



Market investigation into supply of bulk liquefied petroleum gas for domestic use

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The Competition Commission has excluded from this published version of the report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by ✂.

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Contents

	<i>Page</i>
Summary.....	3
Findings	7
1. The reference.....	7
2. Domestic bulk LPG	8
Safety	9
3. Market definition.....	12
The goods and services market—demand-side substitution	12
Supply-side substitution	14
Metered estates	15
Geographic markets.....	15
Aspects of the terms of reference	15
4. Market features	17
A. Market structures	17
B. Switching	17
Background	17
Assessment of effect of barriers to switching on competition.....	21
Assessment of other factors influencing the level of switching	25
Northern Ireland	28
Conclusions on barriers to switching.....	29
Conclusions on barriers to switching in Northern Ireland	30
C. Pricing.....	31
Background	31
Assessment of pricing	33
Conclusions on pricing	37
Pricing in Northern Ireland.....	38
D. Non-price competition.....	38
E. Barriers to entry and expansion.....	39
Great Britain	39
Northern Ireland	40
Conclusions on barriers to entry and expansion	40
Conclusions on barriers to entry and expansion in Northern Ireland	41
5. Other aspects of the market.....	41
Profitability.....	41
Summary	44
Health and safety rationale for business practices.....	44
Exclusivity of supply	45
Ownership of tank by suppliers	46
Uplift of tank when customer switches to new supplier	47
Three-month notice period	47
Overall conclusions	48
6. Findings.....	48
Great Britain	48
Northern Ireland	50
7. Remedies	51
Framework for the assessment of remedies	51
Assessment of remedy options	52
Tank transfer	53
Standardization of the switching process.....	68
Information for customers on the switching process	70

Changes to customer contracts.....	71
Information on suppliers and their offers	71
Reducing the scope for selective discounting	73
Remedies and UK and EC competition legislation.....	73
Monitoring and enforcement.....	74
Relevant customer benefits.....	75
Framework for the assessment of relevant customer benefits.....	75
Distributional efficiencies.....	76
New technology.....	77
Scope of remedies	78
The cost of the CC's package of remedies	79
Implementation of remedies.....	82
The CC's package of remedies.....	83

Appendices

- A Terms of reference and conduct of inquiry
- B Product description
- C The domestic bulk LPG supply chain
- D Safety issues in the supply of domestic bulk LPG
- E Market definition
- F Non-price competition and entry
- G Switching
- H The supply of domestic bulk LPG in Northern Ireland
- I Pricing
- J Financial performance of the major suppliers of domestic bulk LPG
- K Cost of capital
- L Remedies

Glossary

Summary

1. On 5 July 2004, the Office of Fair Trading (OFT) referred to the Competition Commission (CC) the supply in the UK of bulk liquefied petroleum gas for domestic use (which we refer to as domestic bulk LPG). The reference was made following a number of complaints to the OFT, particularly in relation to pricing of domestic bulk LPG, the difficulty of switching between suppliers and certain other aspects of the relations between domestic bulk LPG customers and their suppliers (to which we refer as 'customers' and 'suppliers' respectively). The CC is required to determine whether any feature, or combination of features, of the relevant market for the supply of domestic bulk LPG prevents, restricts or distorts (ie 'adversely effects') competition in the UK.
2. Domestic bulk LPG is used by almost 150,000 households in the UK. Only natural gas supplied via the mains grid (mains gas) provides the same range of functions as LPG, but the cost of LPG is significantly higher than that of mains gas, reflecting in part the need to deliver LPG by tanker to households in mainly rural areas. Its use, except in parts of Northern Ireland, is largely confined to areas situated away from the mains grid.
3. Domestic bulk LPG is a hazardous product. Safety is a key concern to the suppliers, and was so in our own consideration of this industry. The supply of domestic bulk LPG is subject to a legislative regime supplemented by voluntary codes of practice, but also by the suppliers' own practices which sometimes go beyond the codes to ensure legislative requirements are satisfied. We saw no evidence that the UK industry had any serious safety problem, a fact which suppliers partly attributed to the current arrangements for supply of domestic bulk LPG; in particular to the integration of the supply of LPG with ownership of the tanks.
4. Four suppliers (referred to as the 'major suppliers')—BP LPG UK (BP), Calor Gas Limited (Calor), Flogas UK Limited (Flogas) and Shell Gas Limited (Shell)—supply about 90 per cent of domestic bulk LPG in Great Britain, two of which—Calor Gas Northern Ireland Limited (Calor NI) and DCC Energy Limited (Flogas NI)—are the only suppliers in Northern Ireland. The major suppliers argued that there was strong competition to domestic bulk LPG from other fuels, in particular heating oil. But we found the price constraint on domestic bulk LPG from such other fuels was not sufficient for them to be regarded as part of the same economic market, and that the supply of domestic bulk LPG in Great Britain and Northern Ireland could be regarded as separate economic markets from those for other fuels.
5. We found that the rate of switching between suppliers was very low, even among customers who could obtain significant net savings by switching.¹ Suppliers normally retain ownership of tanks on domestic customer premises and it is standard practice, when a customer switches, for the outgoing supplier to remove its tank, which is then replaced by an essentially similar tank owned by the incoming supplier. Customers face charges from both the incoming and outgoing supplier, to cover or contribute to the suppliers' switching costs. Customers are often uncertain as to their liability for such charges. Charges are not always set out in contracts, and in practice the charges actually levied depend on the discretion of suppliers. The inconvenience involved in switching tanks can be considerable. Moreover, customer perceptions of, or uncertainty as to, the level of inconvenience may also discourage switching; the extent of such inconvenience is not known to customers in advance, and in practice

¹A small proportion of customers obtain savings by negotiating discounts rather than switching, as we discuss later.

depends on the efficiency and care with which suppliers complete the switch. The practice of requiring three-month notice periods, which is standard in the domestic market,² may add to the perceived inconvenience of the switching process. Customers may also be prevented from switching by lengthy minimum-term contracts (standard among new customers but also applied to some established customers, for example as a condition of receiving a discounted price).

6. We found that customers had little awareness of alternative suppliers, and tended not to be approached by other suppliers, although this may be explained in part by the difficulties in switching outlined above. The limited extent to which suppliers approach one another's customers may also be explained by the difficulty in identifying such customers and the use of selective discounts (see below). We regard the following as features of the markets for the supply of domestic bulk LPG in Great Britain and Northern Ireland which adversely effect competition:
 - (a) the practice of uplifting and replacing tanks when a customer switches supplier (which increases the charges and inconvenience—whether actual or perceived—faced by customers when switching, and discourages other suppliers from competing for their competitors' customers);
 - (b) the lack of information available to customers on the costs and benefits of switching and on the level of inconvenience involved in the switching process;
 - (c) the imposition of contractual restrictions on switching, which affect the level of switching costs and inconvenience of the switching process; and
 - (d) the limited ability of suppliers to identify and target their marketing efforts on each other's customers.
7. Several aspects of the pricing of domestic bulk LPG support the view that competition is constrained in this market. There are sustained differences between average prices of suppliers and a degree of independence (from one another) in the movements of these average prices. Individual suppliers also charge different prices to different customers, largely unrelated to differences in cost. Low switching rates exist, despite the availability of lower prices from other suppliers and despite little evidence that customers have any loyalty towards, or preference for, the service of, their existing supplier.
8. We regard the offering of selective discounts to customers as a feature of the market in Great Britain which adversely effects competition, in that this reduces the potential rewards to competitors for attempting to win customers away from their current suppliers and thereby discourages firms from competing to win customers from one another. Lack of transparency in prices is also likely to deter customers from switching to another supplier and is a further feature of the market in Great Britain adversely affecting competition. These features do not, however, apply in Northern Ireland, where standard prices are charged.
9. We accept that the major suppliers have made efforts to compete on non-price factors, but found little evidence that customers perceive differences in quality of service between suppliers.

²Three-month notice periods are justified by suppliers by the need to run down the gas in the tank before removal. However, if the customer is switching to another supplier this is often unnecessary, as the gas can be transferred to the new supplier's tank.

10. We also found barriers to expansion by smaller suppliers in the Great Britain and Northern Ireland markets, which constitute a feature of the markets we are examining that adversely effects competition. Switching costs (referred to above) create a barrier to expansion in that, in trying to win a customer, an entrant or smaller competitor will always be at a disadvantage to the current supplier. This disadvantage is particularly significant in a mature market such as that for domestic bulk LPG. With relatively few new-to-market customers, a new or expanding supplier has limited scope to expand without winning customers from larger incumbent suppliers. Selective discounting in Great Britain also enables existing firms to respond to specific competitive threats without lowering prices to their broader customer base. In consequence, the threat of entry or expansion by smaller suppliers is likely to provide only a very limited constraint on the prices charged by suppliers.
11. We also considered two other aspects of the market which, although not necessarily features adversely effecting competition, are relevant to our assessment of competition.
12. First, the major suppliers in Great Britain earned on average over the period 2001 to 2004 returns on capital employed that were in excess of the weighted-average cost of capital which we have calculated, although none of them earned returns that were both persistently and substantially in excess.
13. Secondly, we considered whether any of the business practices which contributed to the low rates of switching (exclusive supply of LPG, ownership of tanks by the supplier, uplift of tanks when the customer switches to a new supplier and the three-month notice period) were required in order to comply with the safety requirements under the current legal regimes in the UK. We found that the exclusivity of supply is a practice which helps to satisfy the safety requirements under the current regime, and may be a more efficient means of managing safety than non-exclusive supply. While ownership of tanks by suppliers of LPG is not necessarily the only safe model, and is not a requirement of the current legal regime, it presents significant advantages over customer ownership (under which some of the existing health and safety regulations would not apply) and appears to be a more legally certain and efficient way of managing safety than ownership of tanks by commercial third parties. We do not accept, however, that the practices of uplifting tanks and requiring a three-month notice period for terminating supply are required under the existing regulatory regimes, nor that they are necessarily the most efficient way of safely managing the supply of domestic bulk LPG.
14. In summary, there are features of the markets for the supply of domestic bulk LPG in Great Britain and Northern Ireland which adversely affect competition in the UK. While some marginal customers may negotiate competitive prices, we conclude that the large majority of customers in the market are paying higher prices than would be the case if these features did not exist.
15. We consider that a package of remedies consisting of the following key elements and applied both in Great Britain and Northern Ireland would be effective and proportionate in remedying the various features of the domestic bulk LPG market identified as having an adverse effect on competition:
 - (a) tank transfer, including a customer's right to request tank transfer, an incoming supplier's right to buy the existing tank from the outgoing supplier, and incoming suppliers being given the opportunity to negotiate a price for a tank with the outgoing supplier, but an obligation on the outgoing supplier to sell for a 'backstop price' determined by a methodology;

- (b) standardization of, and improved information on, the switching process;
 - (c) changes to customer contracts, including notice periods of no more than 42 days and exclusivity periods of no more than two years; and
 - (d) improved information on suppliers and their offers.
16. We also consider that, in Northern Ireland, the General Consumer Council for Northern Ireland should include information on the opportunities for customers to switch supplier in the information it provides to energy customers in the context of the opening of the domestic mains gas and electricity markets to competition in 2007.
 17. Accordingly, we have decided that these remedies should be implemented. We have further decided implementation should be by means of an order and that those subject to the remedy should have a period of no more than nine months from the order in which to ensure that they are compliant.

Findings

1. The reference

- 1.1 On 5 July 2004, the OFT referred to the CC the supply in the UK of bulk LPG for domestic use³ (which we refer to as 'domestic bulk LPG'). Our terms of reference are set out in Appendix A.
- 1.2 The reference was made to the CC following a number of customer complaints to the OFT, particularly in relation to:
- (a) the pricing of domestic bulk LPG;
 - (b) the difficulty of switching between suppliers; and
 - (c) certain other aspects of the relations between domestic bulk LPG customers and their suppliers (to which we refer as 'customers' and 'suppliers' respectively).
- 1.3 Under section 134 of the Enterprise Act 2002 (the Act), the CC is required to investigate whether any feature, or combination of features, of each relevant market⁴ prevents, restricts or distorts competition in connection with the supply or acquisition of any goods or services in the UK or a part of the UK. If so, there is said to be an 'adverse effect on competition'.⁵
- 1.4 If the CC decides that there is an adverse effect on competition, it is required under Section 134(4) of the Act to decide whether action should be taken by it, or whether it should recommend the taking of action by others, for the purpose of remedying, mitigating or preventing the adverse effect on competition concerned or any detrimental effect on customers⁶ so far as it has resulted from, or may be expected to result from, the adverse effect on competition; and, if so, what action should be taken and what is to be remedied, mitigated or prevented.
- 1.5 During the course of this investigation, we have placed a number of documents on our website including evidence from suppliers and customers; an Issues Statement, an Emerging Thinking Statement, a Statement of Provisional Findings, and a Proposed Final Report; a qualitative and a quantitative survey of customers by ORC and a report by technical consultants, Mott McDonald, all of which were commissioned for the purposes of the investigation; a working paper on safety; and comments from suppliers on some of that material. In the course of the CC's consideration of remedies, we consulted upon a Notice of Possible Remedies and a Remedies Working Paper. In reaching our findings, we have taken into account all of

³Originally, the terms of reference referred to the supply of 'domestic bulk LPG' with domestic being defined as supplied for use by households as well as for use by businesses whose consumption of LPG by volume was similar to that of households. Following consultation by the OFT, the terms of reference were amended on 20 October 2004 to refer to the supply of 'bulk LPG for domestic use' and the definition of domestic was removed. 'Bulk' means supplied by tanker to fixed storage tanks, as opposed to cylinders.

⁴For the purposes of the CC's investigation, 'relevant market' is defined in Section 134(3) of the Act as a market in the UK for goods or services of a description specified in the reference concerned.

⁵Section 134 of the Act is reproduced in Appendix A. The Act states (section 131(2)) that, for the purpose of a market investigation reference, a feature of a market in the UK shall be construed as:

- (a) the structure of the market concerned or any aspect of that structure;
- (b) any conduct (whether or not in the market concerned) of one or more than one person who supplies or acquires goods or services in the market concerned; or
- (c) any conduct relating to the market concerned of customers of any person who supplies or acquires goods or services.

