedy. Although it is important to maintain the divestiture package, even a damaged divestiture package can be sold if the price is right and it can be used to compete effectively.
28. In relation to the use of divestiture trustees, the *Sibelco* study also makes clear the importance of establishing the correct working relationship between the competition authorities, the divesting party and the trustee. It should be made clear from the outset to trustees that although they are remunerated by the parties, they are working for the competition authorities.

Behavioural remedies

29. Taken together, the three studies that covered behavioural remedies, *Alanod*, *Coloplast* and *Centrica*, show that behavioural remedies are more complex than structural remedies and generally require more work. They require a greater number of decisions to be taken about their design. They are further complicated by the need to ensure that they remain relevant over time. In addition, they require ongoing monitoring over time.
30. However, these three studies also show that, if sufficient care is taken over the design of behavioural remedies, and in particular if active and informed monitoring takes place, behavioural remedies can be effective.
31. The *Alanod* and *Coloplast* studies suggest that it is important to take account of the nature of the market when considering price controls. Specifically:
 - (a) In industries where input costs are subject to major changes it will be more difficult effectively to control prices. Even where attempts are made to tie prices to changes in key costs, if other costs fall significantly the control might not be a biting constraint.
 - (b) In markets where bidding is involved there is a risk that revealing the level of the cap will result in bids coalescing around that level (even though in fact in *Coloplast*, where the level of the cap was revealed, this did not occur).
 - (c) In markets where there is substantial churn (or substantial market growth), controlling the prices paid by each customer by reference to the prices they paid previously is unlikely to be effective.

- (d) In markets where there is significant innovation and/or new product development price controls might be eroded as the controlled products become a smaller part of the market.
- (e) Where there are other products related to the controlled product, it will be necessary to take account of the effect of the control on those related products.
32. It should also be noted that the *Alanod* and *Coloplast* studies illustrate the tension between controlling outcomes and facilitating competition. Price controls, by holding down a firm's prices, can increase the controlled firm's market share and perhaps help it to expand its share of other markets (or market segments) beyond that for the controlled product. Ultimately, price controls might force firms that are unable to compete with the controlled price out of the market and/or deter new entry.
33. The *Centrica* remedies involved the use of Chinese walls to bring about a degree of vertical separation in the company. The study shows that such remedies can be used effectively if the firm assigns sufficient priority to this function and if this is backed up with effective external monitoring. In order to ensure their effectiveness it is necessary for the firm to educate its staff as to the existence of the Chinese walls, make clear what they can and cannot do, and establish an effective deterrence mechanism for those who breach the walls (eg through internal disciplinary processes).

Negotiation of undertakings

34. The *Centrica* study illustrates the advantages and disadvantages of involving an industry regulator in the implementation of remedies. Where a regulator is involved in an industry, it can provide valuable information during the negotiation process. Where the regulator will be involved in monitoring the remedy, it is important that it is involved in the negotiations so that it understands the thinking behind the remedy and also so that the remedy will give the regulator the tools it needs to monitor effectively. However, there is a risk that simply increasing the number of parties in the negotiation will add to the complexity of the negotiations.
35. The negotiation process involved in the *Centrica* remedies also illustrates the importance, as noted in paragraph 19, of the existence of a back-up remedy that is less preferred by the firm in focusing minds on the need to take constructive approach to making its preferred remedy work. Had Centrica not been aware that failure to reach agreement on effective behavioural undertakings would trigger a reconsideration of the divestiture option, it might have been less willing to accept some restrictions.

Ongoing compliance and monitoring

36. The *Centrica* study clearly illustrates the advantage of involving an industry regulator in ongoing monitoring. The regulator might have relevant expertise that allows it better to monitor compliance than a non-specialist body could. In addition, the firm's ongoing and multi-dimensional relationship with the regulator could provide an additional incentive for the firm to comply.
37. Compliance with its remedies is signed off by Centrica's internal audit committee. The success of this illustrates how such sign-off can provide a useful discipline. The independence of the non-executive directors on the committee means that they can provide useful internal scrutiny of compliance reports before they are submitted to the authorities.

38. The experience in *Coloplast* shows the importance of employee education and a continuing awareness of the need for compliance over time. Where remedies remain in place over a period of time and there is a risk that parties might overlook them, it might be necessary to remind parties periodically of their obligations.
39. The different experiences in *Alanod*, *Coloplast* and *Centrica* suggest that ensuring effective compliance with behavioural remedies may be easier for firms with an established compliance culture and the internal capacity to implement a compliance programme. It seems that larger firms are more likely to have this capacity than smaller firms. It also seems likely that regulated firms are more likely to have this capacity than unregulated firms.

FTA-specific points

40. Under the FTA, the OFT was constrained in its ability to put in place interim remedies prior to any reference to the CC. The *Alanod* study shows how the lack of interim remedies prior to a reference can seriously constrain the CC's choice of final remedy for completed mergers by allowing the significant integration of the two firms.
41. Under the FTA, where the CC handed over implementation of remedies to the OFT there was a risk that the OFT would not have the benefit of the extensive understanding of the issues that the CC had gained during its inquiry. The *Centrica* study illustrated this problem, which was especially acute in relation to complex inquiries such as this. Parties to the negotiation could use the OFT's lack of familiarity with all the subtleties of the CC's report to reopen arguments during the negotiation. There was also a risk that negotiations took longer and might have been less effective because parties had to 'start again' with the OFT.

4. Comparisons with other remedies research

42. Other competition authorities have undertaken studies into the effectiveness of past merger remedies. Two such studies are internationally acknowledged as particularly authoritative. The first is a study undertaken by the FTC in 1999, which looked at its divestiture process. The second is a more recent study by DG Comp of the European Commission, which looked at the effectiveness of a large sample of merger remedies. It is instructive briefly to consider how the learning points from this study relate to those from the other studies.

The FTC divestiture study

43. In 1999 the FTC published the results of an extensive study of divestiture remedies.³ The study looked back at 37 (out of a total of 50) divestiture remedies that had been implemented between 1990 and 1994 and attempted to assess whether the divestiture had been an effective remedy, and whether there were systemic reasons why some of the divestitures had not been effective. The research was conducted mainly by means of interviews with purchasers, although a relatively small number of other parties were also interviewed. It concluded with a series of recommendations as to how the FTC's divestiture process might be improved.
44. The divestitures studied covered a wide variety of industries and included a variety of divestiture packages from virtually autonomous (stand-alone) subsidiaries to non-exclusive licences, to patents and know-how. The study showed that almost all of the

³The full study is available at: www.ftc.gov/os/1999/08/divestiture.pdf.

required divestitures actually occurred. The study did not attempt to assess the impact of the divestitures on the process of competition in the relevant markets. However, on the basis that a divestiture was effective if the divestiture package was bought by an approved purchaser who began operating it viably in the market within a reasonable period and continued to do so, 28 out of the 37 divestitures studies, ie approximately three-quarters, were effective.

45. In looking for systemic reasons for why some divestitures failed while others were successful, the study generated the following findings:
- (a) Divestiture packages must include all the assets that a purchaser needs to compete effectively in the market—this may be greater than the area of overlap or an asset access to which constitutes a barrier to entry.
 - (b) Divestitures of existing ongoing (stand-alone) businesses tended to be more successful than divestitures of selected assets (eg intellectual property, technology, brand names).
 - (c) Divesting parties tend to look for purchasers who will not be strong competitors and may engage in strategic conduct to reduce the purchaser's chances of success.
 - (d) Purchasers do not have sufficient information to prevent mistakes in the course of their acquisitions.
 - (e) 'Continuing entanglements and relationships' between the divesting party and the purchaser post-divestiture (eg where the divesting party supplies a key input to the purchaser) tend to increase the vulnerability of the purchaser and can dull the incentive to compete.
 - (f) Smaller firms have the same rate of success as larger firms in operating divestiture packages effectively and should not be presumed to be less suitable purchasers.
46. The study made various recommendations with aim of the increasing the effectiveness of the FTC's divestiture process. These are set out in Table 2.

TABLE 2 Recommendations for the FTC divestiture process

<i>Aim</i>	<i>Recommendations</i>
Increase the divesting party's incentives to achieve an effective divestiture	<ul style="list-style-type: none"> — Appoint trustees — Require divestiture of a 'crown jewel' if divesting party fails to achieve a sale within the specified period — Require consequential damages for failure to deliver supplies
Facilitate the success of the purchaser	<ul style="list-style-type: none"> — Ensure purchaser has access to accurate information — Require purchaser to submit to the FTC an acceptable business plan for the assets — Require purchaser before approval to have executed contracts with third parties who will supply any key inputs or service it will not be providing itself — Ensure that purchaser fully understands the order implementing the remedy — Select appropriate purchasers, on grounds that include knowledge and experience and their commitment to the market, but not necessarily their size
Facilitate transfer of business information	<ul style="list-style-type: none"> — Ensure that purchaser has: <ul style="list-style-type: none"> — Rights to all related technology — Rights to technical assistance — The right to inspect the facilities in operation — The right to hire selected people from the merged entity that have important knowledge

Source: CC, material from DG Comp remedies study.

The DG Comp study

47. The DG Comp study was published in late 2005.⁴ It analysed 96 remedies used in 40 cases with the aim of identifying serious issues in the design and implementation of remedies, assessing the effectiveness of the European Commission's policy on remedies and recommending areas for improvement. Like the FTC study, DG Comp used interviews mostly with the divesting parties and purchasers but also with trustees and other players to gather qualitative data. Unlike the FTC, it also used follow-up questionnaires as a means of gathering quantitative data. Of the 96 remedies it examined, 84 were divestitures, 10 were access commitments, and 2 were other types of remedy. A wide variety of divestitures was covered, including sale of a stand-alone business, sale of package of assets constituting a 'carve out'⁵ from a business, 'mix and match' divestitures, exits from a joint venture and licensing.
48. The study considered that a fully effective divestiture remedy would have resulted in a sale where the divestiture package remained a viable and effective competitor. A fully effective access remedy was considered to be one which had eliminated foreclosure concerns. A partially effective divestiture remedy was one in which there were still (ie at the time of the study) 'unresolved issues' and a partially effective access remedy was one in which access had not been granted to the extent determined in the decision. Ineffective divestiture remedies had failed to restore competition either because the divested business had ceased to operate or had not begun operating three to five years after the decision. Access remedies were ineffective where no access had been granted. On this basis, the study concluded that 57 per cent of the 96 remedies had been fully effective, 24 per cent partially effective and 7 per cent ineffective. The effectiveness of the remaining 7 per cent could not be judged because the remedy had been proved unnecessary.
49. The study also provides a breakdown of effectiveness by broad type of remedy, as shown in Table 3.