⁶A detrimental effect on customers is defined in section 134(5) of the Act as one taking the form of:

- (a) higher prices, lower quality or less choice of goods or services in any market in the UK (whether or not the market to which the feature or features concerned relate); or
- (b) less innovation in relation to such goods or services.

the evidence received during the course of this investigation, including comments made in written submissions and hearings and the responses of suppliers and third parties to consultation documents such as the Emerging Thinking Statement, Provisional Findings, Notice of Possible Remedies, Remedies Working Paper and Proposed Final Report. This report—including the appendices—sets out the CC's decisions on the questions which it is required to answer under the Act, together with the reasons for our decisions and sufficient information to facilitate a proper understanding of them.⁷ The report does not seek to address every point that has been put to us by interested parties, but focuses on the issues which are of material relevance to the CC's decision-making and reasoning.

2. Domestic bulk LPG

- 2.1 Domestic bulk LPG is used by almost 150,000 households in the UK. In Great Britain, almost all customers of LPG are located away from the main gas grid, although in Northern Ireland a significant proportion of customers are located in areas served by mains gas. LPG performs the same household functions as mains gas, but at greater cost, reflecting in part the need to deliver LPG by tanker to individual households situated in mainly rural areas. Unlike mains gas or other network utilities, there is no price regulation of LPG. As noted in Appendix E, heating oil performs many of the functions of domestic bulk LPG but is less suitable for cooking, for which only a restricted range of equipment can be used; generally, therefore, customers of heating oil would have to use an electric cooker. Descriptions of LPG, for which only propane is used in domestic bulk LPG tanks (to which we refer as 'tanks') in the UK, and of the supply chain for domestic bulk LPG, are set out in Appendices B and C respectively.
- 2.2 Four suppliers (referred to as the 'major suppliers')—BP LPG UK (BP), Calor Gas Limited (Calor), Flogas UK Limited (Flogas) and Shell Gas Limited (Shell)—supply about 90 per cent of domestic bulk LPG in Great Britain.
- (a) BP's UK domestic bulk LPG operations form a small part of BP plc's total UK operations. The LPG business has grown organically and through acquisitions (including the businesses of North East Farmers, Border Gas and Mobil Gas). BP plc is a wholesale supplier of LPG to other suppliers of bulk LPG globally.
 - (b) Calor is focused on marketing and distributing LPG. It is the largest supplier of domestic bulk LPG in the UK by 2004 tonnage, having grown organically from its original LPG cylinder operation. It is wholly-owned by the private Dutch group SHV Holdings NV (SHV), which has LPG and other operations across the world.
 - (c) Flogas is a wholly-owned subsidiary of DCC plc (DCC), a company based in the Republic of Ireland, with LPG and other operations predominantly in the UK and the Republic of Ireland. Flogas is focused on marketing and distributing LPG. In November 2002, Flogas acquired the LPG business of British Gas from Centrica. This business now represents the majority of Flogas's enlarged domestic bulk LPG operations.
 - (d) Shell's UK domestic bulk LPG business grew out of its cylinder operations through a number of acquisitions, including that of Esso in 1997, and represents a small part of its total UK operations. In 2000, Shell divested its cylinder business and some of its small bulk LPG to British Gas plc (at the same time receiving some other non-domestic bulk LPG business from British Gas plc).

⁷As required by section 136(2) of the Act.

We are aware of over 20 other suppliers of domestic bulk LPG in Great Britain.

- 2.3 There are only two suppliers of domestic bulk LPG in Northern Ireland: Calor Gas Northern Ireland Limited (Calor NI) and DCC Energy Limited (Flogas NI),⁸ where the total volume sold is small in comparison to the total UK market.

Safety

- 2.4 As noted in Appendix D, LPG is a hazardous product. The safe delivery, containment and use of this product are paramount. High standards in tank and valve design, manufacture, installation and maintenance, and appropriate emergency response are all necessary to minimize LPG leaks and mitigate associated risks.

- 2.5 The supply of domestic bulk LPG in the UK is subject to a legislative regime⁹ governing its safety which comprises:

- (a) legislation designed to protect the health and safety of employees and other persons affected by the activities of a commercial undertaking; and
- (b) certain EU regulations intended to harmonize product safety standards throughout the EU.

This legislative regime is supplemented by codes of practice approved under the statutory regime by the Health and Safety Commission (known as Approved Codes of Practice or ACoPs) and voluntary codes of practice of the main industry trade association, the Liquefied Petroleum Gas Association (the LPGGA CoPs). In so far as these affect the supply of tanks and domestic bulk LPG, the legal requirements relate almost exclusively to suppliers. Customers, in contrast, have limited legal responsibilities other than certain general duties under civil law (including the Occupiers' Liability Acts 1957 and 1984) to ensure the safety of their premises, and their responsibilities under contracts with their suppliers (for example, to protect the tank from damage, or to insure a tank other than from damage for which suppliers are liable), of which they may not always be aware.

- 2.6 The Health and Safety at Work etc Act 1974 (the 1974 Act)¹⁰ imposes a number of general obligations on employers to ensure, so far as is reasonably practicable, the health, safety and welfare at work of their employees, including a requirement to ensure the safe use, handling, storage and transport of substances. Employers' (and self-employed persons') obligations extend to persons not in their employment who may be affected by the activity of their undertakings. Equivalent provisions applicable in Northern Ireland are contained in the Health and Safety at Work (Northern Ireland) Order 1978 (the Northern Ireland Order).¹¹

- 2.7 Suppliers, along with all other employers, are under an obligation to comply with the general duties laid down in the 1974 Act. They are required to ensure, so far as is reasonably practicable, the health, safety and welfare of any employees engaged in activities 'at work', which include installing and maintaining tanks and delivering LPG to domestic premises. Suppliers are also required to ensure, so far as is reasonably practicable, that customers are not exposed to risks to their health and safety as a result of such commercial activities.

⁸We use the names (a) Calor NI to refer to the LPG business of Calor Gas Northern Ireland Limited, an SHV subsidiary, in Northern Ireland, and (b) Flogas NI to refer to the LPG business of DCC Energy Limited, a DCC subsidiary, in Northern Ireland.

⁹For more detail of the Great Britain and Northern Ireland regulatory regimes, see Appendix D.

¹⁰c 37.

¹¹1978 No 1039 (NI 9). For further details of the Northern Ireland regime, see Appendix D.

2.8 The 1974 Act confers powers on the Secretary of State to make 'health and safety regulations' for securing the health, safety and welfare of persons in connection with work. A number of these regulations, the details of which are set out in Appendix D, affect the activities of suppliers, in particular:

(a) the *Gas Safety (Installation and Use) Regulations 1998*¹² (GSIUR);

(b) the *Pressure Systems Safety Regulations 2000*¹³ (PSSR);

(c) the *Dangerous Substances and Explosive Atmospheres Regulations 2002*¹⁴ (DSEAR);

(d) the *Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004 (CDGR)*¹⁵ and

(e) the *Management of Health and Safety at Work Regulations 1999*¹⁶ (MHSWR).

Of these, for example, the PSSR apply to pressure systems such as tanks and associated pipework which are 'used or intended to be used at work'. They regulate certain matters related to tank installation and (for older tanks) design and construction, and require the 'user' of the pressure system to establish the safe operating limits of the tank, ensure that the tank is properly maintained and implement a written scheme of examination, including periodic inspections.¹⁷

2.9 Compliance with the specific regulations affecting LPG activities (and with the ACoPs and LPG CoPs) will very often be relevant in determining whether a supplier has taken such action as is 'reasonably practicable' to protect its employees and others. However, such compliance will not necessarily guarantee that the underlying obligations contained in the 1974 Act (or, as appropriate, the Northern Ireland Order) have been satisfied, and it will be for the suppliers to take a view on how a particular activity affects the health and safety of employees and other persons affected.

2.10 Any breach of the general obligations under the 1974 Act (or the Northern Ireland Order) and the health and safety regulations gives rise to an offence. Proceedings for an offence may be brought by an inspector appointed by the relevant enforcing agency, which, in most cases involving domestic bulk LPG in Great Britain, we understand will be the Health and Safety Executive (HSE).¹⁸ In addition, inspectors have the power to issue improvement notices where the 1974 Act (or the Northern Ireland Order) itself is being contravened and prohibition notices where there is a risk of serious personal injury. As well as the possibility of prosecution, breach of the relevant regulations may, in some circumstances, result in an action for damages by someone suffering harm as a result. The HSE is not, however, in a position generally to carry out individual site inspections at domestic premises.

2.11 In addition to health and safety regulations made under the 1974 Act (and its Northern Ireland equivalent), there are other regulations relevant to the domestic bulk

¹²SI 1998 No 2451.

¹³SI 2000 No 128.

¹⁴SI 2002 No 2776.

¹⁵SI 2004 No 2095.

¹⁶SI 1999 No 3242.

¹⁷For further details, see section 2 of Annex 1 to Appendix D.

¹⁸In Northern Ireland, the enforcement authority will be the Health and Safety Executive for Northern Ireland, the relevant government department or such other class of person as may be prescribed (Northern Ireland Order, article 20(1)).

LPG industry which implement EU obligations intended to harmonize product safety standards throughout the EU,¹⁹ most notably:

(a) the *Pressure Equipment Regulations 1999*²⁰ (*PER*); and

(b) the *General Product Safety Regulations 2005* (*GPSR*).²¹

More details of these are also set out in Appendix D.

- 2.12 Safety is a key concern to the suppliers and in our own consideration of this industry. Suppliers own practices sometimes go beyond the codes of practice, they told us, to ensure legislative requirements are satisfied. We received no evidence that the industry has had any serious safety problems, which was partly attributed by the major suppliers to the current arrangements for supplying domestic bulk LPG. In particular, it was argued that safety was ensured by integrating the supply of LPG with ownership of the tank—the suppliers taking full responsibility for procurement and installation of the tank, for its subsequent maintenance, refurbishment and, if necessary, replacement, and for supply of LPG to that tank. We noted that there are, however, exceptions to this integrated model—for example, where suppliers have acquired other companies and their installed tank base, or a customer or group of customers from another supplier, including, in some cases, a small number of customers owning their own tanks. Some smaller suppliers also supply customers with their own tanks. But we were told that even in those cases the supplier generally takes full responsibility for the maintenance of the tank. As a result of that integrated supply of LPG and of tanks, changes of suppliers in practice generally involve a change of tank.
- 2.13 We received evidence from the HSE, which told us (as noted in the summary of its evidence on our website) that its concern was that the duties under the legislation should be carried out, rather than that they were carried out by one firm or several firms. The HSE also stated that the ownership of equipment was one of the issues excluded from the regulations. In its view, the practice of changing tanks on changing supplier, for example, was a commercial decision, which could not be hidden behind considerations of health and safety.
- 2.14 We also commissioned technical consultants, Mott McDonald, to provide advice on safety issues. As noted above, Mott McDonald's report and contribution to our own Safety Working Paper were published on our website. Annex 3 of the Safety Working Paper gives Mott McDonald's opinion on regulation in the domestic bulk LPG industry. In its view, formed after talking to a number of suppliers and visiting a small number of sites, the domestic bulk LPG industry has a robust legislative and standards regime, which is well understood by operators and generally well applied. It did, though, note that the sites it visited could be improved to comply with the industry ACoPs and LPGA CoPs, but it did not regard the differences it observed to be departures from the spirit of the ACoPs and LPGA CoPs or unsafe. It also noted some areas where there was a range of interpretation of the CoPs and the health and safety regulations. However, its view was that there was no monitoring or enforcement of specific practices for industry participants, except prosecution following an incident, when the relevant enforcement authority intervened; and furthermore that there were no regulatory barriers to entry, no licensing required, and

¹⁹There is a degree of overlap between regulations made under the 1974 Act and those implementing EU obligations. A number of the health and safety regulations outlined above implement EU obligations (eg DSEAR, CDGR) or have been made under both the 1974 Act and the European Communities Act 1972 (eg MHSWR).

²⁰SI 1999 No 2001, as amended.

²¹SI 2005 No 1803. The Regulations, which apply to the UK, replaced S.I. 1994 No 2328 and implement Directive 2001/95/EC. Changes include new enforcement provisions and extending the scope of products.

no consultative technical body (with enforcement powers) to authorize new practices or equipment.

- 2.15 We also published on our website the comments of the major suppliers on the Mott McDonald report and the Safety Working Paper. They made a number of criticisms of the Mott McDonald analysis. Among other things, they believed Mott McDonald did not visit a sufficient number of sites to allow it to judge the practices of all suppliers, and also referred to their own experience following acquisition of other companies when they had found it necessary to undertake extensive rectification programmes and to replace a number of tanks. But Mott McDonald was not carrying out full safety audits of individual suppliers or of the industry as a whole, nor would it have been practical or appropriate for them to seek to do so. Despite the criticisms made by them of the Mott McDonald report, some of the major suppliers accepted many of the points made by Mott McDonald and relied on its findings in their own submissions.
- 2.16 We have reached our own views on safety issues, having regard to all of the relevant evidence presented to us, including the comments from the HSE and from suppliers and the technical advice of a consultant provided by one of the major suppliers. We have noted in paragraph 2.12 that we saw no evidence of any serious safety problems, even though in Great Britain small bulk tanks at domestic premises do not currently attract proactive inspections by the HSE and the safety regime is focused on avoiding prosecution. We saw no reason to doubt that the systems of the major suppliers are effective, although, as apparent also from some of the sites we ourselves saw, the CoPs are not always applied to the letter.
- 2.17 The integrated supply of LPG and tanks we noted above distinguishes domestic bulk LPG from the supply of heating oil, where customers generally own their tanks. The major suppliers argued that this different approach reflected the greater hazards involved with supply of domestic bulk LPG and the associated safety concerns. We consider in Section 5 and Appendix D whether alternative arrangements to the integrated model could have been developed for the supply of domestic bulk LPG without putting safety at risk.

3. Market definition

- 3.1 The relevant market²² (or markets) which the CC is required²² to examine is the market (or markets) for the goods or services of a description specified in the terms of reference (the reference goods or services). In order to carry out its assessment, it is necessary therefore for the CC to identify the economic market (or markets) in which the reference goods or services compete. In this section, we consider the economic market (or markets) for the products concerned. We then go on in the next sections to assess competition within that economic market (or markets), before considering whether any feature of the relevant market adversely affects competition.

The goods and services market—demand-side substitution

- 3.2 We discuss economic market definition in Appendix E. The conceptual approach applied here to economic market definition is to consider whether a hypothetical monopolist (or all suppliers acting in concert) of certain products or services could profitably sustain a small but significant non-transitory price rise (normally in the region of 5 per cent) above the competitive level.²³ If the price rise would be

²²As defined in section 134(3) of the Act.

²³We explain in paragraph 2 of Appendix E why we refer to prices above the competitive level rather than existing prices in our consideration of market definition.

unprofitable because customers would switch their consumption to certain other products, then these products are added to the product group and the procedure is repeated.²⁴ The relevant product market is the smallest group of products for which a hypothetical monopolist could sustain the price rise profitably.

- 3.3 From a customer's perspective, only mains gas provides the same range of functions as LPG. The cost of LPG is approximately double that of mains gas (see paragraph 3 of Appendix E), hence use of LPG in Great Britain is largely confined to areas situated away from the mains gas grid.²⁵ Despite the advantages of LPG over other fuels, such as heating oil to which we referred in paragraph 2.1, a larger proportion of households located away from the mains gas grid use heating oil than use domestic bulk LPG (see also paragraph 3.5(c)).
- 3.4 The major suppliers argued that there was strong competition from other fuels, in particular heating oil, and that in the long term, heating oil and (to a lesser extent) other fuels (eg wood and coal) place some constraint on the price of domestic bulk LPG, though most did not contend that they are close enough substitutes to be considered part of the same market.
- 3.5 On the basis of the evidence we received, however, we found:
- (a) There is limited switching in Great Britain between domestic bulk LPG and other fuels in response to price changes or otherwise. On the figures we have seen for example, in 2003, only 1 per cent of customers switched to heating oil (see Table 10 of Appendix G) (although this is more than switched to another supplier of LPG or to any other fuel).
 - (b) The scope for substitution between domestic bulk LPG and other fuel sources is limited by factors such as the costs of converting to other fuels from LPG and the limited periods within which a customer is likely to consider switching (for example, given the cost of a new boiler, when a boiler needs to be replaced, which is usually after a period of between 15 and 20 years: see paragraph 4 of Appendix E).
 - (c) The retail price of domestic bulk LPG is around double that of heating oil (on a per kilowatt hour basis) (see paragraph 8 of Appendix E).²⁶ Prices of both domestic bulk LPG and heating oil depend on input costs linked to crude oil prices, so the two tend to move together over the longer term, although the premium of domestic bulk LPG over heating oil has varied widely in recent years (see paragraph 9 of Appendix E).
- 3.6 Calor argued that heating oil constrained LPG prices over the longer term, because (a) of the need to maintain an acceptable differential between the prices of LPG and heating oil, and (b) heating oil was a good substitute for LPG at critical stages in the life of a central heating boiler, ie when a boiler comes up for replacement. We note that some aspects of the major suppliers' marketing efforts were directed against heating oil.

²⁴Very few customers appear willing to switch to an alternative supplier (for reasons which we discuss below), even in response to a substantial difference in relative prices, and suppliers can offer discounts, on an individual basis, to customers who express an intention to switch. As such, it could be argued that any supplier could behave as a monopolist with respect to its own customer base. This is further considered in paragraphs 11 to 13 of Appendix E.

²⁵In some areas of Northern Ireland where mains gas has been introduced relatively recently, a substantial number of households have not (at least yet) switched to mains gas. (See further consideration in paragraph 3.8.)

²⁶Part of this differential can be explained by the inclusion in LPG prices of an element of tank costs (including some installation costs), which are not included in prices of heating oil.

- 3.7 While we recognize that there is some competition from heating oil (particularly for new customers or when the boiler comes up for renewal) we found this to be limited. Given that customers do not appear to respond to the considerable fluctuations in the relative prices of domestic bulk LPG and heating oil (which are shown in Figure 2 of Appendix E), we consider that, if a hypothetical monopolist of domestic bulk LPG raised prices to 5 per cent above the competitive level, customers would not switch to heating oil at a sufficient rate to make such a price rise unprofitable. We acknowledge that the long-term objective of suppliers is to attract new-to-market customers from alternatives such as heating oil. However, as we have noted in Table 9 of Appendix G, the rate of new customers, including those coming into the market, is small relative to the size of the market overall. We therefore conclude that domestic bulk LPG in Great Britain is not in the same economic market as heating oil. Similar arguments apply in relation to other fuels such as wood and coal and we have seen no evidence that domestic bulk LPG is in the same economic market as these other fuels.
- 3.8 We reached a similar conclusion in respect of Northern Ireland, although circumstances are to some extent different. We noted above that, unlike Great Britain, a significant proportion of customers in Northern Ireland are in areas also supplied by mains gas, following the recent introduction of mains gas in those areas. As a result of this mains gas development, use of domestic bulk LPG has declined and, on the evidence we saw, is likely to continue to do so. The upfront cost of connection from the mains supply to domestic premises (and possibly the cost of converting household appliances from consuming LPG to mains gas) may slow the speed of the switching by customers to mains gas, and [X] suggested that some customers considered gas stored in a tank to give them greater security of supply (see paragraph 15 of Appendix E). However, the price difference between domestic bulk LPG and mains gas is such that domestic bulk LPG cannot compete on price with mains gas, and most customers in areas supplied by mains gas are likely to switch in the medium term as they become aware of the scale of the price differential and (to the extent that they perceive security of supply as an issue) more confident as to the reliability of mains gas delivery. In the longer term, however, it is unlikely that the mains gas grid will extend to the entire country, and domestic bulk LPG will continue to be an option in areas not covered by the grid. The two Northern Irish suppliers also told us that, in areas not served by mains gas, there was a strong preference there to use heating oil rather than domestic bulk LPG, but again with limited price competition between the two (see paragraph 17 of Appendix E). We therefore also regard domestic bulk LPG as a distinct market from heating oil in Northern Ireland. Again, similar arguments apply in relation to other fuels such as wood and coal and we have seen no evidence that domestic bulk LPG is in the same economic market as these other fuels.

Supply-side substitution

- 3.9 Some major suppliers told us that supply to domestic bulk LPG customers was not a distinct market from supply to non-domestic customers, since it was often economic for LPG tankers to deliver to a mix of customers, and suppliers of non-domestic customers (commercial, industrial and agricultural) could choose also to deliver to domestic customers. But almost all bulk LPG retailers supply both domestic and non-domestic customers. Hence, in our view, such firms are best considered already as competitors within the domestic bulk LPG market, rather than potential sources of supply-side substitution. Although there may be some potential for competition from the small number of companies currently only supplying non-domestic customers,, that is likely to be limited by some of the constraints on entry on any scale into supply of domestic bulk LPG, which we consider in paragraphs 4.90 to 4.98. A commercial-

only bulk LPG supplier could not, for example, readily respond to an increase in LPG prices by starting to supply domestic bulk LPG customers given the difficulty of identifying those customers and inducing them to switch. The extent of potential competition from suppliers of non-domestic customers is therefore limited and we believe the domestic market, in both Great Britain and Northern Ireland, can be regarded as distinct.

Metered estates

- 3.10 We also considered whether customers in metered estates should be considered as belonging to a separate economic market. While metered estate customers are typically charged lower prices (see paragraph 37 of Appendix I), suppliers told us that this reflected the lower unit costs of supply and we have seen no evidence that prices to metered estates are inconsistent with those to non-estate customers (other than due to the logistical efficiency advantages noted above and to the possibility that metered estate purchasers may have a slightly better negotiating position because of the higher volumes of LPG they buy—see paragraph 4.13). The same firms supply to both types of customers, and while supply to metered estates may have some distinct characteristics, we have not seen evidence that they are sufficiently distinct to be treated as a separate economic market.
- 3.11 In our view, therefore, the supply of domestic bulk LPG, ie the relevant market as defined in the terms of reference, can be regarded as the economic market in both Great Britain and Northern Ireland.

Geographic markets

- 3.12 As noted in paragraph 20 of Appendix E, the logistics of domestic bulk LPG supply require the supplier to use a depot within at most around 100 miles of all customers who are served from that depot. Apart from a small amount of cross-border trade from the Republic of Ireland to Northern Ireland, we found no evidence that any customers in the UK were supplied by companies located outside the UK, nor arguments that there was scope for such supply to take place.
- 3.13 Northern Ireland appears to be a distinct market, both from Great Britain and from the Republic of Ireland. Although LPG is internationally traded, at the domestic level supply from Great Britain, from a firm not already present in the Northern Ireland market, would require substantial investment in marketing and distribution. This is also true of supply from the Republic of Ireland, albeit that (as noted above) a small amount of cross-border trade occurs at present. The two companies with a substantial presence in Northern Ireland do not supply outside Northern Ireland, although the parent companies of both also own companies which supply to other markets, including Great Britain.
- 3.14 We have not identified any distinct local markets within Great Britain or Northern Ireland; pricing appears to be broadly similar in all regions of Great Britain, while each of the suppliers in Northern Ireland charges a standard price. In Great Britain, one of the major suppliers [X] maintains standard prices that differ to some extent by region, but this variation seems to be insufficient to suggest that local or regional markets exist.

Aspects of the terms of reference

- 3.15 In its response to the Emerging Thinking Statement, Shell told us that, as the CC's terms of reference made no mention of the supply or maintenance of tanks for

storage of LPG, the CC 'would need to take a view on the scope of market definition before reaching any conclusions in relation to particular features of the relevant market'. We have done so.

- 3.16 We have noted above the current integrated supply of tanks and domestic bulk LPG, which requires customers to change tank in order to change supplier, and allows for the recovery of tank and installation costs partly through LPG prices. Given the existence of widespread integrated supply, we believe it is valid to regard supply of both LPG and tanks as part of the relevant market (ie the market for the reference goods or services) and of the economic market (see paragraph 14 of Appendix E), and that inclusion or exclusion of tanks from the economic market would not significantly affect our competition assessment. But, even if the supply of tanks could be regarded as a separate economic market, the Act provides that a 'feature' capable of adversely affecting competition includes conduct of one or more than one person who supplies goods or services in the relevant market, whether or not that conduct is in the relevant market concerned.²⁷ Hence, since suppliers of LPG and suppliers of tanks are to a large extent one and the same, any conduct relating to tanks which was undertaken by suppliers of LPG and which we might identify as adversely affecting competition would qualify as a 'feature' of the relevant market capable of preventing, restricting or distorting competition.
- 3.17 About 9 per cent of customers are residents of metered estates, from whom we received a number of complaints. The term 'metered estate' is used to describe a number of possible arrangements, which are set out in detail in paragraphs 4 to 16 of Appendix A. In some cases the supplier supplies the customer directly, through a central fixed storage tank which also supplies other customers. In other cases the supplier's customer is an intermediary such as a developer or estate owner, who resells the LPG to customers on the estate. Suppliers typically regard such supply via an intermediary as part of their commercial business. As discussed in Appendix A, since such intermediaries supply LPG from a central tank through pipes to individual sites, in our view they cannot be regarded as supplying to fixed storage tanks, as specified in our terms of reference.²⁸ However, supply to those intermediaries, even where dealt with by suppliers as commercial customers, can be regarded as falling within the terms of reference since such supply is ultimately for domestic use.
- 3.18 As noted in paragraph 3.10, in terms of the economic market definition, we have seen no evidence to suggest that supply to customers on metered estates should be treated as a separate market from the remainder of domestic bulk LPG supply, albeit that they may have some distinct characteristics, such as lower prices (due to the efficiency advantages noted above) and additional barriers to switching, for example due to ownership by the supplier of the pipework and/or land on which the tank is sited, or the fact that in many cases it may be impossible or unattractive for a

²⁷Section 131(2)(b) of the Act.

²⁸We are aware of other measures that to some extent address the supply by developers and estate owners to customers. First, the Office of Fair Trading in September 2005 issued a guidance note on unfair terms in holiday caravan agreements (*Guidance on unfair terms in holiday caravan agreements*, Office of Fair Trading, September 2005). The guidance included as examples of terms that could potentially be considered unfair those which without good reason tie caravan owners to purchasing services supplied by the park owner such as caravan accessories or the supply of LPG. The guidance related inter alia to the provision of services including LPG and addresses the unfairness of terms imposing an unfair financial burden upon residents or allowing for unilateral variation by the landlord and emphasises the need for transparency in fees. The document also noted more generally that occupiers of park homes may have additional protection under other legislation. We also noted that the Office of the Deputy Prime Minister issued a consultation document on Park Home Statutory Instruments (*Park Home Statutory Instruments, Consultation on Implied Terms and Written Statement*, Office of Deputy Prime Minister, July 2004), responses to which were published in February 2005 (*Implied terms and written statement for park homes, Consultation Summary of Responses*, Office of Deputy Prime Minister, February 2005), and a draft statutory instrument was laid before Parliament on 24 May 2006 to amend Schedule 1 of the Mobile Homes Act 1983 and is due to come into force on 1 October 2006.

householder to install his or her own individual tank (see paragraphs 39 to 41 of Appendix G).

4. Market features

- 4.1. We now consider whether there are possible features, as explained in paragraph 1.3 above, of the relevant markets that may prevent, restrict or distort competition. We discuss in turn the structure of the markets; switching; pricing; non-price competition; and entry. In each case, we first discuss possible features relating primarily to the Great Britain market; and then the extent to which they may also apply in the Northern Ireland market.

A. Market structures

- 4.2. As noted above and in paragraph 7 of Appendix F, the major suppliers account for about 90 per cent of supply of domestic bulk LPG in Great Britain; Calor alone accounts for almost one-half of supply.
- 4.3. While Calor's market share has reduced since the early 1980s when it held over 75 per cent, the combined share of the major suppliers appears to have risen from about 75 per cent in 1995 to about 90 per cent in 2003, mostly as a result of acquisitions.
- 4.4. We considered whether the current level of market concentration, in the supply of an essentially homogenous product, might give scope for coordination²⁹ between firms. We carried out an econometric study into whether the prices charged by the major suppliers over time supported a conclusion of coordinated effects. We considered that the results of the study did not provide clear evidence that coordination was occurring in the market for domestic bulk LPG.³⁰ Indeed, the extent to which the average prices charged by suppliers diverge over sustained periods tends to indicate that suppliers price with a degree of independence. A smaller supplier alleged that it had been put under pressure to offer its customers similar contract terms to those offered by the larger suppliers. On the whole, however, we have not found sufficient evidence to conclude that any of the major suppliers are engaging in any practices which it would not be in their interests to engage in unilaterally. Nevertheless, as discussed in paragraphs 42 to 48 of Appendix I, there is some evidence to suggest that the conditions for coordination may be met in this market, and it is possible, in principle, that such coordinated effects could emerge in future if the suppliers' incentives to coordinate were to increase.
- 4.5. In Northern Ireland there has been little change in market structure in the last ten years (see Table 2 of Appendix F). [S] has been the largest supplier throughout that time. Between 1995 and 1998, there were effectively three companies in the market: Calor NI, Flogas NI and Blugas NI Ltd. In 1998, Calor NI bought Blugas.