⁴The full study is available at: www.europa.eu.int/comm/competition/mergers/others/remedies_study.pdf. Alex Kopke from DG Comp presented the findings at a lunchtime seminar for CC members and staff on 21 February 2006.

⁵The term 'carve out' was applied to assets that were split out of a business for divestiture.

TABLE 3 **DG Comp study: effectiveness of remedy by type**

	<i>Fully effective</i>	<i>Partially effective</i>	<i>Ineffective</i>	<i>per cent</i> <i>Unclear</i>
Asset divestitures	56	25	6	13
Exit from a JV	77	8	0	15
Access commitments	40	40	20	0

Source: DG Comp study, CC analysis.

-
50. In relation to divestitures, the main findings of the study can be grouped by reference to:
- (a) scope of package;
 - (b) interim preservation;
 - (c) suitable purchasers;
 - (d) the transfer process.
51. The study found that there were five key issues that often threatened commercial viability:
- (a) upstream/downstream links;
 - (b) geographic limitations;
 - (c) business below critical size;
 - (d) product cycle effects;⁶ and
 - (e) unresolved intellectual property rights (IPR) issues.
52. Crucially, the study also found that divestitures of packages of assets that dealt only with the 'overlap' were as likely *not* to be fully effective (43 per cent) as to be effective (43 per cent). Divestitures of packages of less than the 'overlap' fared even worse with 72 per cent classed as 'risky/doubtful' and only 14 per cent as fully effective. However, divestitures of packages comprising more than the 'overlap' were far more likely (86 per cent) to be fully effective.
53. In relation to interim preservation issues, the study found that:
- (a) These were more complex when the business to be divested was not stand-alone.
 - (b) The divesting party often attempted:
 - (i) to degrade tangible and intangible assets;
 - (ii) not to maintain investment and customer service levels;

⁶For example, if a business is sold at a stage in the product cycle when demand is low the purchaser may have to withstand a period of low sales before business picks up later in the product cycle.

- (iii) to put in place inadequate personnel retention schemes; and
 - (iv) 'front loading'.⁷
- (c) Interim preservation measures are difficult to monitor, even by experienced trustees, and success or failure often only becomes apparent after the divestiture.
- (d) Effective monitoring trustees should:
- (i) be appointed as soon as possible;
 - (ii) have trustee mandates that are very clear on their functions;
 - (iii) follow a detailed workplan and keep in regular contact with DG Comp;
 - (iv) have the requisite qualifications and experience; and
 - (v) have and maintain their independence of the divesting party.
54. In relation to suitable purchasers, the study found that 12 divestiture remedies had been ineffective or only partially effective because of the unsuitability of the purchaser. It noted the existence of a strong link between the availability of suitable purchasers and the scope of the asset package, and that a more limited asset package (as well as introducing the risk that the purchaser would not have everything it needed to compete) could reduce the pool of potential purchasers making it more likely than an unsuitable purchaser would be approved. It also noted that the risk of not finding a suitable purchaser could be reduced by use of 'upfront buyers'.
55. Specifically in relation to the requirements of a suitable purchaser, the study concluded that these included:
- (a) proven expertise (especially in innovation-driven industries);
 - (b) financial resources;
 - (c) incentives to compete;
 - (d) independence from and no connections to the divesting party; and
 - (e) no risk of creating new competition problems.
56. The study noted that after approving the sale and purchase agreement, DG Comp rarely intervened in the transfer process. It suggested that DG Comp might be able to intervene more often to check that the terms of the sale and purchase agreement are complied with and perhaps to help resolve any outstanding issues (eg IPRs) that could damage the effectiveness of the remedy.
57. In relation to access commitments, the study concluded that:
- (a) determining the nature of the commitments up front is inherently difficult:
 - (i) their effectiveness will depend on who is using the access, and this might not be known at the time; and

⁷This term was used to describe a process of selling sufficient quantities of product on to the market before the divestiture such that the purchaser faced a period of very low demand just after having acquired the assets.

- (ii) it is difficult to determine what 'non-discriminatory', 'fair' and 'reasonable' terms actually are;
 - (b) access fees can convey sensitive market information and/or dull incentives to compete;
 - (c) there may be a failure to transfer all the know-how necessary effectively to use the access; and
 - (d) monitoring is often inadequate.
58. The study will feed into a revised European Commission remedies notice, which is expected to be adopted some time in 2007.

Comparison with the CC study

59. It is important to be aware of the differences between the US, EU and UK merger control systems and the impact that these differences have on the emphases of the various studies.
60. The FTC study relates to a system of merger control in which pre-notification is mandatory and in which there are severe penalties for completing a merger before FTC clearance has been given ('gun-jumping'). Thus, the FTC is very unlikely to force the divestiture of the whole of the acquired business, as the Secretary of State did in *Sibelco*. For the same reason, situations in which the 'eggs' have been 'scrambled' prior to a decision on the merger so that an effective divestiture is infeasible, as in *Alanod*, are very unlikely to occur. Similarly, the FTC encounters fewer issues in relation to the need to hold separate and maintain the acquired business than do the UK authorities.
61. Like the FTC study, the DG Comp study relates to a system in which transactions cannot be completed until a clearance decision has been obtained, making it less likely to experience situations where integration has made divestiture simply infeasible, as in *Alanod*. This, together with a lack of resources for ongoing monitoring, makes it less likely than the UK authorities to use behavioural remedies. However, an important difference from the US system is that DG Comp can only consider remedy proposals offered by the parties. It has the ability to decline those proposals but the only alternative is prohibition, which could be disproportionate. This system therefore makes DG Comp more likely to experience problems related to the inadequate scope of divestiture packages and perhaps also the lack of obviously suitable purchasers.
62. It is also important to note the differences in focus and methodology between the FTC and DG Comp studies and the CC study. The FTC study covered 37 divestitures and the DG Comp study covered a total of 96 remedies. The number of remedies covered allowed both the FTC and especially DG Comp to provide statistical overviews of the success of different types of remedy and instances of different types of failure. The CC study, in contrast, covered just four sets of remedies, so that any statistical overview would have no value. However, the CC's small number of case studies did mean that, even with the limited resources available, it was possible to get an in-depth view of the remedies from the CC's final report through the implementation process.
63. Both the FTC and DG Comp studies were based largely on interviews. The FTC study was heavily based on interviews with the divesting party and the purchaser. Similarly, the DG Comp study used interviews with the party committing to the

remedy, any purchasers, licensees or companies granted rights as a result of the remedy, and any trustees. The CC study was also based largely on interviews but, in contrast, included interviews with customers and competitors (as well as the OFT as ongoing monitor and implanting body under the FTA), allowing the CC access to a different perspective on the effectiveness of the remedies.

64. The differences in merger control regimes and the differences in research methodology notwithstanding, the results of the CC study in relation to interim remedies and divestiture remedies are in line with those of the FTC and DG Comp studies. The experience in *Alanod* of firms pressing ahead with integration to the detriment of a divestiture package and in *Sibelco* of the divesting party degrading the asset package closely echo the findings of the DG Comp study on interim preservation measures. The results of the *Sibelco* case study also bear out the findings of the DG Comp study on the difficulties involved in assessing the suitability of purchasers, the risks of not finding a suitable purchaser and the links between those risks and the scope of the divestiture package. Further, the *Sibelco* experience strongly supports the warning from the FTC study that divesting parties will look for purchasers who will not be strong competitors. It is difficult, however, to find any echo of the *Coloplast* divestiture experience in either the DG Comp or FTC study, since neither of those institutions offer 'back-up remedies' in such a way.
65. The findings of the CC case studies in relation to behavioural remedies differ from those of the DG Comp study. The DG Comp study included only behavioural remedies in the form of access commitments (and did not include any behavioural remedies aimed at controlling outcomes such as the *Alanod* and *Coloplast* price controls) and found that such remedies were more likely to be ineffective or only partially effective than fully effective. This contrasts with the results of the CC's case studies which suggest that those behavioural remedies examined have been very largely effective. In particular, the *Centrica* remedies, which include access commitments, appear to be working well.
66. Although the CC has undertaken relatively few case studies, the greater level of success associated with its behavioural remedies is perhaps not surprising. The UK authorities, not least because of the differences in its merger control system, have more experience of behavioural remedies than DG Comp. It also seems likely to be important that the UK has more resources available for ongoing monitoring than does DG Comp and, in particular in relation to regulated sectors, can draw on the expertise of existing institutions to act as effective monitors. The experience from the behavioural remedies studied for this research suggests that, although they may not be appropriate for every situation, if designed carefully and monitored well, they can be effective.

Summary of remedies used in merger inquiries, 1999 to 2003

<i>Merger</i>	<i>Summary of remedies</i>	<i>Category of remedies</i>
1. CityFlyer and British Airways—BA's acquisition of CityFlyer's slots. The merger was expected to preclude competition for BA at Gatwick with the result that fares for air services would be higher than would otherwise have been the case	Cap on the share of slots used by BA at Gatwick airport. Cap on the share of slots held by BA in any 1- and 2-hour periods (to ensure that appropriate capacity was available to BA competitors in the peak operating periods)	Divestiture
2. Transfer of newspaper titles and related assets owned by Mirror Group plc to Trinity plc and Regional independent Media Holdings Ltd. The increased concentration of ownership was expected to result in: —the possible loss of one of the titles' distinctive voice representing unionist opinion, which would have threatened the adequate representation of the range of political opinion in NI; —reduced competition for newspaper advertising leading to higher advertising costs in NI.	Disposal of some of the acquired titles and related newspaper assets	Divestiture
3. Acquisition of Metalloxyd Ano-Coil Ltd (Ano-Coil) by Alanod Aluminium-Veredlung GmbH & Co (Alanod). The acquisition of the largest supplier of anodized aluminium coil for use in lighting in the UK by the second largest supplier had resulted in a clear loss of competition. The merger diminished competition and produced a dominant supplier. The possibilities for price discrimination in a market traditionally lacking price transparency were enhanced. In addition, with the dominant supplier being the sole source of the MIRO range of vacuum deposition products, greater potential existed for tying-in of MIRO with pre-anodized aluminium than would otherwise have arisen.	Maximum prices. Commitment to continuing supply of existing grades of aluminium. Removing links between sales of MIRO and sales of anodized aluminium. Commitment to supply MIRO products to competitors. Cancelling agreement with a manufacturer of plant for the MIRO process. Commitment not to give retrospective rebates. Maintenance of arm's length business relationships with Jordan Reflectors Limited which had ownership links with Alanod.	Controlling market outcomes Restrict vertical behaviour Restrict behaviour towards end-customers
4. Proposed merger between Carlton Communications Plc and United News Media plc	Recommended divestiture of: Meridian TV, a holding in GMTV Limited, Tyne Tees Television Ltd and other divestitures.	Divestiture
5. The JV Pentre Askern Group Limited was formed by combining businesses of Askern Group Limited (Askern) and Pentre (Holdings) Limited	Divestiture of a division of Pentre Askern and commitment to return the businesses to the separate ownership of Sylvan and Locker.	Divestiture