B. Switching

Background

- 4.6. We discuss switching costs in Great Britain in Appendix G. As noted above, suppliers in general retain ownership of the tanks which they install in domestic premises and

²⁹See paragraph 3.61 of CC3, *Market Investigation References: Competition Commission Guidelines*, June 2003.

³⁰Particularly in view of missing data and some structural shifts over the period studied.

seldom, if ever, allow customers to receive domestic bulk LPG from another supplier into their tanks or themselves supply into tanks they do not own.

Level of switching costs and charges

- 4.7. Switching supplier therefore usually entails removal of the remaining LPG from the existing tank, removal of that tank, and installation of a tank belonging to the incoming supplier. As shown in Table 1 of Appendix G, the costs of installing an overground tank (excluding the costs of the tank itself) were estimated by the major suppliers at between £250 and £650; and of removing an overground tank at between £200 and £250. (These figures relate to Great Britain. Information on equivalent switching costs in Northern Ireland is at paragraphs 7 to 10 and Table 1 of Appendix H.) Costs of installing and removing underground tanks can be several times higher than this (as noted in paragraph 20 of Appendix G, estimated removal costs are as high as [£]). There is some evidence that installation and removal costs may be lower when the customer is switching between suppliers, rather than entering or leaving the market, as set out in paragraph 12 of Appendix G. While the figures above suggest combined costs of installation and removal of between £450 and £900 (for an above-ground tank), supplier estimates of the costs when the customer was switching supplier ranged from £330 to £700.
- 4.8. In considering switching costs, it is important to distinguish between the total costs resulting from a switch from one supplier to another and the costs borne by customers through upfront charges. As set out in paragraphs 10 to 18 of Appendix G, suppliers adopt different policies on the extent to which costs of removal and installation of a tank:
- (a) are met by upfront switching charges on customers;
 - (b) are subsequently recovered in other charges, particularly LPG prices, levied on those specific customers; or
 - (c) are borne by the supplier (and likely to be largely reflected in the overall level of LPG prices).

Customers are not always informed of their suppliers' charges for tank uplift in advance of their initially contracting for LPG. While some contracts state the uplift charge, others note the customer's liability for the cost of removal, without indicating what this cost will be (see paragraphs 30 and 31 of Appendix G). In practice, moreover, the stipulated charges for uplift and installation are often waived either fully or in part (see Table 1 of Appendix G). Even if customers are not therefore actually charged the stipulated amounts for uplift and installation, they will reasonably believe such charges will be levied because the charges are stipulated in the contract. Hence, there is considerable scope for uncertainty on the part of customers as to the charges they will face when switching.

- 4.9. As a result of differing policies, and an element of discretion in applying those policies, the upfront charge to a customer of removing one tank and installing another when switching between suppliers varies widely between customers of the same, and different, suppliers. Among the major suppliers in Great Britain, the weighted average standard installation charge is about £100 and the weighted average standard removal charge is £135 (see Table 1 of Appendix G). The standard charges were applied to around half of all customers of the major suppliers for whom a tank was installed and removed (respectively) in 2003. No charges were applied in a substantial proportion (around [] per cent) of cases of both installation and removal. Among those charged, the weighted average charges were about £155 and

£120 respectively (ie £275 in total). (We note that the average removal charge for those charged is lower than the standard charge, while the opposite is true for installation charges.) Over all installations and removals—those charged and those for which no charge was levied—the weighted average charges were about £90 and £70 respectively (ie £160 in total for switching a tank). The charges for installation of underground tanks, which are not widely used at present but have become more common, are considerably greater (see Appendix G, paragraphs 19 and 22), and it is likely that uplift charges will also be higher, reflecting the higher costs to the supplier (though there has been very little switching of underground tanks to date). In addition, customers commonly incur excavation costs in order to prepare their land for installation of the tank.

Inconvenience and uncertainty of the switching process

- 4.10. The average annual bill for domestic bulk LPG was about £800 in 2003, as set out in the annex to Appendix G, paragraph 6; hence these upfront charges are substantial in relation to the potential savings available to a customer by switching (a 10 per cent saving would, for example, be some £80 a year, or 20 per cent saving £160). However, as we note in paragraph 58 of Appendix G, even where there is apparent scope for savings by switching, customers on the whole do not switch. An important reason for this may be that the inconvenience involved in switching tanks can be considerable. As set out in paragraph 24 of Appendix G, inconvenience can incorporate a number of different elements, including the need to monitor the level of gas in the tank over the (often lengthy) notice period; the process of arranging removal and replacement of the tank by outgoing and incoming suppliers; the actual uplift and replacement, which normally involves the use of one or more cranes; and the length of time and degree of contact with suppliers it takes to complete the process. As noted at paragraph 24 of Appendix G, the process may take up to four or five months (including time for the customer to find the best deal, a three-month notice period (discussed below), and time for the suppliers to coordinate switching), although one of the major suppliers [X] denied this (see paragraph 26 of Appendix G).
- 4.11. We note that perceptions of inconvenience are to a degree subjective, and individual customers may ascribe different levels of inconvenience to the same switching process. Moreover, an individual customer's expectations as to the level of inconvenience may act as a disincentive to switching even where the actual inconvenience involved would not be substantial. We consider that, in addition to the actual inconvenience of switching, customer perceptions of inconvenience—whether due to individual aspects of the switching process, the switching process as a whole or uncertainty as to what the process entails—may also constitute a disincentive, and hence a barrier, to switching. Where we refer to inconvenience in this report, we include (a) the actual inconvenience of switching, (b) customer perceptions of inconvenience, and (c) uncertainty about the degree of inconvenience involved in switching.

Contract terms

- 4.12. Several industry standard contract terms have the potential to impede customer switching, in particular:
- (a) As set out at paragraph 36 of Appendix G, three-month notice periods are common, and are justified by suppliers as allowing customers time to run down the supply of gas in their tank before uplift. However, most suppliers seem to see this as necessary only when the customer is switching to another fuel: if a new

tank is being installed, gas remaining in the outgoing tank can be transferred to the new tank so there is less need to 'run down' supply. Despite this, suppliers do not usually make arrangements for switching tanks until the notice period has expired.

- (b) As set out at paragraphs 32 to 35 of Appendix G, suppliers generally require new customers to enter into minimum contract terms of three or five years, which have been justified by suppliers as being necessary to recover installation costs. In some cases, existing customers who have successfully negotiated a discount are also required to enter into fixed-term contracts.

Metered estates

- 4.13. Customers on metered estates face additional barriers to switching, such as the need for cooperation between those on the estate.³¹ On the other hand, if residents on a metered estate work together to obtain the lowest price for LPG they may be able to do so more effectively than individual customers: the volume of business makes it more valuable to the current supplier and more attractive to competitors, and some switching costs can potentially be divided up between the properties on the estate (see further paragraph 4.54).

Switching rate

- 4.14. Each year, around 3 per cent of the major suppliers' customers end their supply arrangement. Only one in six of these (0.5 per cent of the customer base) do so to switch to an alternative supplier (see Tables 9 and 10 of Appendix G).³² The major suppliers argued that a switching rate of 0.5 per cent should not be regarded as particularly low.³³ However, the switching rate of 0.5 per cent appears low compared with other industries. For example, annual switching rates for mains gas and electricity respectively are around 15 per cent and 22 per cent.³⁴ We acknowledge, as some suppliers have argued, that there are differences between the mains utility market and domestic bulk LPG,³⁵ but we consider the figure for domestic bulk LPG to be low whatever the benchmark used.³⁶
- 4.15. In addition to those customers which actually switch to another supplier, some customers threaten to switch in order to negotiate lower prices from their suppliers (or plan to switch and change their mind because their supplier offers a discount). There is some uncertainty regarding the proportion of the customer base (at any given time) receiving lower prices because they have threatened to switch: details of price negotiations are not always recorded accurately, and price differences between customers (or price changes) may reflect other factors such as different costs of supply or compensation for service problems. As set out in paragraph 4.42, we

³¹In principle, it would be possible for individual customers to have a tank installed in their own garden, but this may often be impracticable or unattractive, for example due to lack of available space or the greater expense to the supplier of delivering to a single household rather than an entire estate. See further paragraph 39 of Appendix G.

³²The other reasons for leaving an LPG supplier are customers switching to heating oil (1 per cent), vacating premises (0.3 per cent), switching to natural gas (0.2 per cent), and 'other' or 'unknown' reasons (1.1 per cent).

³³The suppliers argued that regard should be had to the total number of customers who were lost and gained over an extended period. One of the major suppliers [redacted], for example, told us it lost [redacted] customers over a five-year period. However, the majority of these losses were due to customers switching to other fuels or no longer requiring a fuel supply (for example, when a property is vacated), and we do not believe that these should be regarded as switchers within the relevant market. (The event of a customer moving out of a property and the new occupant signing a contract for supply of LPG from the same supplier is not counted as a loss or gain in the 0.5 per cent switching figure.)

³⁴Source: Ofgem, *Domestic Competitive Market Review 2003*.

³⁵For example, mains utility suppliers are not involved in physical delivery of energy products.

³⁶In the SME banking inquiry in 2002, the CC considered an annual rate of switching of 4 to 6 per cent to be 'very limited' (*The supply of banking services by clearing banks to small and medium-sized enterprises: A report on the supply of banking services by clearing banks to small and medium-sized enterprises within the UK*, Cm 5319, 2002, at paragraph 275).

estimate that close to 5 per cent of customers at any one time are receiving discounts because of an actual or implied threat to switch, although some of the major suppliers have argued that the proportion is considerably higher.

- 4.16. One supplier [redacted] argued that, in considering the percentage of customers switching, we should exclude the proportion of customers who accepted fixed-term contracts in return for lower introductory prices, or subsequent discounts as, even if they wanted to, such customers were not free to switch. But we note in this regard that lengthy fixed-term contracts may themselves constitute a barrier to switching with the potential to impede competition (see paragraph 4.27), and that, even as a proportion of those who were free to switch, the number of switchers from this supplier was still relatively low (see paragraph 52 of Appendix G).

Assessment of effect of barriers to switching on competition

- 4.17. As indicated in the previous section, we consider that the switching charges and inconvenience of the switching process are often considerable and amount to barriers to switching between suppliers.³⁷ Uncertainty as to the extent of the switching charges may also act as a disincentive to switching, and certain standard contract terms have the potential to impede switching or increase the uncertainty of the switching process further. In this section, we consider the effect of these barriers to switching on competition in the market for domestic bulk LPG in Great Britain.

Effect of switching costs and charges

- 4.18. Some of the major suppliers told us that switching charges were not sufficient to deter switching in return for lower prices (although one acknowledged that switching costs had some effect). However, in our view, the upfront switching charge to the customer on switching supplier—the weighted average among the major suppliers being approximately £100 for installation and £135 for removal (see paragraph 4.9)—is significant in relation to the savings available (for example, the illustrative range of £80 to £160 noted in paragraph 4.10). One of the major suppliers [redacted] claimed that the majority of cases where little or no charges have been levied for tank installation and removal relate to customers switching between suppliers, yet (as regards removal charges) this appears to be inconsistent with evidence it provided that around [redacted] per cent of customers who switched from it to another supplier did not pay a removal charge, whereas a higher proportion of customers (over [redacted] per cent) who stopped using it for other reasons did not pay such a charge.
- 4.19. As regards these upfront charges to customers for switching, the major suppliers noted that the ORC survey suggested that customers were not deterred by such charges, with 62 per cent of those who had switched paying between zero and £10. However (as noted in paragraph 29 of Appendix G), we believe that data from the ORC survey about customers that switched supplier should be treated with caution due to the small sample size,³⁸ and that more comprehensive data, summarized in Table 1 of Appendix G, on charges provided by the major suppliers confirmed that average switching charges were considerably higher than those reported by survey respondents, on average (as noted in paragraph 4.9) some £160 across all

³⁷Of the 126 customers who wrote letters of complaint to the OFT and ourselves (letters from 82 of whom we put on our website), excluding those customers supply to whom does not fall within the ToR, almost two-thirds referred to general restrictions on, or barriers to, switching supplier, including contractual ties and (from just less than half of complainants) difficulties associated with switching tanks and the need for tank uplift and installation (see paragraph 44 of Appendix G).

³⁸Although over 1,000 customers were surveyed by ORC, only around 60 had switched supplier.

customers who switched, but £275 to those who were charged.³⁹ As shown in the annex to Appendix G, such charges have a substantial impact on the net financial benefit of switching.

- 4.20. We consider that, to the extent switching costs are initially borne by individual customers through upfront switching charges, these costs must necessarily reduce the net benefit to a customer of switching and therefore discourages them from doing so. Costs of tank installation and removal were the most common disincentives to switching among respondents to the survey by ORC. When prompted, six in ten said that these costs were a disincentive (see Table 8 of Appendix G). On the other hand, to the extent these costs are initially borne by incoming suppliers, they must necessarily reduce the net benefit to a supplier of winning a new customer and may consequently reduce the incentive to suppliers competing for the business of existing customers of other suppliers. Switching costs may also lead the supplier to offer a less competitive price than would otherwise be the case. A large number of smaller suppliers who gave evidence to us supported the view that difficulties in switching supplier including the current system of tank uplift inhibited them from competing for each others' customers (see paragraph 50 of Appendix G).
- 4.21. As discussed in paragraphs 103 et seq of Appendix G, in some circumstances, markets with switching costs may be competitive. For example, the ability to price discriminate between new and established customers may give firms more scope to compete aggressively for each others' customers, leading to lower prices generally. But the use of introductory prices in the domestic bulk LPG market has not led a significant number of customers to switch supplier to obtain a lower price, or to negotiate a lower price from their existing supplier. The existence of price discrimination does not itself indicate a lack of competition in the market for the supply of domestic bulk LPG, but rather the customers' failure to switch in order to avail themselves of lower introductory prices or to negotiate a better deal on the basis of those prices. The use and effect of introductory prices and selective discounting is considered further in the section on suppliers' pricing policies in Appendix I, paragraphs 103 to 113 of Appendix G and from paragraph 4.71.