<i>Merger</i>	<i>Summary of remedies</i>	<i>Category of remedies</i>
<p>(Pentre). The merger created a business with an 80% share of the combined markets in the UK for steel, timber, plywood and cardboard drums, and a 39% share of the market in the UK for timber drum management services.</p> <p>The CC concluded that the merger was expected to have an adverse effect on competition only on the markets for timber, plywood and cardboard drums.</p>		
<p>6. The proposed acquisition by British United Provident Association Limited (BUPA) of Community Hospitals Group plc (CHG) and the acquisition by Salomon International LLC (SIL) of 26.8% of the ordinary share capital of CHG.</p> <p>The proposed BUPA/CHG merger was prohibited.</p> <p><i>Existing SIL/CHG and SIL/CHG/BUPA merger situations.</i></p> <p>It was concluded that these situations could be expected to be adverse to the public interest because the circumstances of BUPA's involvement in SBUKE's acquisition of the CHG shareholding. These circumstances were such as to make SBUKE's retention of the CHG shareholding a cause of concern and uncertainty, lasting for perhaps 12 months or more, to many parties involved with CHG.</p>	<p>Prohibition. It was recommended that SBUKE reduce its holdings within six months and that for so long as SBUKE held CHG shares it should be prohibited from exercising its voting rights without the consent of the DGFT.</p>	<p>Divestiture</p>
<p>7. The acquisition by Interbrew SA (Interbrew) of the brewing interests of Bass PLC (Bass). The merger would have made Interbrew the largest brewer in Great Britain, with an overall market share of between 33 and 38% and a portfolio of leading beer brands. In terms of the wholesaling and distribution of beer, Interbrew would have had a market share of approximately 33%. The merger would have strengthened Interbrew's portfolio of leading brands and lead to the creation of a duopoly between Interbrew and Scottish & Newcastle plc (S&N).</p>	<p>Interbrew was required to divest the UK business of Bass Brewers to a buyer approved by the DGFT. CC decision overturned on judicial review.</p>	<p>Divestiture</p>
<p>8. The completed acquisition by Coloplast A/S of the continence care business of SSL International plc. As a result of the acquisition the market share in the UK of Coloplast A/S and</p>	<p>The Secretary of State accepted undertakings requiring Coloplast to renegotiate the exclusive distribution agreement with the Mentor Corporation but later on the</p>	<p>Restrict vertical behaviour</p> <p>Controlling market outcomes</p>

<i>Merger</i>	<i>Summary of remedies</i>	<i>Category of remedies</i>
its subsidiaries (Coloplast) rose in the markets for sheaths, urobags and intermittent catheters. In the CC's view the greatest effect on competition was in the market for sheaths, where, in addition to giving Coloplast a very high market share, the acquisition had resulted in the elimination of Coloplast's main competitor, giving it control of the market-leading brands of latex and non-latex sheaths.	Secretary of State following a changes in circumstances announced that she had accepted undertakings imposing a cap on the price Coloplast could charge NHS hospitals for supply of non-latex sheaths	
9. Proposed acquisition by Vivendi Water UK PLC (VWUK) of First Aqua (JVCo) Limited (JVCo) from First Aqua Holdings Limited (First Aqua). The CC concluded that the proposed merger may be expected to operate against the public interest because it would have prejudiced the Director General of Water Service's ability to make comparisons between different water enterprises.	The CC recommended that VWUK was required to divest its 31.4% stake in South Staffs Group, thereby securing the independence of that company as a comparator. The Secretary of State disagreed and VWUK undertook to limit voting shares in Southern Water Investments Ltd to no more than 25% and to restrict number of its board appointees	Divestiture
10. The acquisition by Scottish Radio Holdings plc (SRH) and GWR Group plc (GWR), through the joint venture company Vibe Radio Services Ltd (VRSL), of Galaxy Radio Wales and the West Limited (Galaxy). The merger had significantly increased the already high market shares of local radio advertising held by the GWR stations in the Bristol and Bath, and four Taunton and Yeovil areas. There was extensive overlap of listeners between Galaxy 101 and both the GWR stations and some overlap of advertisers. The merger reduced the options open to companies advertising locally and reduced competition for local radio advertisers.	The CC recommended GWR should reduce interest in Vibe 101 to a level at which the OFT was satisfied it had no material influence. Opus, the GWR advertising sales house, should no longer sell Vibe 101 advertising. Failing these undertakings being given, GWR should divest all its shareholding in VRSL. GWR in fact sold all of its holding in VRSL to SRH.	Divestiture Restrict vertical behaviour
11. The acquisition by Centrica plc (Centrica) from Dynegy Inc (Dynegy) of two companies which owned and operated the Rough gas storage facility and associated assets. The CC concluded that, in the absence of further constraints, Centrica might have been expected: (a) to discriminate between customers in giving access to capacity at Rough; (b) to use to its advantage sensitive information gained from the operation of Rough; (c) to withhold information about the operation of Rough; (d) to be less innovative in marketing Rough	Centrica should sell all Rough's capacity and do so on non-discriminatory terms. It should auction all remaining capacity no less than 30 days before the start of each storage year. It should not participate in the primary sale process but reserve no more than 20% of Rough's capacity for itself in the first year, falling to 15% over a five-year period and remaining at 15% thereafter. Ensure separation of its storage business from all other parts of the group. Facilitate secondary market for Rough	Controlling market outcomes Restrict vertical behaviour

<i>Merger</i>	<i>Summary of remedies</i>	<i>Category of remedies</i>
products than another owner; and (e) to invest less in expanding Rough's capacity than another owner.	capacity. Offer a minimum of 20% of Rough capacity on annual contracts. Arrange independent review of compliance.	
12. The proposed merger between Carlton Communications Plc (Carlton) and Granada plc (Granada). The CC expected the merger to operate against the public interest in the areas of the impact on the other ITV regional licensees; and the sale of advertising airtime.	C-G should agree a package proposed by the ITC, safeguarding interests of other ITV licensees. C-G's combined advertising sales house should give other ITV licensees the right to carry forward current terms enjoyed with Carlton and Granada's sales houses separately. All existing customers of Carlton and Granada's advertising sales houses should have the right to renew their 2003 contracts on current terms. C-G to fund an independent adjudicator to oversee remedy.	Controlling market outcomes Restrict vertical behaviour
13. The proposed acquisition of Safeway plc (Safeway) by each of Asda Group Limited (owned by Wal-Mart Stores Inc (Wal-Mart) (Asda); Wm Morrison Supermarkets PLC (Morrison's); J Sainsbury plc (Sainsbury's); and Tesco plc (Tesco)	Asda, Sainsbury's and Tesco prohibited from acquiring all or part of Safeway (other than Safeway stores divested by Morrison's as part of remedy for its acquisition). Morrison's acquisition permitted on condition of divestiture of one-stop grocery stores in 48 localities where would be adverse effects and a further 5 smaller stores where acquisition would have damaged innovation and diversity.	Divestiture

Research methodology

1. This appendix sets out how those case studies were chosen and the tools that were used to research each one.

Selection of case studies

2. It was intended that the chosen case studies should fulfil a number of requirements. In particular, they should:
 - (a) be sufficiently far in the past to allow meaningful research on their success, but sufficiently recent to ensure they are relevant. In practice, this implied that this first tranche of cases would be restricted to cases considered under the FTA regime as cases under the Enterprise Act regime were too recent to be considered;
 - (b) cover different types of remedy, and especially those remedies most frequently used by the CC;
 - (c) include both examples that were thought to be successful and examples that were thought to be unsuccessful; and
 - (d) include both relatively straightforward examples and relatively complex examples.
3. Case studies were chosen from the period 1999 to 2003. As set out in Table 1, the MMC completed 48 merger inquiries in this period of which 14 involved remedies (other than prohibition). Further details of the remedies used in these merger inquiries are provided at Appendix 1.

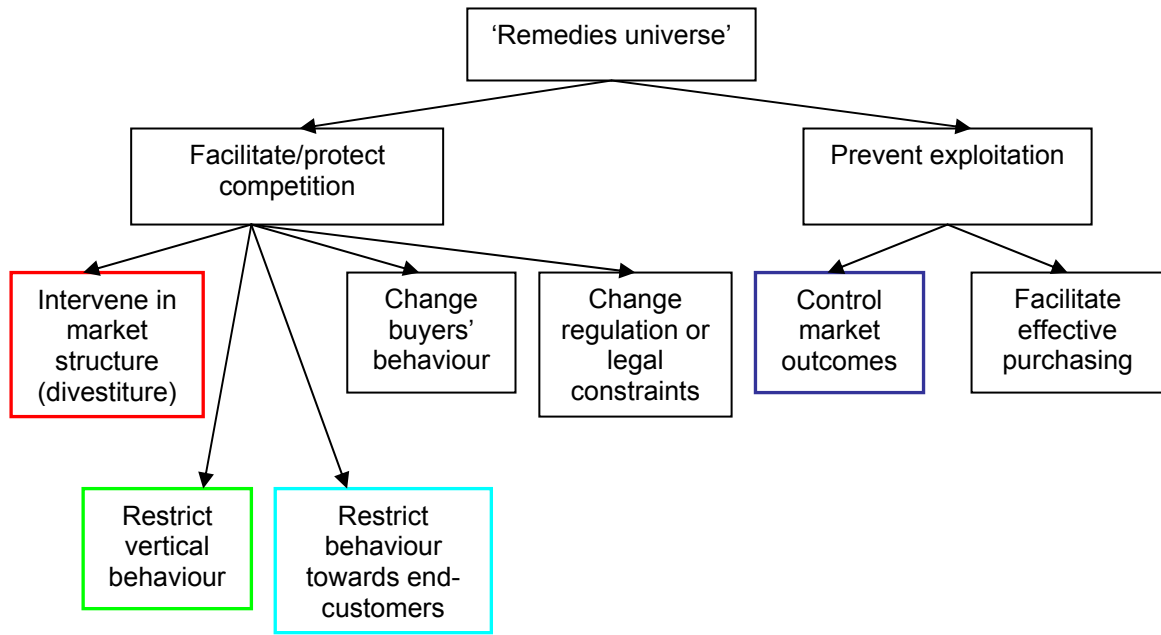
TABLE 1 Use of remedies in CC inquiries, 1999 to 2003

Total number of merger inquiries ...	48 (100%)
—of which prohibited	8 (17%)
—of which cleared unconditionally	26 (54%)
—of which cleared with remedies	14 (29%)

4. It is possible to categorize remedies broadly into the following types, according to whether they aim to facilitate or protect competition or whether they seek to prevent exploitation and by how they achieve these aims. This categorization is illustrated by Figure 1.

FIGURE 1

Categorization of remedies by type

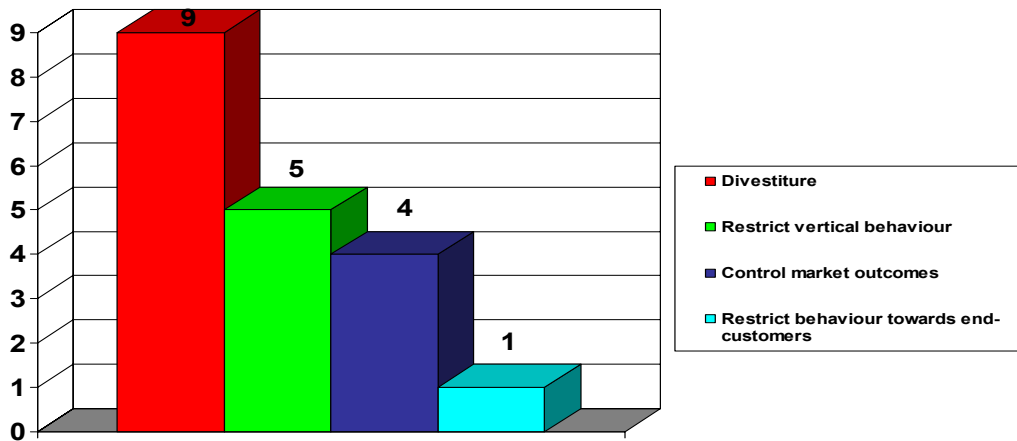


Source: CC analysis.

- By applying these categories to the remedies recommended by the CC in the period 1999 to 2003, it is evident that the most frequently used type of remedy was divestiture. Remedies to restrict vertical behaviour were the second most frequently used, closely followed by remedies to control outcomes (such as price controls). Remedies that sought to facilitate competition by restricting behaviour in relation to end-customers were only used once. Other types of remedy were not used in this period. The frequency distribution of the different remedy types is shown in Figure 2.

FIGURE 2

Frequency of merger remedies by type, 1999 to 2003



Note: Remedies do not sum to 14 because some inquiries utilized more than one type of remedy (see Appendix 1).

Source: CC analysis.

- In order to ensure coverage of those types of remedy most frequently used by the CC, it was clear that the case studies would need to include divestiture remedies,

remedies restricting vertical behaviour and remedies controlling outcomes. Cases where remedies were under review by the OFT were avoided.

7. It was decided that the most relevant remedy types could be covered using four studies: *Sibelco*, *Alanod*, *Centrica*, and *Coloplast*. This set of case studies also had the advantage of including two relatively straightforward cases (*Sibelco* and *Alanod*) and two relatively complex cases (*Centrica* and *Coloplast*) and also included two cases where the circumstances of the case were thought to constrain effective outcomes (*Sibelco* and *Coloplast*). The selection of case studies is set out in Table 2.

Research tools

8. Extensive background research was undertaken into each case study. This involved CC staff:
 - (a) reviewing the final report and inquiry files (in particular, submissions from and transcripts of hearings with parties to be contacted in the research);
 - (b) discussing issues with the Inquiry Director involved on the case; and
 - (c) consulting the relevant OFT case officer in connection with the implementation of the remedies.
9. Once this background research had been completed, relevant contacts were selected for interview. In each case, interviewees included representatives of:
 - (a) the OFT team involved in negotiating the remedies (and monitoring where appropriate);
 - (b) the party subject to the remedies;
 - (c) key competitors; and
 - (d) key customers.
10. Where possible and appropriate, other candidates for interview included:
 - (a) possible divestiture package purchasers;
 - (b) the divestiture trustee;
 - (c) industry regulators;
 - (d) government departments; and
 - (e) trade associations.
11. All interviewees received a formal invitation to participate in the study from the CC's Chief Business Adviser and Head of Remedies. Interviews were conducted by two members of the CC staff, with one member of staff involved in all interviews to provide continuity. A contemporaneous note was taken of each interview, and this was agreed with the interviewee.
12. Each interviewee was sent a topic guide in advance of the interview. The topic guide for each interview was different, reflecting the particular remedy and the position of

the interviewee in relation to it. However, interviewees were asked broadly similar sets of questions relating to:

- (a) their understanding of the reasons for the choice of remedy;
- (b) their understanding of what had happened since the undertakings had been put in place;
- (c) (for behavioural remedies only) whether the undertakings appeared to be constraining the company subject to them in the way originally intended;
- (d) whether the remedy had had any side effects;
- (e) whether the remedy was working in the way that they had expected; and
- (f) what, if anything, they would like to see done to improve the way in which the remedy worked or works.

Assessment of methodology

- 13. The methodology used in this research appears to have worked well. The chosen methodology was subject to various risks, but steps were successfully taken to mitigate each of them.
- 14. There had been concern that it might be difficult to identify suitable candidates for interview and to secure their participation in the study. The OFT, drawing on its experience in implementing and monitoring the remedies, was particularly helpful in identifying suitable candidates for interview. Sending a formal letter of invitation from a senior member of the CC staff which made clear the importance of the study helped to encourage participation. CC staff managed to secure interviews with all of those identified as suitable candidates.
- 15. A further concern had been that interviewees might be reluctant freely to share their views on the remedies with the CC. However, interviewees were forthcoming in their comments on the remedies in question once they had been assured that their comments would not be made public. The prepared topic guides helped to ensure that the interviewers covered the prima facie relevant issues. But the interviewers' wider knowledge of the inquiry and a willingness to pursue other lines of questioning as they arose were important in getting maximum value from these interviews.

Case study results

1. This appendix presents the main factual findings of the research in relation to each study in turn. The following aspects of each study are discussed:
 - (a) the main facts of the inquiry;
 - (b) key factors in relation to the choice and design of the CC's recommended remedy; and
 - (c) what happened after the CC's final report.
2. Following the presentation of the factual findings in relation to each study, a summary of the main learning points from that study is provided. These learning points are to be found, grouped thematically rather than by case study, in section 3 of the main body of the report.

Alanod

Main facts of the inquiry

3. The acquisition of Metalloxyd Ano-Coil Ltd (Ano-Coil) by Alanod Aluminium-Veredlung GmbH & Co (Alanod) was referred to the CC in July 1999.
4. Both Alanod and Ano-Coil processed sheet aluminium in coil form, which was used for its reflective qualities in commercial lighting units (known as luminaires). The companies anodized the aluminium to produce reflectivities of around 85 per cent, though higher levels could be achieved (at higher cost) using the process of vacuum deposition through which Alanod produced its MIRO product range.
5. Alanod was a technologically advanced, profitable company with a strong market presence in the UK and Europe. Ano-Coil, by contrast, was financially weak and its parent company had been under bank control since 1997. Alanod had strong links with Jordan Reflectors Ltd (Jordan), a specialized manufacturer of louvres for ceiling light fittings, with Jordan's parent company being owned by two individuals who also owned a joint share in Alanod. Shortly before the merger Ano-Coil had restructured itself and was budgeting for a small pre-tax profit in 1999. Its owners said that they did not have the financial resources to secure Ano-Coil's medium- to long-term future and had decided that their best course of action was to sell the business as a going concern. The effect of the merger was to increase Alanod's share of the UK market for anodized aluminium coil for use in lighting from about 35 per cent to about 75 per cent.
6. The OFT did not become aware that the merger had been completed until some time after the event. The OFT was left with only two months in which to complete its phase 1 investigation of what was now a completed merger. Under the FTA, the OFT could not put in place interim undertakings until after a reference to the CC had been made. Following the reference, the OFT sought interim undertakings from Alanod, but Alanod responded by noting that Ano-Coil had already been integrated with Alanod. Eventually, very limited interim undertakings were put in place, which obliged Alanod to maintain the Ano-Coil name and product codes.

7. The CC concluded that the merged entity would have the ability and the incentive to raise prices for specular anodized aluminium in the UK. It also noted that the merged entity would be the sole supplier of the high reflective quality 'MIRO' range and that it could tie sales of MIRO to sales of more basic products, thereby damaging competition in the supply of those more basic products. Customers were highly fragmented, with the largest accounting for around 20 per cent of anodized aluminium usage in the UK and the next largest accounting for around 7 per cent of usage. Luminaire manufacturers also bought ready-made louvres, but in the UK Jordan (which was linked to Alanod) was the largest supplier.
8. In its final report, the CC noted that the amount of the start-up costs a new entrant would need to incur relative to the size of the market constituted a barrier to entry. However, the CC also noted that other barriers to entry also existed. Notably these included exclusive distribution arrangements that Alanod had with key distributors, initially with Thyssen. In addition, a deal with Von Ardenne Anlagentechnik GmbH (Von Ardenne) effectively prevented others from using the method of manufacturing the MIRO product which been partly developed by Von Ardenne. Alanod also used retrospective rebates to customers that would have had the effect of deterring customers from switching. It concluded that the strength of the merged entity in the EU market, together with a 7 per cent EU tariff on imports from third countries, would deter entry from outside the EU. The CC also noted that a strong independent distributor sector would have increased the scope for inter-brand price comparisons, thereby helping to facilitate competition. However, the independent distributor sector was not strong, and Alanod's exclusive distribution arrangements militated against its development.