Effect of inconvenience and uncertainty

- 4.22. It was put to us by one of the major suppliers [redacted] that we do not have sufficient evidence to make a formal finding of inconvenience caused by tank uplift. The same supplier noted that thousands of tanks are uplifted without complaint each year (ie for refurbishment). However, we consider that practice is a not a direct parallel with arrangements to uplift on the change of a supplier, as it takes place within an ongoing supply relationship, does not require any cooperation between competing suppliers or involvement by the customer, and does not give rise to any possible incentive on the part of the supplier to obstruct the process. The relevant evidence on which we have reached a view that tank uplift is inconvenient is as follows:
- (a) *Survey evidence.* Respondents to the ORC survey commissioned by the CC were asked to identify reasons that would discourage them, or had discouraged them from switching supplier. When prompted, more than half identified the inconvenience of tank installation and removal, while four in ten identified the

³⁹One of the parties [redacted] argued that Table 1 is not a valid comparison with the ORC survey since it is not limited to customers who switched supplier. The figures in Table 1 are not confined to switchers from one supplier to another, but also relate to customers who have stopped using LPG for another reason, for example because they have switched to another fuel. However, the major suppliers told us that they did not have a policy of levying different charges on such customers (and, as noted in paragraph 4.18, evidence from one supplier indicates that to the extent that different charges might be levied for removal, customers switching to another supplier may actually pay charges more often than those switching for other reasons).

inconvenience of changing contract and six in ten identified contractual restrictions or uncertainty as to the scope of such restrictions (respondents were allowed to give more than one reason for switching—see Table 8 and paragraphs 42 and 43 of Appendix G). One of the major suppliers [X], in arguing that there were no barriers to switching, noted that 54 per cent of respondents to the ORC survey who switched supplier found it was easy to do so. For the reasons set out at paragraph 4.19, we do not consider that aspect of the ORC survey findings to be reliable. However, even assuming the data were reliable, we note that a substantial minority (35 per cent) said that it was difficult to change suppliers (see paragraph 29 of Appendix G) and that a customer's expectations as to the level of inconvenience may act as a disincentive to switching even if he expresses satisfaction with the actual process of switching after the event (see paragraph 4.11);

(b) *Letters of complaint.* Just less than half of the customers who complained to the OFT and the CC referred to the need to change tank (ie tank uplift and installation) as barriers to switching. Many of these complainants indicated that they regarded the process of switching tanks as inconvenient (examples are given at paragraph 44 of Appendix G and more letters were published on the CC website);⁴⁰ and

(c) *Nature of the switching process.* There are several steps required for the switching process and customers need to be involved at a number of stages throughout the process (summarized in Tables 5 and 6 of Appendix G).

4.23. It was also argued to us that the inconvenience and time taken to switch were 'perceived' barriers to switching rather than actual barriers. However, where a customer needs to expend time and effort in identifying the most competitive supplier and organizing a switch to that supplier, this amounts to a cost to that individual, which is a disincentive to switch. Moreover, as noted in paragraph 4.11, while perceptions of inconvenience are to a degree subjective, and individual customers may ascribe different levels of inconvenience to the same switching process, an individual customer's expectations as to the level of inconvenience will strongly influence their switching behaviour.

4.24. One of the major suppliers [X] has argued that the LPGA has sought to simplify the switching process and that the relevant LPGA CoP⁴¹ achieves this by providing for coordination between the outgoing and incoming supplier in the exchange of tanks and ensuring that there is little or no risk of a break in supply during the process. [X] said that the prospect of winning customers back disciplines suppliers into facilitating a smooth switch. We have seen no evidence in support of this claim. We acknowledge that the LPGA CoP may go some way to reducing the potential for delays in switching following expiration of the notice period, and the number of interfaces between the customer and the incoming and outgoing suppliers. However, the LPGA CoP is voluntary, established by a trade body to which not all suppliers

⁴⁰[X] argued that only some 14 of 76 complainants on our website referred directly to the physical aspect of tank uplift and that it had not seen all of the customer letters. Primarily for reasons of confidentiality, we chose only to publish those letters for which we received consent from the relevant customer. As explained at paragraph 4.19 in the Provisional Findings, and again at footnote 37 and paragraph 4.22(b) of the Proposed Final Decision, this meant that we published redacted versions of letters from 82 of the 126 customers (excluding those customers supply to whom does not fall within the ToR) who wrote letters of complaint to the OFT and ourselves. We checked those letters which we were not able to publish, and the proportion of complainants referring to barriers to, and the inconvenience of, switching is broadly the same as for those letters which we were able to publish. While we accept that a relatively small number of the letters we published in redacted form refer directly to the physical aspect of tank uplift, almost two-thirds of complainants referred to general restrictions on, or barriers to, switching supplier, including contractual ties and (from 57 complainants) difficulties associated with the need to change tank in order to change supplier (requiring uplift of the existing tank and installation of a new one) and with the cost, delay and other inconvenient aspects of having to do so (see paragraph 44 of Appendix G).

⁴¹LPGA CoP 26.

belong and is not always adhered to by suppliers. The letters of complaint we have received from customers, the varying interpretations of the LPG CoP provided to us by the suppliers themselves and evidence received from some suppliers that delays and frustrating action by the incumbent supplier do occur and that the switching process is held out by incumbents as difficult and potentially dangerous (see, for example, paragraphs 47 to 50 of Appendix G) lead us to conclude that the LPG CoP does not solve all of the difficulties inherent in the existing switching process. Some of the major suppliers also acknowledged that comprehensive details on the switching process may not always be given to all customers and that there was scope for making more information about the transfer process available to customers.

Effect of contractual barriers to switching

- 4.25. On contractual terms, we referred in paragraph 4.12 to three-month notice periods being common and to lengthy minimum contract terms being widely used for new customers and, in some cases, for existing customers as a condition for negotiated discounts.
- 4.26. While it may be necessary to have a reasonable notice period, if it is too long, this can inhibit switching. One of the major suppliers [redacted] suggested to us that long notice periods increase the scope for the incumbent supplier to price defend. The current three-month period offers the incumbent supplier a 'tactical advantage' and suppliers often negotiate discounts during the notice period to retain the customer⁴² (as discussed further at paragraph 4.78, this allows incumbent suppliers to retain most of their marginal customers while maintaining higher prices across the vast majority of the market). In addition to providing an opportunity for the incumbent supplier to respond with a lower price (which may discourage suppliers from seeking to win customers and facilitate higher prices across the rest of the market), we are concerned that the use of three-month notice periods increases the inconvenience of the switching process (including the need to monitor the amount of LPG remaining in the tank). Some suppliers acknowledged that the three-month notice period was currently longer than necessary, particularly for customers switching to another supplier, in which case remaining gas in the outgoing tank can be transferred to the new tank.
- 4.27. We recognize that initial fixed-term contracts can be pro-competitive by allowing suppliers to recoup initial investment, and hence incentivizing them to compete for new business. However, minimum contract terms may limit the ability of customers to avail themselves of better offers from other suppliers, for example where the costs of installation are recoverable in a shorter period than the fixed term, and the length of the term may dampen rather than encourage competition. In practice, penalties for early termination of contracts are often waived, but this is not known to customers in advance, and depends on negotiation between customer and supplier.⁴³
- 4.28. As indicated in paragraph 4.8 and the preceding paragraph, the opacity of the contractual relationship may also impede switching. Customers are often not clear about the terms of their contracts, or about the extent to which they would be

⁴²We note that [redacted] contract contained a requirement that 'if following expiry of the minimum period you [ie the customer] feel that a third party can make (in total) a more competitive offering, you agree to give us the right to meet such offering or to make such proposals as are, in all the circumstances, equally competitive'. [redacted] told us that the objective of the clause was to make it clear to the customer that [redacted] would provide a competitive service at a competitive price, but, since the clause might be misinterpreted, it would be dropped.

⁴³We understand that a number of aspects of contract terms have been modified or accepted as unenforceable by suppliers as a result of discussion with the Contract Regulation Unit at the OFT, but such changes may not apply to customers supplied under existing contracts and, even where this is the case, customers with existing contracts may not always be aware of this.

enforced,⁴⁴ and we have heard of instances where the suppliers themselves may not be certain of the terms on which they are supplying. The ORC survey asked customers to identify, from a prompted list, reasons that had discouraged them from switching supplier. While cost and inconvenience were the most frequently identified, around half of respondents also identified uncertainty about what their contract allowed, cost penalties for cancelling the contract, and uncertainty about what the penalties were as reasons that had discouraged them from switching (see further Table 8 of Appendix G).

- 4.29. Given the discretion that suppliers can exercise over which contract terms to enforce and which to waive, suppliers would have the ability and incentive to increase the barriers to switching by changing their practices in the future—for example, by enforcing contract terms relating to removal charges strictly rather than waiving charges—in response to an increase in competition.⁴⁵
- 4.30. Overall, we conclude that the contractual barriers to switching identified above enhance the inconvenience of the switching process, increase uncertainty as to the level of switching charges, and consequently reduce the level of switching.

Relevance of safety to switching costs

- 4.31. It was also argued that the actual costs faced by suppliers during the switching process resulted from the current arrangements for integrated supply of LPG and the tank, which were essential in achieving customer benefits, including safety, efficiency and service. We discuss, in paragraphs 5.17 to 5.35, the health and safety rationale for certain business practices which result from the integrated supply model, and consider whether alternative arrangements could have developed which would have achieved those benefits without imposing the same level of switching costs.

Assessment of other factors influencing the level of switching

- 4.32. As set out in paragraph 4.14, the rate of switching appears to be low, with around 0.5 per cent of customers switching from one supplier to another each year.
- 4.33. The previous section discussed the effect of switching costs, the perceived inconvenience and uncertainty of the switching process and contractual terms on competition in the market for domestic bulk LPG. In this section, we consider the relevance of several other factors which may influence the rate of switching, or have been suggested as doing so, namely:
- (a) high levels of customer satisfaction;
 - (b) low levels of customer awareness of alternative suppliers; and
 - (c) the practice of offering customers discounts to dissuade them from switching.

⁴⁴When prompted with a list of possible factors discouraging them from switching supplier, around half of respondents to the ORC survey identified uncertainty as to what their contract allowed, and what the penalties were as factors.

⁴⁵As noted in paragraph 4.24, one of the major suppliers [redacted] argued that it had no incentive to make the switching process more difficult, but rather that the prospect of winning customers back disciplines suppliers into facilitating the smooth switch to a new supplier of their former customers. While we accept that this may be a factor which some suppliers take into account, we are not persuaded that it is sufficient to preclude any incentives to increase the cost or inconvenience of switching.

High levels of customer satisfaction

- 4.34. The major suppliers told us that there was a strong link between levels of customer satisfaction and switching, and that high satisfaction levels were the primary explanation for low switching rates. Customer surveys by suppliers tend to show high levels of satisfaction with service quality (in recent surveys, [X] per cent of [X] customers and 60 per cent of [X] customers said that they were likely to recommend their supplier, while a further 23 per cent of [X] customers would 'possibly' do so) and this was largely confirmed by our own survey, which indicated that far more customers are satisfied than dissatisfied with their supplier (76 per cent compared with 14 per cent).
- 4.35. That reported satisfaction is high is not in question. However, as discussed in paragraph 66 of Appendix G, these results do not necessarily support the view that the very low rate of switching is due to customer satisfaction. Responses to the ORC survey indicate that, although most customers find their supplier satisfactory, about 70 per cent do not have a view as to whether the service from other suppliers would be any less satisfactory, while those that expressed a view were most likely to think that other suppliers were about the same as their current supplier: only 4 per cent believed other suppliers offered a poorer service. A recent qualitative survey for one of the major suppliers [X] (discussed in paragraph 71 of Appendix G) concluded that customers had very low expectations of service, primarily because of the difficulty of switching and the resultant lack of competition. As such, reported satisfaction with the present supplier does not necessarily equate to a strong preference for that supplier's service over others. Indeed, around half of all customers started using their current supplier by moving into a house to which the company had been supplying, in contrast to the one in ten who did so by switching from another supplier, suggesting that convenience and the desire to avoid installation charges has at least as much influence on the choice of supplier as personal preference.⁴⁶
- 4.36. We received evidence (discussed in paragraphs 67 and 68 of Appendix G) that customers attach greater importance to price than service quality, and satisfaction with LPG prices tends to be significantly lower than satisfaction with service. In the ORC survey, more customers were dissatisfied than satisfied with the value for money they get from their supplier (54 per cent compared with 33 per cent). The major suppliers argued that, following a period of rising prices due to increases in wholesale propane prices, it was unsurprising that, although customers were satisfied overall with their supply of domestic bulk LPG (reflecting the importance and value of service levels in this sector), they expressed dissatisfaction with the cost of LPG. The major suppliers also noted that 46 per cent of customers in the ORC survey who experienced price increases thought that other suppliers made similar increases, reducing their likelihood of their wishing to change supplier in response.
- 4.37. We accept that customers will rationally prefer a lower price to a higher price, and that the proportion of customers who express dissatisfaction with prices or value for money in part reflects increased LPG prices resulting from the current level of input prices. Similarly, as regards the complaints by some customers to us that LPG prices are significantly greater than those of mains gas, it would be unreasonable to expect the level of LPG prices to be equivalent to that of mains gas given the different costs of supply. However, we note that even though many customers in the ORC survey

⁴⁶It has been put to us by a major supplier [X] that house movers are merely potential customers and need to be persuaded to buy from the current supplier to the property. However, such house movers would still be subject to installation charges and the inconvenience and uncertainty of the switching process, and therefore have an incentive to contract with the 'incumbent' supplier. Moreover, the same supplier pays its sales staff more for signing a completely new domestic supply contract than one where the property owner has changed, suggesting that the former are seen as more difficult to acquire (see paragraph 70 of Appendix G).

describe themselves as dissatisfied with value from their supplier, and many (36 per cent) think that other suppliers offer a lower price, 45 per cent of those who described themselves as dissatisfied (overall) with their supplier had never considered switching.