The choice and design of remedy

9. The CC recommended a package of seven behavioural remedies:
 - (a) maximum prices (to be reviewed after five years);
 - (b) continuing supply of existing grades of specular anodized aluminium;
 - (c) not linking sales of MIRO products to sales of lower-grade anodized aluminium products;
 - (d) an obligation to supplying MIRO products to competitors;
 - (e) cancelling its exclusive distribution agreement with Von Ardenne;
 - (f) not giving retrospective rebates; and
 - (g) maintaining an arm's length relationship with Jordan.
10. The key factor in the CC's choice of remedies was the fact that the substantial integration of the Ano-Coil business into Alanod had meant that no viable stand-alone divestiture package existed. At the time of the reference to the CC, when the OFT wrote to Alanod's advisers seeking interim undertakings, it became apparent that Ano-Coil's technical, sales and marketing functions had already been dismantled. Given that Ano-Coil was no longer a business by this stage but only a production plant, only other manufacturers would have been interested in it as a divestiture package. The CC had identified SACALL (an Italian manufacturer) as a possible purchaser but when the CC visited SACALL it made clear that it was not interested. On this basis, the CC considered divestiture too uncertain a remedy.

11. The CC's final report notes that other more radical structural remedies were also considered. These are not specified but might have included requiring Alanod to sell some other, stand-alone, part of its business outside the UK. However, since Alanod was incorporated outside the UK, controlled by foreign nationals and had no business in the UK other than Ano-Coil, the CC concluded that this was not practicable.
12. The CC then considered behavioural remedies and in particular a price control, effectively as a second best solution. It noted that there would be difficulties in operating a price control across a multiplicity of products and it noted the scope for avoidance of a control through redefinition of existing products.
13. Alanod suggested a price control on a per-customer basis, under which the price a customer paid in the future would be linked to the prices it had paid from Alanod and Ano-Coil in the past. The CC accepted that this had merit. However, it noted that not all those customers whose aluminium coil was supplied by Alanod bought directly from Alanod; some bought indirectly through another company, Thyssen Garfield Ltd (Thyssen), a metals stockholder and distributor. Alanod would not be aware of the prices they had paid and these customers would not be protected by the control. It also attempted to ensure that Alanod did not avoid the control by redefining grades, and specified that it should continue to supply existing grades.
14. As well as controlling outcomes, the CC also recommended putting in place measures to protect and facilitate competition. Recognizing that Alanod would be a powerful supplier to companies that were downstream competitors, the CC recommended that Alanod should continue to supply its competitors with MIRO products. The CC also attempted to ensure that the market was not foreclosed to entry by recommending that Alanod should not tie sales of MIRO to sales of other more basic products and should not give retrospective rebates to customers. The recommendation that Alanod should cancel its exclusive distribution agreement with Von Ardenne was also intended to remove a significant barrier to entry. The CC also recommended that Alanod maintain an arm's length relationship with Jordan.

What happened after the final report?

15. With the publication of the CC's final report in January 2000, the Secretary of State asked the DGFT to consult on the nature of the price control remedy. In April 2004 the OFT proposed a modified version of the remedy to the Secretary of State. The OFT's recommended remedy initially included a published price list rather than a price control, although after consultation the OFT reverted to recommending a price control.
16. During negotiations with the OFT, Alanod requested that the price control include an RPI escalator. It argued that this was necessary to protect it from unforeseen cost increases, including the impact of the Climate Change Levy. The OFT linked the level of the price control to the market price of aluminium on the London Metal Exchange, since aluminium was the main input into Alanod's luminaires and was expected better to reflect any changes in cost (decreases as well as increases) than would the RPI.
17. Alanod also argued that the undertakings should be time limited, but the OFT did not agree to the inclusion of such a 'sunset clause' in the undertakings. The final undertakings do contain provision for the OFT to review them after five years, but this review has not yet taken place.

18. In order to monitor compliance with the price control, the OFT used information provided by Alanod, Ano-Coil, Thyssen and their customers to compile a schedule of prices paid by customers immediately prior to the merger. This was a difficult task because prices were individually negotiated, so that the schedule had to contain separate prices for each customer and some customers had no record of the price they had paid. One hundred and thirty-three pages of schedules (one for each customer) were prepared as an appendix to the undertakings.
19. In general, it appears that Alanod's customers sell their products in an aggressively competitive market, which compels them to keep input costs to a minimum. This in turn appears to have resulted in pressure on Alanod to reduce prices. The pressure appears to stem from:
 - (a) customers switching away from Alanod to other suppliers of anodized aluminium luminaires;
 - (b) luminaire manufacturers using non-anodized (raw) aluminium, producing substitutes for low-specification anodized aluminium luminaires; and
 - (c) customers moving their production facilities from the UK to lower-cost countries such as China and therefore looking for suppliers in these areas instead.
20. In addition, consolidation among downstream lighting manufacturers has resulted in those manufacturers enjoying a more powerful position in negotiations with suppliers such as Alanod.
21. Alanod has said that this pressure has meant that it has been unable to raise prices up to the level permitted by the control. Although aluminium prices have risen from \$1,500 per tonne in 1999 to \$1,900 per tonne in 2005, Alanod has not been able to pass these increases on to customers (although the control would have enabled it to do so). It has maintained margins by driving down processing costs.
22. The exception to these factors is the MIRO high-specification luminaire, for which there is no close substitute and in which Alanod continues to have 100 per cent of the supply in the UK. It also appears that no other manufacturer can supply material of equal quality to Alanod's MIRO product. It appears that Alanod could have market power in the supply of the MIRO product, and that that price control is a biting constraint. Evidence from customers suggested that Alanod has not tied sales of other products to sales of its MIRO product.
23. Alanod faces a price control that controls prices on a per-customer basis by reference to the prices paid by each customer for products from Alanod and Ano-Coil separately, before the merger. The price control does not apply to new customers (although it is possible that if prices to new customers drifted far out of line with prices to existing customers, existing customers might take advantage of an arbitrage opportunity). The fact that the downstream market has been characterized by consolidation and exit rather than entry has therefore been important for the control's effectiveness, although it was not something that was explicitly foreseen in the CC's final report.
24. In relation to the other undertakings under which Alanod operates (ie an obligation to supply MIRO to competitors, the cancellation of the exclusive distribution arrangement with Von Ardenne, an obligation not to give retrospective discounts and the maintenance of an arm's length relationship with Jordan), the OFT has received no complaints.

Summary of key learning points

25. The key learning points from this case study can be summarized as follows:
- (a) Even where there is no specific intention to undermine any divestiture package, pursuing the normal course of integration following completion of a merger might remove any scope for an effective divestiture remedy. The lack of effective interim remedies could therefore seriously constrain the CC's choice of final remedy for completed mergers.
 - (b) It can be difficult to control prices in industries where input costs are subject to major changes. Even where attempts are made to tie prices to changes in key costs, if other costs fall significantly the control might not be a biting constraint.
 - (c) In markets where there is substantial churn (or substantial market growth), controlling the prices paid by each customer by reference to the prices they paid previously is unlikely to be effective.
 - (d) In markets where there is significant innovation and/or new product development price controls might be eroded as the controlled products become a smaller part of the market.
 - (e) Price controls, by holding down a firm's prices, can increase the controlled firm's market share and perhaps help it expand its share of other markets (or market segments) beyond that for the controlled product. Ultimately, price controls might force firms that are unable to compete with the controlled price out of the market.

Sibelco

Main facts of the inquiry

26. The acquisition of Fife Silica Sands Ltd and Fife Resources Ltd (the Fife companies) by SCR Sibelco SA (Sibelco) was referred to the CC in January 2001.
27. Sibelco was a global supplier of silica sand, which is used mainly in the manufacture of glass containers. It had bought the UK's principal supplier, Henderson Minerals and Chemicals (HMC), in July 2000. The Fife companies were bought in September the same year. These acquisitions gave Sibelco 86 per cent of the UK market by volume.
28. The merger was completed at the time of reference. As noted in relation to *Alanod* above, under the FTA, the OFT could not put in place interim undertakings until after a reference to the CC had been made. Thirteen days after the reference the OFT accepted interim undertakings, in which Sibelco agreed to take no action that would reduce the ability of the Fife companies to be run as a going concern 'without accepting any duty to make any substantial capital investment'.
29. The CC considered whether the Fife companies constituted a failing firm, but concluded that they did not. The CC concluded that horizontal concentration created by the merger was expected to act against the public interest.

The choice and design of remedy

30. The CC recommended that Sibelco be required to divest the Fife companies to a purchaser approved by the OFT within six months of the publication of the CC's final report.
31. The CC had considered behavioural remedies and specifically price regulation as an alternative to divestiture. However, it had concluded that price regulation would be difficult to operate because of the many different grades of product and the difficulty of unbundling transport costs from the cost of the product. The CC was also reluctant to introduce price regulation in an unregulated industry. In addition, Sibelco itself had argued in favour of divestiture over price control.
32. Key factors in the CC's choice of remedy were:
 - (a) the CC's view that possible purchasers would be attracted by the size of the silica sand reserves which the Fife companies had access to and would be willing to invest in the business on that basis; and
 - (b) the fact that during the inquiry two companies had said that they would be interested in acquiring the Fife companies.
33. However, one of the companies that expressed interest in acquiring the Fife companies qualified its interest emphasizing that the price would need fully to reflect the business problems that it perceived were experienced by the Fife companies. The other company that expressed interest in acquiring the Fife companies qualified its interest by making clear that it would need to be satisfied that such a purchase would add shareholder value.
34. Furthermore, the CC was told at a very late stage in the inquiry by two directors of Fife Silica Sands that the company was in a sufficiently weak financial position that, without a significant injection of finance, the quarry would almost certainly be placed on 'a care and maintenance basis'. They also told the CC that much of the equipment at FSS was coming to the end of its working life, by which time known reserves would also be exhausted.

What happened after the CC's final report?

35. Following the publication of the CC's final report in July 2001, the OFT recommended to the Secretary of State that undertakings should be sought from Sibelco implementing the CC's recommended remedy. In addition, he recommended that the undertakings should allow for the appointment of an independent divestiture trustee in the event that a sale by Sibelco had not taken place within six months. This recommendation was accepted in July 2001. It was the first time that a divestiture trustee provision had been used in the UK.
36. During the negotiations with the OFT, Sibelco sought to argue that the divestiture package was not clearly defined in the final report, for example as to whether it should include licences and options held by FSS. The OFT noted that, although the CC had suggested possible purchasers, it had not provided a set of criteria that could be used to assess the suitability of purchasers. Sibelco argued that neither of the companies that expressed interest in acquiring the Fife companies were suitable because their main interests were in construction materials.
37. The Secretary of State accepted undertakings from Sibelco at the end of October 2001. The undertakings required Sibelco to divest the Fife companies to an approved

purchaser by 18 January 2002 and also ‘without accepting any duty to make any substantial capital investment additional to investment arrangements in place at the time of acquisition’ to maintain the Fife companies as a going concern, and ‘except with the prior written consent of the Director General of Fair Trading’ to maintain and preserve the assets of the Fife companies.