- 4.38. Some of the major suppliers [X] and [X] criticized us for being ‘highly selective’ or inconsistent in our use of the ORC survey and one of those suppliers [X] also argued that we had unfairly favoured the ORC survey over other customer survey evidence. As noted in paragraph 69 of Appendix G, we consider the ORC survey to be a particularly important source of evidence, because we were able to monitor the sample selection process, and because the questions were designed with the current inquiry in mind. However, we interpreted the results with caution, taking into account sample sizes for specific question responses, internal consistency of responses, consistency with evidence from other sources, and, more generally, how responses should be interpreted in the light of evidence from other sources.
- 4.39. In summary, while we accept that there may, in principle, be a relationship between customer satisfaction and switching rates, we do not consider that the reported satisfaction with the service quality of incumbent suppliers demonstrates a strong preference for that supplier’s service over others. There is little evidence to support the proposition that customers remain with a supplier because they believe the quality of service from that supplier to be greater than other suppliers. Customers appear to attach significantly more importance to price than to service quality in comparing suppliers. In any event, there appears to be a large degree of passivity in the customer’s choice of supplier and even among customers who expressed dissatisfaction with their supplier, almost half had never considered switching.

Low awareness of competing offerings

- 4.40. The ORC survey provided evidence of low customer awareness of alternative suppliers. Nine out of ten customers (91 per cent) said that they had never been approached by another supplier. Over half could not name or did not know any other suppliers, although identifying local suppliers does not appear difficult. We also note in paragraph 82 of Appendix G the difficulty in comparing prices, for those who may wish to do so, given the absence of readily-available published prices and the inability, due to fluctuating costs of propane, of most suppliers fully to commit to future prices. While suppliers told us that they quoted indicative prices to prospective customers who contacted them, several customers who wrote to us found suppliers unwilling to quote for business and the ORC survey found that around one-third of customers had experienced difficulty when seeking to compare prices (see paragraphs 77 and 79 of Appendix G).
- 4.41. The effects of low customer awareness of offers from alternative suppliers is likely to be exacerbated by the barriers to switching identified above—with customers having limited incentive to investigate these offers, and the alternative suppliers having limited incentive to market them.

Ability to negotiate lower prices without switching

- 4.42. Another reason suggested by suppliers for the low rate of switching was the practice of offering discounts to customers who threatened to switch. The suppliers argued that such discounts enabled customers to benefit from competition without having to switch. We consider the effects of such selective discounts on competition in paragraphs 4.76 to 4.78. We note here that estimates of the extent to which customers obtain discounts by threatening to switch are highly uncertain (the

question of whether a discount was motivated by an expectation that the customer would switch is in some cases subjective). Estimates of the proportion of the customer base in receipt of discounts after threatening to switch range from less than 5 per cent to more than 20 per cent at any one time. On the whole, however, we consider, from the balance of the evidence set out in paragraphs 83 to 96 of Appendix G, that the correct figure is at the low end of that range (close to 5 per cent), and the number of customers, at any given time, enjoying discounts which they have won by threatening to switch, represents a small proportion of the market. Moreover, where discounts are offered, they are not necessarily equivalent to the savings the customer could have made by switching.

- 4.43. While the level of switching would probably be higher if suppliers did not offer selective discounts to those customers who threaten to switch, it is not clear that every individual who threatens to switch would actually go ahead and do so. Even if all threats to switch were carried out, the overall level of switching would still not be particularly high (the major suppliers estimate that in 2003, 3 per cent of their customers threatened to switch—see paragraph 87 and Table 12 of Appendix G). On this basis, we do not consider that low levels of switching can be explained simply on the ground that suppliers offer customers discounts to dissuade them from switching.
- 4.44. Some smaller suppliers were also concerned that the ability of incumbent suppliers to offer a selective discount increased the costs of winning customers. They cited examples where, after they gave a competitive quote, and sometimes even after they had signed a new customer, that customer then decided to stay with its existing supplier in response to the offer of a price reduction, reducing their incentive to compete for such customers. The effects of this practice are considered further in paragraphs 4.76 to 4.78.

Northern Ireland

- 4.45. As we note in Appendix H, there is virtually no switching between suppliers in Northern Ireland and the market exhibits a number of the barriers to switching similar to those identified in Great Britain, in particular:
- (a) the model of integrated supply, which would result in substantial costs to both the incoming and outgoing firm were a customer to switch suppliers;
 - (b) charges for tank installation and removal (on average a customer switching from one supplier to another can expect to pay charges of at least £[~~8~~], though less than they would expect to pay in Great Britain);
 - (c) supply agreements that specify minimum periods of exclusive supply of either 15 months or five years;
 - (d) three-month notice periods in contracts, although there is some indication that these are waived with greater regularity than in Great Britain; and
 - (e) some (limited) evidence that, as in Great Britain, customers have limited awareness of ability to switch supplier or of alternative suppliers, and that uncertainty as to the costs and inconvenience of switching (including tank uplift and penalties) has discouraged customers from switching.
- 4.46. However, the outgoing supplier appears to have less control over the switching process in Northern Ireland than in Great Britain: we were told that suppliers do not find out that a customer wants to stop using them until they are asked to collect the disconnected tank. There are, moreover, no selective discounts in Northern Ireland,

each supplier charging uniform prices to its customers, although, as we note in paragraph 4.81, these prices are not published.

Conclusions on barriers to switching

- 4.47. As discussed in paragraph 4.14, we regard the extent of switching in this market as very low. We accept that low switching is not of itself sufficient to conclude that there is weak competition: competition could still be effective if a large proportion of customers negotiated lower prices without needing to switch; and/or the benefits of price competition to prevent customers from switching were passed on to the generality of a suppliers' customers. However, as we discuss in paragraph 4.53, there are substantial differences in average prices between suppliers, between new and established customers, and between customers who have and have not negotiated discounts and we saw no evidence that these price differences reflect varying costs of supply. In our view, the ability to maintain such price differentials without customers switching to other suppliers is itself indicative of switching costs or other barriers to switching. The proportion of customers who threaten to switch each year, or who otherwise successfully negotiate some reduction in prices without actually switching, is low; and in contrast to utilities such as gas and electricity, the ability of suppliers to price discriminate between customers means that they can respond to competitive threats at a lower cost, by reducing prices only to those customers who appear likely to switch.
- 4.48. We believe the following are important barriers to switching:
- (a) the widespread practice, when a customer switches supplier, of the outgoing supplier removing its tank from the site and of the incoming supplier replacing it with an essentially similar tank, with the consequential costs of removing and installing tanks, which:
 - (i) to the extent that these costs are reflected in upfront charges to individual customers, acts as a barrier to customer switching;
 - (ii) to the extent that these costs are borne by the incoming supplier, acts as a disincentive to competing for the business of existing customers and/or leads them to offer a higher price than would otherwise be the case; and
 - (iii) to the extent that the practice gives rise to customer inconvenience (whether actual or perceived), acts as an additional barrier to customer switching;
 - (b) the lack of information among customers in that:
 - (i) some customers are not aware of their ability to switch supplier or of alternative suppliers;
 - (ii) suppliers often do not provide sufficient information in advance about customers' liability for switching charges;
 - (iii) there is uncertainty about the likely level of inconvenience of the switching process, which contributes to customer perception of inconvenience; and
 - (iv) customers generally are not aware of prices on offer from alternative suppliers and face some search costs in finding the cheapest supplier;
 - (c) the imposition of contractual restrictions on switching, including the use of lengthy fixed minimum terms in introductory contracts; requiring contract renewal

(with a further lengthy fixed minimum term) as a condition of selective discounts; three-month notice periods for termination; and (as noted in (b)(ii)) lack of clarity as to the extent of contractual liability; and

(d) the limited ability of suppliers to identify and target their marketing efforts on each others' customers.

4.49. The major suppliers have argued that a lower rate of switching means lower total switching costs—to the benefit of customers as they will ultimately pay for these costs. However, the negative effect on competition associated with a low switching rate may be considerably more detrimental to customers than any increase in costs resulting from a higher switching rate. At the current rate of switching between suppliers (0.5 per cent) the total cost of such switching is around £350,000 a year. An increase in competition which reduced all LPG prices by as little as 0.35 per cent would be sufficient to compensate customers for this level of switching costs (assuming all switching costs were ultimately borne by customers). In view of this, we consider the potential gains from increasing competition could be expected to outweigh any additional costs, even if switching were to increase tenfold. (This is before considering any reductions in the cost of switching that may also result from making the process of switching easier.)

4.50. In our view, the barriers to switching identified in paragraph 4.48 reduce the ability of, and/or incentives on, customers to switch to lower-priced suppliers or reduce the incentives on suppliers to compete for the business of their competitors' customers. We conclude that these barriers to switching (whether individually or in combination) are features of the supply of domestic bulk LPG in Great Britain which prevent, restrict or distort competition in that market. We received a number of complaints from customers on metered estates outlining the difficulties in switching, and we consider that the barriers to switching identified above apply equally to metered estates (indeed, as noted in paragraph 4.13, customers on metered estates may face additional barriers to switching).

4.51. We consider in paragraphs 5.17 to 5.35 whether, as argued by the major suppliers, requirements of safety justify all the precautions taken in supply of domestic bulk LPG and ownership of tanks which may inhibit switching.

Conclusions on barriers to switching in Northern Ireland

4.52. We discussed barriers to switching in Northern Ireland in Appendix H and paragraph 4.45. In our view, the following barriers to switching are features of the supply of domestic bulk LPG also in Northern Ireland which prevent, restrict or distort competition in that market:

(a) the widespread practice, when a customer switches supplier, of the outgoing supplier removing its tank from the site and of the incoming supplier replacing it with an essentially similar tank, with the consequential costs of removing and installing tanks, which:

(i) to the extent that these costs are reflected in upfront charges to individual customers, acts as a barrier to customer switching;

(ii) to the extent that these costs are borne by the incoming supplier, acts as a disincentive to competing for the business of existing customers; and

(iii) to the extent that the practice gives rise to customer inconvenience (whether actual or perceived), acts as an additional barrier to customer switching;

- (b) the lack of information among customers in that:
- (i) some customers are not aware of their ability to switch supplier or of alternative suppliers;
 - (ii) suppliers often do not provide sufficient information in advance about customers' liability for switching charges; and
 - (iii) there is uncertainty about the likely level of inconvenience of the switching process, which contributes to customer perception of inconvenience;
- (c) contractual restrictions on switching, including the use of lengthy minimum terms in introductory contracts; three-month notice periods for termination; and lack of clarity in contracts; and
- (d) the limited ability of suppliers to identify and target their marketing efforts on each others' customers.

C. Pricing

Background

Price variation between customers

- 4.53. In 2003, a wide range of prices was charged to customers in Great Britain; the highest prices charged to individual customers being over 50 per cent more than the lowest prices. Much of this variation appeared to be random, although some of it was explained by the identity of the supplier (average prices charged by the major suppliers varying by about 10 per cent but this range would be greater if smaller suppliers were included—see paragraphs 8 and 33 to 34 of Appendix I), by whether the customer was new or established, and by whether the customer had negotiated a lower price. Variations in the cost of supplying different customers (depending on factors such as the volume of LPG purchased and the distance of a customer from the supplier's depot) are reflected in prices at most only to a limited extent, and explain only a small part of price differences between customers (see paragraph 38 of and Annex 1 to Appendix I). As set out in paragraph 3.14, with one exception [§], the major suppliers told us that they do not, on the whole, charge systematically different prices between regions, and this is supported by our analysis.
- 4.54. As discussed in paragraph 4.13, metered estate customers may face some additional barriers to switching but may also, for various reasons, find it easier to negotiate a lower price. Customers in metered estates tend to pay lower prices, as set out at Table 3 of Appendix I. However, this reflects the lower delivery costs of supplying to metered estates than to individual premises. (With lower unit costs, and other things being equal, the supplier has an incentive to charge a lower price in order to sell more units.) On balance, we have not concluded that the extent of competition in supplying to metered estates is any different from that in supplying to individual customers.

Pricing policies of suppliers

- 4.55. Some suppliers offer standard prices to customers while others calculate prices on an individual basis. Most suppliers offer introductory discounts for periods varying from six months to three years, though in some cases, the contract length exceeds the period of the introductory offer.

- 4.56. In Great Britain, none of the major suppliers publishes its prices, for example on its website. Verbal, indicative offers may be made in response to telephone queries, but final, written price quotations normally require a visit to the site (see paragraph 24 of Appendix G). Some suppliers do at that stage provide information on the current level of standard prices as well as any lower introductory prices, and may commit themselves as to the prices that will be charged for between one and three years. However, the period over which the customers will in practice be supplied by that supplier is typically somewhat longer than the period for which prices are agreed. None of the major suppliers commits to prices (whether fixed or explicitly linked to costs such as propane) over the life of the supply relationship; nor is there any commitment within the contract to reduce prices if input prices fall.
- 4.57. Price changes by the major suppliers appear, recently, to have been caused mainly by changes in the wholesale price of propane, which has fluctuated considerably over the past few years (see paragraph 9 of Appendix I). The major suppliers told us that they attempt to keep to a minimum the frequency of such price changes, increases and decreases in propane prices not being passed on immediately. Although we received some representations that suppliers were quicker to increase than decrease LPG prices to reflect changes in propane prices, this was not supported by our analysis of historical prices (see paragraph 9 and Annex 2 of Appendix I).
- 4.58. As well as the LPG price, the major suppliers also levy a standing charge for tank rental and maintenance—typically £[redacted] to £[redacted] a year. The level of that standing charge, however, is not sufficient to cover the costs of the tank and its installation and maintenance, which are therefore partly recovered through upfront charges and the price of LPG.

Scope for negotiation of prices

- 4.59. The evidence we have received indicates that the large majority of customers are not aware that there is any scope to negotiate on price. As set out in paragraph 88 of Appendix G, it appears that at most around one customer in four is aware of the scope to negotiate prices. Moreover, customers who try to negotiate discounts are not always successful; very few customers are actually receiving a negotiated discount. The major suppliers disagreed that the number of customers who successfully negotiate a price reduction was so low but, as set out in paragraph 4.42, having weighed up the evidence, we consider that the number of customers at any given time enjoying discounts which they have won by threatening to switch, represents a small proportion of the market (close to 5 per cent). Among those customers who successfully negotiate a discount, an average discount of 3p per litre (see paragraph 89 of Appendix G), just over 10 per cent, based on typical average prices, appears to be broadly typical, although some customers receive substantially deeper discounts.
- 4.60. Suppliers told us that price reductions to customers usually led to requests for a lower price from customers in the same locality (see paragraph 80 of Appendix G). While some customers requesting price reductions may refer to prices offered to their neighbours, we have seen no evidence that such comparing of prices is widespread in the market as a whole: the fact that the large majority of customers are unaware of the ability to negotiate itself suggests there is no widespread conferring amongst them.
- 4.61. One supplier [redacted] told us that the number of price query telephone calls it received rose after implementing a price increase: according to its records, around 1 per cent of customers queried a price increase in this way, half of whom received a discount

from the standard price increase (see paragraph 86 of Appendix G). But price increases by an individual supplier do not appear to increase the rate of account termination (see, for example, paragraph 93 of Appendix G). One explanation offered for this was that all suppliers increased their prices together, so customers had little to gain from switching in response to an increase; however, historical data on price changes (set out in Figure 1 of Appendix I) do not support this.