38. The undertakings also provided for the OFT to require Sibelco to appoint a divestiture trustee. The trustee would monitor Sibelco’s compliance with its obligations under the undertakings. However, since Sibelco was not required to appoint a divestiture trustee until after it had failed to meet the deadline for divestiture of the Fife companies, it is not clear how effectively compliance with the undertakings—in particular, those provisions relating to the maintenance of the business as a going concern—could have been monitored.
39. Sibelco appointed an investment bank to sell the Fife companies by the 18 January 2002 deadline. The bank identified 35 potential purchasers and by November 2001 had three indicative offers of quite different amounts, one of which was negative. The OFT approved the bank’s long list and in early January, approved the highest bidder as a suitable purchaser. The following week, that bidder withdrew.
40. This meant that Sibelco had failed to sell the Fife companies by the 18 January deadline. However, on the basis that there were several other possible purchasers still in discussion with the investment bank, the OFT delayed the appointment of the divestiture trustee for a month to allow time for further negotiations.
41. In January 2002, the Fife companies wrote to their two largest customers telling them that it could no longer supply them with sand to their specification and that unless they were prepared to change their specification they should source supplies from elsewhere. One of these customers withdrew its business and the other significantly reduced its business. On the same day as the companies wrote to these customers, they also wrote to the OFT arguing that the loss of these customers would affect the sales process. At about the same time (ie between the withdrawal of a possible purchaser’s offer and the appointment of a divestiture trustee), we were told, FSS cancelled leases on land it had earmarked for future exploitation of silica sand reserves.
42. No purchaser having been secured during the month’s extension, a divestiture trustee was appointed on 19 February 2002. The trustee was a partner with the accountancy firm that had been FSS’s auditors, and the firm resigned the audit role on his appointment. The trustee retained the investment bank that had been employed by Sibelco during the initial divestiture period as an adviser.
43. In early March the trustee reported to the OFT that FSS was cash positive, but that any further reduction in sales or the need for further investment would change this. In the report the trustee also stated that he believed that his obligation was to sell the Fife companies at the highest price attainable and he asked whether he could sell the quarry for landfill as this could secure a better price. The OFT made clear to the trustee that his role was to sell the Fife companies in order to remedy the CC’s adverse finding and that a sale for use as landfill would not achieve this.
44. By this time a possible purchaser had emerged. There were suggestions from Sibelco that this purchaser actually wished to use the quarry for landfill and the OFT received several letters of protest from concerned local residents about possible usage of the quarry as landfill. The OFT wrote to the possible purchaser asking in some detail what its intentions for the business were. Issues explored included likely

customers, intentions to open reserves, and plans to tackle quality problems. In mid-March the OFT approved this purchaser.

45. At a meeting with the OFT a week later (followed up by a letter in early April), Sibelco argued that the loss of business from its two largest customers because of 'unavoidable quality problems' constituted a material change of circumstance that necessitated its release from the undertakings. The OFT did not accept these arguments.
46. The Fife companies were bought by this last possible purchaser for a nominal sum in June 2002. The new owner of the Fife companies has invested in the site, installing new technology to address the quality problems. It also negotiated a new contract with one of the major customers that took its business elsewhere after receiving the letter from the previous FSS management and on the strength of that contract it increased the quarry's capacity. In addition, the new owner succeeded in re-establishing the lease that was terminated by FSS and has secured planning permission to exploit reserves on that land.
47. We were told that in 2002 Sibelco offered some of its major customers contracts of between three and five years. The new owner is competing with Sibelco for that business as the current contracts expire. The new owner acknowledged that it would in principle be able to make more money by using the quarry for landfill, but it would not be able to obtain planning permission for this.

Summary of key learning points

48. The key learning points from this case study can be summarized as follows:
 - (a) In the absence of restrictions on behaviour, firms may attempt to undermine the effectiveness of a divestiture package. It is important to ensure that measures are put in place to protect against this. In particular, it is necessary to ensure that final undertakings include measures to ensure that a divestiture package is maintained until divestiture. It is important that compliance with such measures is actively monitored.
 - (b) It is important to be clear about all those elements that should be included in a divestiture package, and all the key criteria that should be used in assessing the suitability of purchasers.
 - (c) Approval of only the favoured bidder for a divestiture package increases the riskiness of the remedy by introducing the potential for delay should the purchase by the approved purchaser fall through. It is better to approve several purchasers (eg those shortlisted). Although it involves more work, it increases the chances of successful completion.
 - (d) Potential bidders for a divestiture package should be assessed thoroughly. High-level statements of interest are not sufficient indicators of genuine interest in a divestiture package and it is important to take account of a firm's incentives and the information available to it in gauging whether it is likely to be a willing and able purchaser.
 - (e) The interests of the management of a business to be divested should be taken into account in the design of a divestiture remedy. Were the management of a business being divested opposed to the divestiture, this may increase the risk of an ineffective sale process. In such circumstances it might be appropriate to consider the use of a monitoring (and ultimately divestiture) trustee.

- (f) It is important to retain the option of appointing divestiture trustees to sell the divestiture package at no minimum price. Where this fails to provide an adequate incentive on the parties to manage an effective sale process themselves, it can provide the sole means of implementing the remedy. Although it is important to maintain the divestiture package, the effectiveness of a divestiture remedy can be preserved even with a damaged divestiture package if it is sold at the right price to a purchaser who will use it to compete.
- (g) It might not always be clear to trustees that, although they are remunerated by the parties, they are working for the competition authorities. This should be made clear from the outset.
- (h) Where (under the FTA) the CC handed over implementation of remedies to the OFT, there was a risk that the OFT would not have the benefit of the full understanding of the issues that the CC had gained during its inquiry. Parties to the negotiation could use this to reopen arguments during the negotiation. There was also a risk that negotiations might take longer and might be less effective because the parties had to 'start again' with the OFT.

Coloplast

Main facts of the inquiry

49. The acquisition of the continence care business of SSL International plc (SSL) by Coloplast A/S (Coloplast) was referred to the CC on 14 January 2002.
50. Coloplast was a Danish company that developed, manufactured and marketed ostomy, continence care and dressings for chronic wounds. It had subsidiaries in 22 countries, including Coloplast Ltd in the UK. Coloplast Ltd marketed Coloplast's products through its own subsidiary Coloplast Direct, a dispensing appliance contractor (DAC)⁸ which dispensed appliances direct to clients via a home delivery service. By acquiring SSL, Coloplast raised its shares of the markets in the UK for intermittent catheters to 26 per cent, for urobags to 58 per cent and for sheaths to 92 per cent. The merger was completed at the time of the reference.
51. The two companies supplied these products both to hospitals and to the community sector (primary healthcare). Prices in the community sector were determined by the Drug Tariff negotiated between suppliers and the Department of Health. Prices in the hospital sector were determined through a process of open competitive tendering administered by the NHS Purchasing and Supply Agency (PASA).
52. The CC noted that Coloplast supplied the market-leading non-latex sheath, Clear Advantage, in the UK under an exclusive distribution agreement with a US company, Mentor. Coloplast was also the only distributor of the Conveen Security+ sheath, the closest competitor to its own Clear Advantage product. The CC was concerned that the merger would result in a horizontal concentration of supply of non-latex sheaths to the hospital sector. There were other non-latex sheaths in the market, manufactured in the USA and distributed by Jade and Sims Portex, but these were not seen as significant competitors. Although the parties had argued that the geographical market was at least as wide as the European Economic Area, the CC concluded that regulatory and patent restrictions would make it difficult for overseas firms to supply the UK market. It concluded that three relevant markets were affected by the merger:

⁸DACs are dispensers of appliances but also offer value-added services such as home delivery in excess of those services offered by pharmacists.

the supply of sheaths in the UK, the supply of urobags in the UK, the supply of intermittent catheters in the UK.

53. In relation to urobags, the increase in Coloplast's market share from 6 to 58 per cent was not considered sufficient to cause a problem. In relation to intermittent catheters, an increase from 19 to 26 per cent was similarly not considered problematic because of the existence of a strong competitor. The CC was concerned about the horizontal concentration that the merger would create in sheaths, in which Coloplast's share would rise from 34 to 92 per cent. The CC considered that the NHS might be expected to exercise countervailing buyer power but that the importance of clinical freedom in determining the products prescribed would prevent the NHS from exercising buyer power. In the community sector, prices were determined by the Drug Tariff and there was no evidence of suppliers forcing price increases (eg by threatening to withdraw products), so no adverse effect was expected. In the hospital sector, since PASA had an established alternative provider of latex sheaths with a significant market share, the CC concluded that it did not expect the merger to result in an adverse effect in the supply of latex sheaths to the hospital sector. However, it did expect an adverse effect in the supply of non-latex sheaths to the hospital sector.
54. An expected adverse effect was identified in relation to prices. Innovation was not expected to be adversely affected because, although the distribution agreement with Mentor could have dampened innovation, this agreement was due to expire in 2007 (Coloplast did not plan to renew it) and innovation was thought to be driven by longer-term goals. Coloplast was not thought to face an incentive to reduce quality because this would reduce the clinical performance of the product, having a negative impact on Coloplast's reputation more widely.
55. The CC was also concerned about the vertical effects of the merger. In particular, it was concerned that the merger would increase Coloplast's presence in the supply of sheaths in the community sector as a result of its increased ownership of DACs. Post-merger Coloplast-owned DACs would account for 78 per cent of all sheaths, 48 per cent of all urobags, and 57 per cent of all intermittent catheters supplied through DACs in England. There was concern that this could increase barriers to entry, give Coloplast access to information not available to its competitors, and allow Coloplast DACs to favour Coloplast products over those of competitors, both directly and through its funded continence care nurses (although there were so few of these nurses the effect was not considered likely to be major).