Monitoring of competitor pricing

- 4.62. Of the major suppliers, only one [X] systematically collects information on competitor prices, monitoring a sample of its competitors' customers (see paragraph 39 of Appendix I). It referred to its doing so as evidence of price competition. But that supplier also told us that changes to its standard prices to the majority of its existing customers in recent years had not been in response to changes in prices of other suppliers. [X] argued that because wholesale costs are at high levels and volatile, it is not surprising that wholesale prices may have had more of an influence on LPG prices than competitor's prices. As noted in paragraph 4.4, the divergence in average prices of all the major suppliers over sustained periods indicate to us that they price with a degree of independence, and are not constrained to price at the lowest competitive level.

Northern Ireland

- 4.63. As noted above and in paragraph 3 of Appendix H, in contrast to Great Britain, customers in Northern Ireland pay standard prices from which discounts are seldom, if ever, available. Prices are lower in Northern Ireland than in Great Britain, as discussed further in paragraph 4.82.

Assessment of pricing

Evidence of price competition

- 4.64. The major suppliers in Great Britain argued that there was effective price, as well as non-price, competition, not only between themselves but also, on a regional level, between the major and smaller suppliers. As considered in more detail in Appendix F, paragraphs 70 to 76, suppliers' strategy plans and other documents did provide evidence of some competition between suppliers, but on the whole tended to focus more on retaining customers and winning customers new to LPG, for example new rural developments, than on winning customers from existing suppliers. While we recognize that there have been some examples of competition between suppliers for existing customers,⁴⁷ this competition appears to be weak. The focus is on marketing efforts to new-to-LPG customers. (We discuss the effectiveness of non-price competition in paragraphs 4.87 to 4.89.)
- 4.65. The major suppliers also told us that customers were sensitive to prices; hence the prices had to be competitive relative both to other suppliers (including smaller suppliers) and other fuels (in particular heating oil). As set out in paragraph 4.36, we received evidence that customers appeared to attach more importance to price than to other aspects of the supply relationship (such as service quality). But we also noted that few customers switch suppliers to get a better price (or for any other reason), and most have not tried to negotiate lower prices with their existing supplier.

⁴⁷For example, [X] sending its magazines to competitor customers and winning [X] customers from competitors in [X] following a sales drive, and reports by two of the major suppliers [X] and [X] of competitive activity from another supplier [X].

- 4.66. A major supplier [X] told us [X].
- 4.67. An alternative argument put to us by the same major supplier was that customers switch in relation to an ‘accumulation of grievances’, rather than on the basis of short-term price changes, especially since, so it was claimed, prices are ‘broadly in line with each another’. We consider, however, that the fact that customers only switch after an accumulation of grievances, rather than in response to what are, in fact, persistent price differences between suppliers, is consistent with our view that customers face significant switching costs.

Effect of lack of price transparency

- 4.68. On price transparency, most of the major suppliers argued that they themselves were not in a position readily to compare their prices with those of other suppliers, although one [X] told us that it goes to some lengths to try to achieve this. Nonetheless, they argued that prices were reasonably comparable for customers. As set out in paragraph 4.56, the major suppliers told us that they generally give indicative prices over the telephone (one of the major suppliers [X] told us that it would quote prices currently available to new customers, as well as standard prices and price calculation methodology, over the telephone), though most suppliers will not provide a binding written quote until they have visited the customer’s premises.
- 4.69. This limitation on price transparency, and the unwillingness of suppliers to commit themselves to future prices⁴⁸ (set out in paragraph 4.56), mean that customers, when choosing a supplier, cannot accurately assess which supplier will be most competitive over the ‘whole life’ of the supply arrangement. In our view, this is likely to inhibit customers from seeking alternative price quotations, and to deter switching to another supplier.
- 4.70. We also noted in paragraph 4.58 that the cost of tanks (including installation costs) is currently recouped in part through LPG prices. Several of the major suppliers told us that customers preferred such a price structure: since a tank was only of value to allow the use of LPG, customers would prefer to be charged on the basis of use of LPG. They also regarded such a pricing structure as increasing their ability to compete with heating oil, and as an aspect of the integration of tank and LPG. Although such a pricing structure reduces the transparency of charges to customers, to some extent it reduces switching charges, since customers are not charged the full cost associated with switching supplier (but not to such an extent, as we have discussed above, as to remove the disincentives to switch). While we were concerned about the competitive effects of integrated supply of tanks and LPG due principally to the costs of switching under such an integrated system, we have not reached a view, given that such integrated supply exists, that any additional anti-competitive effects currently occur as a result of the cross-subsidization between charges for the tank and LPG prices.

Effect of price discrimination

- 4.71. Some suppliers told us that differences in prices between customers reflected differences in costs, although this argument was not put forward by all suppliers. As noted in paragraph 4.53, however, our analysis in Annex 1 of Appendix I indicates

⁴⁸We acknowledge that there are some inherent difficulties in suppliers committing themselves to future prices due to fluctuating propane costs. However, one means of making pricing more transparent might be to link LPG prices to propane costs, which the parties do not currently do (see further paragraph 2.4 of Annex 2 to Appendix I).

that price differences were, at best, explained to only a very limited extent by characteristics that might lead to cost differences.

- 4.72. We consider in this section the effects of price discrimination between new and established customers, and between price-sensitive and non-price-sensitive established customers. It was argued by the major suppliers that such price discrimination allowed them to compete aggressively to win new customers and to retain existing customers. Price differences, they argued, would result in a more efficient outcome overall, which might allow wider distribution of domestic bulk LPG than would otherwise be the case; if standard prices were used in Great Britain, prices would not fall to the lowest currently available price.
- 4.73. The effect of price discrimination on competition is complex in that, compared with the case where firms have to charge a single standard price to all customers, price discrimination may mean that some customers pay more, but others, who would not have purchased at the standard price, may pay less. The effect is complicated further when price discrimination takes place in a market with switching costs.

Introductory pricing to new customers

- 4.74. Suppliers' introductory discounts are typically available both to new-to-LPG customers and to customers of other suppliers. In principle, such discounts can lead to competitive prices prevailing, despite the presence of switching costs: each firm is willing to offer aggressive prices to other firms' customers because it can do so without having to offer the same lower prices to its own customer base. If all firms behave in this way, the customer base of each firm can avail itself of the aggressive prices from the other firms, leading to prices across the whole of the market close to the competitive level.
- 4.75. However, there is no evidence that this is happening in the market for domestic bulk LPG. The market is characterized by low rates of switching, limited numbers of customers threatening to switch and substantial price differences, both on average between suppliers and among the customers of each major supplier, which are not explained by differences in quality (between suppliers) or cost of supply (between customers). Evidence we received in relation to supplier strategies indicates that, when trying to grow their business (rather than simply retaining customers), suppliers tend to focus on new-to-LPG business rather than attracting their competitors' customers (see paragraphs 70 to 76 of Appendix F). The situation in which suppliers mutually constrain prices by offering introductory discounts to each others' customer bases does not appear to apply to the market for domestic bulk LPG. This appears to be due to a combination of reasons:
- (a) Although competition between suppliers for new-to-LPG customers may be stronger than for existing customers, the number of new-to-LPG customers is a small proportion of the market⁴⁹ and we do not consider that this is sufficient to lead to a competitive outcome in the market overall.
- (b) The extent of barriers to switching is such that even the discounted introductory prices on offer are not sufficient to induce a significant degree of switching or threatening to switch. Customers appear reluctant to switch even to obtain a substantially lower price, in view of the cost and inconvenience of switching.

⁴⁹As indicated in Tables 9 and 10 of Appendix G, 3 per cent of customers are gained each year, of which 2.5 per cent are new-to-LPG customers and 0.5 per cent are gained from other LPG suppliers.

(c) A customer who wishes to achieve the lowest possible price must regularly seek alternative quotes and/or renegotiate prices with the existing supplier (another aspect of switching costs), and may be unable accurately to assess which supplier will be most competitive over the whole life of the supply arrangement (see paragraph 4.69). Introductory discounts tend to be strictly time-limited, with the length of the discount in some cases shorter than that of the contract. A number of customers told us that, if they switched, they would expect to face the same problem with the next supplier—taking advantage of switching costs to offer an uncompetitive price—further reducing their incentive to switch. This evidence was supported, to a degree, by our survey, as half of the respondents said that they were discouraged from switching because they saw no long-term benefit or would not expect to get a better deal elsewhere.

Price defending by incumbent suppliers

- 4.76. In pricing to established customers, incumbents can price discriminate between marginal, or price-sensitive, and infra-marginal, or non-price-sensitive, customers. Because of this, any attempt by a competitor to win an existing customer is likely to lead to an aggressive pricing response from the incumbent—offering the customer a selective discount to deter switching. The incumbent’s advantage in defending its customer base could also influence a competitor’s behaviour when considering whether to approach a customer of another supplier. If the likelihood of winning the customer is small, then the competitor, by quoting aggressively, would gain no advantage for itself. In this way, selective discounts deter suppliers from investing resources into winning their competitors’ customers.
- 4.77. We noted in paragraph 4.42 that the offering of negotiated discounts when customers threatened to switch was put forward by the major suppliers as a justification of the low level of switching, as well as evidence of competition working. The major suppliers told us that reducing prices to customers threatening to switch was standard in consumer markets. They argued that the fact that some customers negotiated lower prices was not discriminatory, but demonstrated that the market was competitive. Similarly, it was argued that individual pricing in response to switching reflected the vigorous operation of the competitive process.
- 4.78. We do not regard selective discounting in itself as an anti-competitive practice. Indeed, as set out in paragraphs 103 to 113 of Appendix G, we acknowledge that such price discrimination can potentially lead to a better outcome for customers and, specifically, greater competition in a market with switching costs. However, given the extent of switching costs in the domestic bulk LPG market there is only a limited number of marginal customers who will seriously contemplate switching to get a lower price. By offering selective discounts, incumbent suppliers can retain most of these customers while maintaining higher prices across the vast majority of the market. In our view, the offering of selective discounts in the market for domestic bulk LPG restricts competition since, in combination with the barriers to switching identified in Section B above, it discourages firms from competing to win customers from one another.

Level of pricing in domestic bulk LPG market

- 4.79. It was also argued that neither high profits nor high operating costs appear to be prevalent in the industry, suggesting that competitive pressures do operate to maintain overall competitive prices for customers. (Profitability is considered at paragraphs 5.2 to 5.16.)

4.80. We consider, however, that prices to a large majority of customers in Great Britain are higher than might have been the case in a market without the features identified having an adverse effect on competition. The cost to customers of the adverse effect on competition which we have identified cannot be measured accurately. However, we have sought to estimate what the minimum cost might be. Details of how our estimates were arrived at are set out in Annex 3 to Appendix I. We began by identifying the lowest non-introductory price charged in Great Britain by each major supplier to a substantial number ([redacted] per cent) of its customers in 2003. For each customer of the major suppliers, we calculated the premium (if any) paid above this price and multiplied this by the customer's annual consumption in 2003. But alternative approaches, including estimates based on our analysis of the profitability of the main suppliers, to estimating consumer detriment arising from anti-competitive features of the domestic bulk LPG market in Great Britain lead to a range of figures. The smallest estimate, based on the lower end of the range of our profitability analysis, is just over £4 million a year (across the major suppliers only). The largest estimates, subject to more uncertainty, are some two to three times that amount (including smaller suppliers). These estimates of modest but nevertheless important consumer detriment reflect the weaker competitive constraints on pricing that result from the adverse effects on competition of the features of the market identified.

Northern Ireland

4.81. As noted in Appendix H, several of the factors set out in this section suggesting that price competition is ineffective in Great Britain also apply in Northern Ireland: in particular those derived from switching costs and other constraints on switching, previously identified in paragraph 4.52. But in contrast to Great Britain, uniform prices are offered by each supplier to customers in Northern Ireland, although these prices are not published by the suppliers. Suppliers do not offer selective discounts to customers who are threatening to switch, or low prices to new customers. As such, suppliers may be more constrained in the standard price they set, as too high a standard price may lead to customers switching, and make the supplier less competitive in winning new customers.

4.82. [redacted] Price levels in Northern Ireland are consistently below those in Great Britain; in addition, Calor NI's prices to domestic customers are below those to commercial customers—the opposite of the situation in Great Britain.

Conclusions on pricing

4.83. We regard the following aspects of the pricing of domestic bulk LPG as evidence that competition is prevented, restricted or distorted in the Great Britain market:

(a) the sustained differences between average prices of suppliers and a degree of independence (from one another) in the movements of these average prices;

(b) individual suppliers charging different prices to different customers, largely unrelated to differences in cost; and

(c) the existence of low switching rates and the limited number of customers threatening to switch, despite the availability of lower prices from other suppliers, and despite evidence (as referred to in paragraph 4.35) that customers do not have any strong preference for the service of their existing supplier.

4.84. For the reasons set out in our consideration of pricing above, we regard the following features of the supply of domestic bulk LPG in Great Britain, in combination with

those identified in paragraph 4.48, as preventing, restricting and distorting competition in the relevant market:

(a) the lack of transparency in prices, such that customers, when choosing a supplier, cannot accurately assess which supplier will be most competitive over the 'whole life' of the supply arrangement. This is likely to inhibit customers from seeking alternative price quotations and to deter them from switching to another supplier; and

(b) the practice among most suppliers of offering selective discounts to customers when they threaten to switch. Given the high level of switching costs in the market for domestic bulk LPG, such 'price defending' reduces the potential rewards to competitors for attempting to win customers away from their current suppliers and thereby discourages firms from competing to win customers from one another.