Choice and design of remedy

56. The CC recommended that Coloplast should undertake to renegotiate its contract with Mentor to secure either the divestiture of the Clear Advantage brand *without* the product or a divestiture of the Clear Advantage brand *with* product. The CC said specifically in its report that, if these negotiations resulted in an unsatisfactory outcome, the OFT should consider a price control remedy. In addition, the CC was aware that the Department of Health was reviewing DAC remuneration. The CC noted the distortive effect of the two-tier (hospital and community sector) pricing on competition and urged the Department to conclude its review as soon as possible. It also encouraged the OFT to consider a review of the anti-competitive effects of the rules in relation to the supply of appliances.
57. Coloplast had suggested that the CC should recommend that it issue a temporary licence (until 2007) to another supplier to distribute Conveen sheaths in the UK. The CC rejected this suggestion on the grounds that:

- (a) another supplier would not have competed as effectively as Coloplast itself would have absent the merger;
 - (b) finding a licensee might be difficult given the short-term nature of the licence; and
 - (c) Conveen product distributed by Coloplast in the rest of Europe might find its way into the UK through secondary markets, confusing prescribers.⁹
58. The CC also considered a price control on non-latex sheaths supplied to the hospital sector until the expiry of the agreement with Mentor. However, this was rejected for two reasons: first, because this market was characterized by competitive tendering and was one of the few areas in the NHS that appeared to be open to price competition, which could be undermined by a price control; and secondly, because the continued existence of the Mentor agreement, with its minimum volume obligations, could represent a disincentive for Coloplast to introduce its new product, since this could harm sales of Clear Advantage. By contrast, the removal of the exclusive agreement with Mentor would not affect price competition in the competitive tenders and would increase Coloplast's incentive to bring on its new product range.
59. The CC did consider a remedy involving the divestiture of the SSL business. However, it noted that the adverse effect expected related to just one product type in one part of the market. If an effective remedy could be crafted that affected only that product in that part of the market, a divestiture of the whole of the SSL business would, by implication, be disproportionate.

What happened after the CC's final report?

60. At the end of May 2002, the OFT advised the Secretary of State that it should be instructed to seek undertakings from Coloplast that it would renegotiate its contract with Mentor and that if this could not be achieved within six months it would consider other appropriate remedies. The OFT also said that it would reflect on the CC's invitation to review the supply of appliances.
61. At the beginning of August 2002, the OFT reported that it had agreed undertakings with Coloplast. Coloplast undertook to renegotiate its contract with Mentor to divest either the Clear Advantage brand alone (which would have allowed Coloplast to market the product under another name) or the Clear Advantage brand and product.¹⁰ The undertakings set out that the renegotiation should be completed within six months of the publication of the CC's report, with a deadline of mid-December 2002. This deadline would allow the new arrangements to be settled in advance of the next round of competitive tendering. The undertakings also set out that if this deadline were not met, the OFT would advise the Secretary of State to seek other remedies. Coloplast was required to provide the OFT with progress reports every two weeks. Mentor was not subject to any undertaking because it was not one of the parties to the merger.
62. By January 2003, it was clear that negotiations had reached an impasse and that agreement was highly unlikely. In the interview for this research, Coloplast argued that the obligation to renegotiate the agreement with Mentor to a deadline that had entered the public domain had severely damaged its ability to negotiate an

⁹This could also have undermined any licensee, although this was not referred to in the CC's final report.

¹⁰The undertakings obliged Coloplast to renegotiate the agreement and not simply to use best or reasonable endeavours. The undertakings do not state whether the divestiture of brand or brand and product was to be preferred.

acceptable outcome. This notwithstanding, it could also be argued that acknowledgement in the CC's report of the fact that if Coloplast were not to fulfil its obligations to Mentor it would be open to litigation in the New York courts for breach of contract might have signalled to Coloplast a low likelihood of action to enforce the renegotiation undertaking. The CC's report had also made clear that the most likely alternative to renegotiation was a price control. Thus, in theory, if Coloplast had preferred a (temporary) price control to renegotiation, it could have achieved its preference by failing to renegotiate. In practice, Coloplast told us that it would have preferred the CC's first choice of remedy to a price cap.

63. The failure to renegotiate constituted a change of circumstance under section 88(4) of the FTA and the OFT advised the Secretary of State that the undertakings in place needed to be varied.
64. The OFT had considered enforcement of the existing undertakings by means of an order. Coloplast reiterated strongly to the OFT the argument that enforcement would leave it open to litigation in the courts. Ultimately, the Secretary of State was advised that an order would not be enforceable and declined to attempt to enforce the remedy in this way.
65. The OFT had considered other appropriate remedies. It considered Coloplast's offer to waive the exclusivity provisions of the Mentor agreement in relation to supply to the hospital sector. However, the OFT pointed out that for this remedy to be effective, Mentor would need to have sufficient incentive to compete with Coloplast in this sector, even though it would have no expectation of follow-up sales in the—much larger—community sector. The OFT thus had serious reservations about this remedy.
66. The OFT also considered a temporary control on prices of non-latex sheaths in the hospital sector, as outlined in the CC's final report, which would remain in place until the Mentor agreement expired in 2007. On balance, because the CC's adverse effects finding related only to prices (and not quality or innovation), the OFT accepted that a price control could be considered more proportionate than a structural alternative. It therefore recommended a price control on both Clear Advantage and Conveen Security+ until 2007 and an undertaking not to renew the agreement with Mentor after its expiry in 2007.
67. The OFT was successful in putting in place the price control in advance of the next round of competitive tendering by PASA. The OFT negotiated with Coloplast a control that was set close to its costs of production. Indeed, the control was so close to its costs that Coloplast sought, at a late stage, an exemption from the Competition Act 1998 if the price control resulted in predatory behaviour. The request was refused. In line with its recommendation, the undertakings agreed with Coloplast by the OFT also obliged Coloplast not to renew its agreement with Mentor after its expiry in 2007.
68. Notwithstanding the CC's concerns about the potential of the price control to undermine price competition in the competitive tendering process, the level of the control was made public. In the interview for this research, Coloplast said that it had bid into the tender at exactly the level of the control. However, despite the level of the control being public knowledge, Coloplast's competitors entered bids close to their pre-inquiry levels, ie above the level of Coloplast's control. As a result, Coloplast's share of supply in the hospital sector grew significantly. Given that the hospital sector acts as a 'gateway' into the community sector, this is likely to mean that Coloplast could enjoy a stronger position in the community sector where prices—though controlled by the Drug Tariff—are higher.

69. The OFT noted that in a recent tendering round Coloplast had overshot its price control. Coloplast wrote to the OFT informing it of the inadvertent breach. Coloplast told the OFT that the price control had been breached because of the action of a new member of staff who was unaware of it. This had been an oversight and Coloplast was taking steps to ensure that this did not happen again.
70. It appears that the obligation on Coloplast not to renew its agreement with Mentor could be providing a disincentive for it to expand into the community sector with Clear Advantage. This is because, from 2007, Coloplast will no longer distribute Clear Advantage so it would not be in Coloplast's interest to grow the brand's long-term strength. In interviews for this research, it was suggested that Coloplast had switched its emphasis to the Conveen brand in the community sector. However, Mentor has been marketing its Transfix product (a self-adhesive sheath that is virtually identical to Clear Advantage) very aggressively. Coloplast confirmed that it has been losing market share in the community sector to Mentor, but said that it hoped to recapture lost ground in the future. In 2005, the Department of Health started a review of Chapter 9 of the Drug Tariff, which deals with continence care products.
71. On 2 June 2006, Coloplast announced that it had acquired the urology business of Mentor. However, in accordance with the undertakings it had given to the Secretary of State in 2002, Mentor's urisheath business in the UK was not part of the deal. It signed an agreement giving Rochester Corp the rights to distribute Mentor's urisheath products in the UK.

Summary of key learning points

72. The key learning points from this case study can be summarized as follows:
 - (a) The existence of a contingency remedy option is important in ensuring that parties will give effect to a remedy. Such contingency options might include enforcement of the remedy by order or the implementation of a 'back-up remedy' that is more intrusive for the parties than the initial remedy.
 - (b) If remedies set out a preferred remedy but also include a 'back-up remedy' that can be implemented if the preferred remedy is not implemented, it is important to ensure that the parties have appropriate incentives to implement the preferred remedy.
 - (c) Where the effectiveness of a remedy depends on action by a third party that is not subject to the remedy, there is a risk that the remedy will not be effective.
 - (d) The publication of a time period within which a divestiture must be completed can weaken the bargaining power of the divesting party. Revealing the required outcome of negotiations might have the same effect.
 - (e) If sufficient care is taken over the design of behavioural remedies and in particular if active and informed monitoring takes place, they can be effective.
 - (f) In markets where bidding is involved there is a risk that revealing the level of a price cap will result in bids coalescing around that level (even though in fact in this case, when the level of the cap was revealed this did not occur).
 - (g) When choosing and designing a price control remedy, it is necessary to take account of the effect of a price control on products that are related to controlled products.

- (h) Price controls, by holding down a firm's prices, can increase the controlled firm's market share and perhaps help it to expand its share of other markets (or market segments) beyond that for the controlled product. Ultimately, price controls might force firms that are unable to compete with the controlled price out of the market or deter entry.
- (i) Where remedies remain in place over a period of time and there is a risk that parties might overlook them, it might be necessary to remind parties periodically of their obligations.

Centrica

Main facts of the inquiry

- 73. The acquisition by Centrica plc (Centrica) of Dynegy Storage Ltd and Dynegy Onshore Processing UK Ltd (together the Dynegy companies) was referred to the CC on 25 February 2003.
- 74. Centrica was formed by the 1997 demerger of British Gas plc into two parts: Centrica and BG plc. Centrica includes CEMG, which sources the gas and electricity that is used to supply British Gas residential and Centrica business customers. CEMG was responsible for Centrica's own gas production. Dynegy, a US company, had acquired the Rough gas storage facility from BG plc in 2001. As part of its purchase of the Dynegy companies Centrica acquired Rough, which then reported into CEMG.
- 75. Rough was by far the UK's largest gas storage facility. It accounted for 76 per cent of gas storage capacity and represented a significant source of flexibility for the UK gas industry, which is particularly important for the domestic market in winter. The merger was completed at the time of the reference.
- 76. The CC was concerned that the merger would further enhance the vertical integration of Centrica. It would mean that Centrica had a portfolio that was unmatched by any other player, including upstream production, gas storage, and retail domestic, industrial and commercial supply of gas.
- 77. The CC considered whether Centrica would use this enhanced position to drive up the wholesale gas price, and then either pass on the increase to domestic consumers or, by restraining its own domestic prices, squeeze the margins of its downstream competitors. However, it concluded that although Centrica might have the ability to do this, it did not have a strong incentive to behave in this way because the potential gain was small in relation to the costs and commercial risks involved. The CC also noted that there was a significant reputational risk for Centrica of being discovered to manipulate the market.
- 78. The CC noted that there might be benefit to the public interest in Centrica owning Rough as it was a known quantity with regard to operational experience, reputation and financial strength, whereas the alternative to the merger was uncertain. However, it concluded that this benefit was outweighed by the public interest detriment it expected to result from the merger. In particular, the CC concluded that the Centrica would be expected to:
 - (a) discriminate between customers in giving access to capacity at Rough;
 - (b) use to its advantage sensitive information gained from the operation of Rough;

- (c) withhold information about the operation of Rough;
- (d) be less innovative in marketing Rough's products;
- (e) invest less in expanding Rough's capacity.

Choice and design of remedy

79. The CC recommended a package of behavioural remedies. This comprised:
- (a) non-discriminatory terms for Rough customers;
 - (b) auctioning off all remaining capacity at Rough prior to the start of the gas year with no reserve price;
 - (c) restricting the amount of storage that Centrica could reserve for its own use at Rough to 20 per cent in year 1 (slightly less than its pre-merger usage level), decreasing by 1 per cent a year thereafter to a minimum of 15 per cent;
 - (d) maintaining the separation of its storage operation from other parts of the group;
 - (e) facilitation of the development of the secondary market;
 - (f) offering at least 20 per cent of Rough's capacity on annual contracts.
80. Compliance with these undertakings was to be monitored by means of an independent review by Centrica's Audit Committee with annual reports to the OFT and Ofgem.
81. The CC had considered a divestiture remedy. By the end of the inquiry Ofgem had adopted a position in favour of divestiture. However, this appeared mostly to reflect its concerns about Centrica's ability and incentive to manipulate the wholesale gas price, which the CC did not include in its adverse finding. Very few other parties unequivocally favoured divestiture. The CC acknowledged that divestiture could be a feasible remedy—it considered that there were suitable potential purchasers—but it appeared to be aware of the risk that divestiture would open the possibility of a key strategic asset being owned by a less reputable player than Centrica. Ultimately, the CC concluded that the adverse effects identified did not justify the divestiture of the acquired assets because it appeared that those adverse effects could be effectively addressed by behavioural remedies. However, the CC concluded in its final report that if Centrica were not willing to give the full set of behavioural undertakings recommended then divestiture of the acquired assets remained a possible remedy.
82. In considering behavioural undertakings, the CC took account of the fact that Rough had previously been required by undertakings not to discriminate between its customers. It also noted that undertakings as to the amount of Rough storage Centrica could reserve for itself should be capable of being monitored relatively easily. The fact there had been a separation regime, backed up by statutory undertakings, in place while Dynegy owned Rough also lent support to the idea of behavioural undertakings.¹¹

¹¹Dynegy gave undertakings in lieu of a reference to the Secretary of State when it purchased Rough. These replaced those given by British Gas previously. These undertakings in lieu were sought partly on the advice of Ofgem, and were aimed at ensuring that there was no price discrimination and that Dynegy could not use information gained in the storage business for energy trading.

What happened after the CC's final report?

83. The OFT recommended to the Secretary of State that it be instructed to seek 'wide-ranging' behavioural undertakings from Centrica. But it noted that there appeared to be 'considerable challenges' in implementing the remedies recommended by the CC effectively and it stressed the CC's acknowledgement that divestiture remained a possibility. At the beginning of August 2003 the Secretary of State accepted the OFT's recommendation. She asked the OFT to secure behavioural undertakings by 1 December, noting that if the OFT were not able to secure behavioural undertakings she would ask for advice on other remedies, including structural remedies. The OFT had already noted in its advice to the Secretary of State that the CC acknowledged the possibility of divestiture in the event of failure to secure satisfactory behavioural undertakings. On the same day as the Secretary of State accepted the OFT's recommendations, Ofgem put out a press release, stating that it intended to increase its scrutiny of Centrica's wholesale business to ensure that it did not abuse its market power.
84. The negotiation of behavioural undertakings was to some extent tripartite, involving not only the OFT and Centrica but also Ofgem. The involvement of Ofgem helped the OFT in its understanding of the market and was appropriate in particular because Ofgem would play a key role in monitoring compliance.
85. Centrica said that throughout the negotiation of the final undertakings it was very much aware of the threat of divestiture should acceptable behavioural undertakings fail to be agreed. It told us that consideration of this threat had been instrumental in Centrica's offering various undertakings which it considered might be difficult to make work (eg in relation to certain shared services).
86. Undertakings were accepted by the Secretary of State at the end of November 2004. The CC's 20 linked behavioural restrictions had become a legal document of 130 pages, half of which related to the standard storage contract. Since behavioural undertakings had been secured, it was not necessary to revisit any possible divestiture remedy.
87. Under the terms of the undertakings, Centrica prepares compliance reports detailing injections into and withdrawals from Rough, capacity sales, failures (outages) and an inventory report. Centrica sends these reports to Ofgem and the OFT and meets with Ofgem quarterly to discuss them. Ofgem scrutinizes these reports in some depth. Several members of staff at Ofgem are involved in assessing these reports, all of whom have other roles in the organization and wider expertise to bring to their monitoring role. Together the Ofgem's monitoring team probably amounts to slightly less than one full-time equivalent.
88. The capacity report that Ofgem received in October 2005 showed that capacity at Rough had increased by 5 per cent compared with the time of the CC's inquiry. This suggests that by limiting Centrica's access to Rough to a lower percentage of the total than it had prior to the merger, the undertakings have been successful in encouraging Centrica to invest in new capacity at Rough.
89. The capacity sales reports help Ofgem to ensure that Rough is being marketed appropriately and in accordance with the undertakings on third party access. The inventory report shows who has gas in storage at Rough allowing Ofgem to see how quickly and effectively Centrica is selling its capacity, whether 100 per cent of capacity has been sold before withdrawal commences and whether Centrica is discriminating between its customers. Centrica is required to include in its report on operational failures, outages as short as 15 minutes. It must distinguish between

planned and unplanned outages and, in the case of the latter, it must state what remedial action has been taken. Significant outages must be notified by Centrica to all customers at the same time, and while Ofgem is not in a position to verify whether this has taken place it will monitor Centrica's trading activity around the time of the outage for evidence of prior knowledge.

90. In implementing the structural separation provisions of the undertakings, Centrica has put in place a company-wide compliance programme. Compliance officers have been appointed on both sides of the Chinese wall and they report to the company's Audit Committee. The compliance reports are also audited quarterly by KPMG, Centrica's external auditors. At the end of each year, the Audit Committee presents an annual report on compliance to the main board, who in turn report to the OFT and Ofgem. All Centrica employees who have to deal with Centrica Storage Ltd (the owner of Rough) have to confirm quarterly that they are complying with the code. Managers of shared service departments have to submit reports quarterly confirming that their staff are complying. In all, some 2,500 employees a year are required to confirm their compliance with the code of conduct. In addition, staff are reminded periodically of their compliance obligations via emails and articles are posted on the company Intranet stressing the importance that Centrica attaches to compliance.
91. In interviews for this research, Centrica said that placing the Audit Committee at the apex of the compliance structure gave added authority to the process and made it more rigorous because managers have to convince the independent directors on the committee that they are complying. Centrica said that its compliance model had been adopted as good/best practice by the European Commission in regulating gas storage.
92. Centrica estimated that the compliance programme cost around £2,000,000 to set up and costs between £250,000 and £350,000 a year to run. It also noted the intangible costs of compliance. It described the structural separation as more of an 'Iron Curtain' than a Chinese wall and suggested that employees of Centrica Storage Ltd did not feel part of the overall business. It also noted that a recent restructuring plan had necessitated its seeking a variation of the undertakings, which was a protracted process.¹²
93. Nobody interviewed for this research, including Centrica's customers and competitors, could point to any complaints about Centrica's compliance with the undertakings. Neither Ofgem nor the OFT have evidence of non-compliance.

Summary of key learning points

94. The key learning points from this case study can be summarized as follows:
 - (a) The existence of a contingency remedy option is important in ensuring that parties will give effect to a remedy. Such options might include enforcement of the remedy by order or the implementation of a 'back-up remedy' that is more intrusive for the parties than the initial remedy.
 - (b) If sufficient care is taken over the design of behavioural remedies, and in particular if active and informed monitoring takes place, they can be effective.

¹²The CC decided to accept varied undertakings from Centrica on 2 April 2006. The decision can be found at: www.competition-commission.org.uk/our_peop/members/all_members/remedies_decisions.htm.

- (c) Chinese walls can be used effectively if sufficient priority is assigned to this function and this is backed up with effective external monitoring. In order to ensure their effectiveness, it is necessary for the firm to educate its staff as to the existence of the Chinese walls, make clear what they can and cannot do, and establish an effective deterrence mechanism for those who breach (eg through internal disciplinary processes).
- (d) Where a regulator is involved in an industry, and in particular where that regulator will be involved in monitoring the remedy, there are advantages in involving the regulator in the negotiation process. There is also a risk that increasing the number of parties in the negotiation will add to their complexity.
- (e) The existence of a 'back-up remedy' which is not preferred by the parties can be useful in focusing their minds on the need to offer suitable undertakings to make their preferred remedy work.
- (f) Where a regulator exists in an industry there might be advantages in involving that regulator in ongoing monitoring. First, the regulator might have relevant expertise that allows it better to monitor compliance. Secondly, the firm's ongoing and multi-dimensional relationship with the regulator might provide an additional incentive for it to comply.
- (g) Sign-off by a company's audit committee can provide a useful discipline on compliance reports. The duties of the non-executive directors on the committee and their independence mean that they can provide useful internal scrutiny of compliance reports before they are submitted to the authorities.
- (h) Ensuring effective compliance with behavioural remedies is easier for firms with an established compliance culture and the internal capacity to implement a compliance programme. It seems that larger firms are more likely to have this capacity than smaller firms. It also seems likely that regulated firms are more likely to have this capacity than unregulated firms.
- (i) Where the CC handed over implementation of remedies to the OFT, there was a risk that the OFT would not have the benefit of the full understanding of the issues that the CC had gained during its inquiry. Parties to the negotiation could use this to reopen arguments during the negotiation. There was also a risk that negotiations took longer and might be less effective because parties had to 'start again' with the OFT.