4.85. As we have noted in paragraph 4.54, prices are generally lower on metered estates, reflecting costs differences and possibly a higher level of negotiating power on the part of these customers. However, we have received a number of complaints from customers on metered estates outlining the difficulties in switching and we believe the features identified in paragraph 4.84 apply also in relation to metered estates. We therefore conclude that the adverse effects on competition identified apply also to metered estates.

Pricing in Northern Ireland

4.86. However, the use of selective discounts identified as a feature of the market in paragraph 4.84 in relation to Great Britain does not, for the reasons set out in paragraphs 4.81 and 4.82, apply in Northern Ireland. Although prices are not published by suppliers, the use of standard prices (and the limited number of suppliers) should allow easier comparison of prices than in Great Britain; there is insufficient evidence therefore to suggest that lack of transparency of prices can also be regarded as a feature of the Northern Ireland market.

D. Non-price competition

4.87. The major suppliers all argued that there was strong non-price as well as price competition between them. We discuss the extent of non-price competition in Appendix F. We asked the suppliers for evidence of non-price initiatives that they had carried out; in general terms, the main examples we were given were marketing activity (including advertising, direct mail, Internet, exhibitions and leaflet distribution) and better customer service.

4.88. While the major suppliers have told us that the level of non-price competition is high, we have seen little evidence, despite claims to the contrary, of any unique features in their offerings which distinguish one from the other such as might suggest significant non-price competition in the market. All suppliers in the market appear to offer basically the same product and service, more or less to the satisfaction of their customers. We also note that:

(a) as noted at paragraph 4.35, many customers acquired their supplier 'passively', in the sense that they moved into a property which it already supplied and would have had to incur switching costs to use a different supplier;

- (b) most customers who expressed a view were not of the view that quality of service from other suppliers was any worse than what they got now (over 70 per cent of ORC survey respondents did not have a view; most that did thought others were about the same or better).
 - (c) price was the main factor customers would think about if they had to switch supplier (mentioned by 80 per cent of ORC survey respondents when prompted); and
 - (d) as noted at paragraph 4.40, there is low customer awareness of alternative suppliers (albeit that contact details for local suppliers are widely available) and low level of solicitation of customers by other suppliers.
- 4.89. We accept that the major suppliers have taken steps to improve their distribution and sales support systems, albeit that some of these improvements were aimed at reducing costs in addition to improving customer services. However, as noted in the previous paragraph, there is little evidence that customers perceive differences in the quality of service from their own and other suppliers. We have seen no evidence that any recent innovation in service quality has caused large numbers of customers to switch to a particular supplier, or a greater proportion of new customers to choose that supplier over another. We saw no reason for any different assessment in relation to Northern Ireland.

E. Barriers to entry and expansion

Great Britain

- 4.90. We discuss barriers to entry and expansion in Great Britain in Appendix F. As shown in Table 3 of Appendix F, 19 suppliers have started supplying domestic bulk LPG in the last ten years. All of these suppliers are small. However, as apparent from paragraph 4.3, the smaller suppliers' share of the market fell between 1995 and 2003. This indicates that, while there has been small-scale entry, there has been very little expansion by the smaller suppliers.⁵⁰
- 4.91. The major suppliers told us that the competitive strength of the smaller suppliers should not be underestimated. The fact there had been new suppliers itself suggested that barriers to entry were 'perceived rather than actual'. As to expansion, they suggested to us that, while it took time, there was no reason why the 10 per cent share of the smaller suppliers could not increase to 15 or 20 per cent: one of the major suppliers said that it was unwillingness rather than inability to expand that prevented smaller suppliers from doing so. As to economies of scale, the major suppliers argued that smaller competitors could get similar economies in the areas in which they operate by having a high density of customers. Regional suppliers, they argued, also benefited from being hands-on, family businesses, operating in dense areas with a personal service and therefore able to exercise a wide impact on prices in an area. While small suppliers, they said, had relatively small shares on a national basis, a large number had established viable businesses on a local/regional basis with a very strong brand.
- 4.92. While some small-scale entry into the domestic bulk LPG market has therefore occurred in recent years, we are aware of only one supplier [X] which has expanded other than by acquisition, to a share of about 5 per cent of the market.

⁵⁰As noted in paragraph 28 of Appendix F, one supplier gave us a number of examples of expansion by 21 smaller suppliers, but their market share remains small.

- 4.93. A main concern we received from some smaller suppliers was that incumbent suppliers could take action to retain customers by offering discounts to customers who are considering switching (see paragraph 4.44). As noted in paragraph 4.84(b), we regard such selective discounts as reducing the incentive to attract customers from existing suppliers, and, should suppliers attempt to do so, increasing the ability of incumbent suppliers to resist attempts to win customers from them.
- 4.94. The market in Great Britain is characterized by, at most, a slow rate of growth (though with some suppliers expecting the number of customers to remain broadly at the present level or even to grow slightly—see paragraphs 52 to 57 of Appendix F). We note in Table 9 of Appendix G that only a relatively small percentage of customers cease to use, or start to use, domestic bulk LPG in any year. Given the current low rate of switching, due in part to selective discounting referred to in the previous paragraph, a new entrant would need to develop a customer base by winning new-to-LPG customers of which there are limited numbers. These are both factors that are likely to deter significant new entry to and inhibit expansion in the market.

Northern Ireland

- 4.95. We noted in paragraph 4.5 and in Appendix H there has been little change in market structure in Northern Ireland, and no new entry into the market, in the last ten years. There is also very little prospect of entry into supply of domestic bulk LPG in Northern Ireland, given the continued development of mains gas in some of the areas in which domestic bulk LPG is currently supplied and, on the evidence we saw, the prospects for continued decline in the domestic bulk LPG market. Switching costs also create a barrier particularly to expansion in Northern Ireland. However, we noted in paragraph 4.81 that there is no price discrimination in Northern Ireland.

Conclusions on barriers to entry and expansion

- 4.96. While there has been some small-scale entry in the market for domestic bulk LPG, we consider that there are barriers particularly to expansion by smaller suppliers in the Great Britain market, namely:
- (a) that switching costs referred to in paragraph 4.48 create a barrier particularly to expansion, since:
 - (i) in trying to win a customer, a competitor will be at a disadvantage to the incumbent supplier as, faced with equivalent price offers, the customer's incentive will normally be to stay with the current supplier to avoid switching costs; and
 - (ii) any such disadvantage would be particularly significant in the domestic bulk LPG market given the relatively low number of new customers and where a new or expanding supplier would have less scope to grow its customer base by winning customers as it enters the market (see paragraph 4.94); and
 - (b) that, as noted in paragraph 4.84(b), selective discounting enables existing firms to respond to specific competitive threats without lowering prices to their broader customer base, deterring both entry and expansion.
- 4.97. In consequence, the threat of entry or expansion by smaller suppliers is likely to provide only a very limited constraint on the prices charged by suppliers. The barriers to entry and expansion listed in paragraph 4.96 are therefore features of the supply

of domestic bulk LPG in Great Britain which prevent, restrict or distort competition in the relevant market.

Conclusions on barriers to entry and expansion in Northern Ireland

4.98. As discussed in paragraph 4.95, switching costs, which create a barrier particularly to expansion, are features of the supply of domestic bulk LPG which prevent, restrict or distort competition in Northern Ireland since:

(a) in trying to win a customer, a smaller competitor will be at a disadvantage to the market supplier as, faced with equivalent price offers, the customer's incentive will normally be to stay with the current supplier to avoid switching costs; and

(b) any such disadvantage would be particularly significant given the prospect for decline in the market for the supply of bulk LPG in Northern Ireland (see paragraph 4.95).

5. Other aspects of the market

5.1 We also considered a number of other aspects of the market which, although not necessarily features as such, are relevant to our assessment of the adverse effects on competition identified above.

Profitability

5.2 As a further possible indicator of the extent of competition, we have assessed in Appendix J the profitability of the domestic bulk LPG businesses of the major suppliers. As stated in our Guidelines,⁵¹ a competitive market is likely over time to generate significant variations in profit levels between firms as supply and demand conditions change, but with an overall tendency towards levels commensurate with the cost of capital of the firms involved. At points in time, the profits of some firms may exceed what might be termed the 'normal' level. Reasons for this could include, for instance, cyclical factors, transitory price or other initiatives, the fact that some firms may be more efficient than others and the fact that some firms may be earning profits gained as a result of past innovation. However, competition should result in pressure on profit levels towards the cost of capital in the medium to long run. A situation where, persistently, profits are substantially in excess of the cost of capital for firms that represent a substantial part of the market could be an indication of limitations in the competitive process. Alternatively, if firms with market power are able to operate with higher costs than would be sustainable with keener rivalry in the market, this could be another indication of limitations in the competitive process.

5.3 The reference relates to only part of the suppliers' businesses and, as this generally does not correspond directly to existing segmental reporting, it has been necessary for the major suppliers to 'recreate', inter alia, a domestic bulk LPG profit and loss account. For this purpose, the major suppliers have allocated specific costs and apportioned common costs to the various segments.

5.4 We have based our assessment on the major suppliers' accounting profits and capital employed, produced in line with generally accepted accounting practice in the UK, but with certain adjustments as detailed in Appendix J. Our aim was to estimate the profits of each major supplier had they been a stand-alone supplier of domestic

⁵¹CC3, *Market Investigation References: Competition Commission Guidelines*, paragraphs 3.81 et seq.

bulk LPG. In addition to the adjustments we proposed, we received a large number of suggested amendments throughout the investigation, nearly all of which tended to decrease the major suppliers' return on capital employed (ROCE). We accepted and have included in our profitability analysis those which we considered appropriate. Set out below are the key adjustments we have made to the financial information provided by the major suppliers to arrive at the figures used in our profitability analysis.

- (a) We have excluded the acquired goodwill and associated amortization costs from the accounts of one supplier [X] as we have no reason to believe that the assets acquired were not fairly valued and so any excess represents the capitalization of future profits.
- (b) Our preferred treatment is to exclude [X]. We have, also, however, considered the implications of that supplier's preferred treatment of such costs, and shown this adjustment separately in Table 1. This is discussed further in Appendix J.
- (c) For one supplier [X] we have based our analysis on its management accounts. The supplier would prefer us to use a different, less detailed, set of accounts [X], although it only provided us with the last two years of these (we have four years of data for the management accounts). We used the management accounts, but have adjusted them to accept the reallocation of engineering costs. We have not been persuaded of the other adjustments which the supplier has proposed (see Appendix J).

5.5 We have used ROCE as the relevant measure of profitability in this industry. Our Guidelines state that in the context of a market reference, the CC will normally consider profit levels, usually in terms of rates of return on capital in the market concerned, as a further indicator of competitive conditions.⁵² While some suppliers queried whether ROCE was the best measure of profitability, none provided an alternative.

5.6 We compared the ROCEs (as set out in Table 1) with the weighted-average cost of capital calculated in accordance with the capital asset pricing model. This is discussed further in Appendix K.

5.7 Table 1 summarizes the ROCEs for the major suppliers for a six-year period.

TABLE 1 ROCEs of the major suppliers (nominal)

ROCE	per cent					
	1999	2000	2001	2002	2003	2004
Calor						
Flogas						
Shell				X		
BP						

Source: CC analysis of information supplied by the major suppliers.

Notes:

- 1. Flogas figures prior to 2003 are not representative of the ongoing business of Flogas and therefore are not shown.
- 2. All figures to the year ended 31 December, except Flogas for which figures are to the year ended 31 March of the following year.

5.8 The two suppliers which operate in Northern Ireland (Calor NI and Flogas NI) are run as separate entities and have provided separate information (set out in Appendix J).

⁵²CC3, Market Investigation References Competition Commission Guidelines, paragraph 3.82.

The domestic bulk LPG market in Northern Ireland is less than [redacted] per cent of the size of the market in Great Britain by tonnes of LPG sold. Prices for domestic bulk LPG in Northern Ireland are lower than in Great Britain and the average ROCEs of the two suppliers in Northern Ireland are lower than in Great Britain and [redacted] their weighted average cost of capital (WACC), as estimated by us. As can be seen in paragraph 52 of Appendix J, the ROCE figures of the two suppliers are not instructive on their own as they are very volatile [redacted]: due in part to large fluctuations in the capital employed.

5.9 As can be seen from Table 1, the ROCEs of the major suppliers in Great Britain have been above the WACC of between 8.3 and 12 per cent we estimated in Appendix K as appropriate for the supply of domestic bulk LPG for some or all of the period under consideration. We only have consistent data for two suppliers prior to 2001 and the [redacted]. Set out below are the ROCEs of the major suppliers in Great Britain since 2001, expressed as a number of percentage points in excess of a mid-point estimate WACC of 10 per cent.

(a) *BP*: between [redacted] percentage points [redacted].

(b) *Calor*: between [redacted] percentage points [redacted]; between [redacted] percentage points, [redacted].

(c) *Flogas*: [redacted] percentage points [redacted] in the last two years. We have considered only the last two years to be indicative of Flogas' returns, due to the fundamental change (a tenfold increase in volumes) in Flogas' business on the acquisition of the British Gas business in 2002. The earlier years showed [redacted].

(d) *Shell*: between [redacted] percentage points [redacted] in the last two years, and between [redacted] percentage points in the two years prior to that. We do not have data for the earlier years.

5.10 We note with interest that those companies which earn the highest ROCEs are not those that charge the highest prices.

5.11 The major suppliers have argued that their returns reflect a normal level of profitability and a reasonable return for this sector compared with their cost of capital and given the risk taken on the investment made. The principal arguments proposed by the major suppliers against our findings are set out below (these are discussed further in Appendices J and K):

(a) that the WACC which we have calculated may be too low;

(b) that we have excluded valid costs borne by the suppliers or excluded valid assets from their balance sheets, as discussed above; and

(c) that the period for which we have data is not sufficient for a finding of persistent excess profits.

5.12 In addition, [redacted] provided us with further analysis of its financial information in which it had revalued all of its tanks on a depreciated replacement cost basis in each of the years we are considering: the supplier believed that its balance sheet, based on historical cost accounting, understated the true position. The methodology the supplier used as well as our concerns are described more fully in Appendix J.

5.13 The results of this exercise, as well as the [redacted], are shown in Table 2. As explained in Appendix J, the correct comparator for these results is a real WACC. As can be seen in the table, if this methodology were accepted, [redacted], the return on capital for this

supplier would be closer to the real WACC of approximately 8 per cent (which we estimate in Appendix K as appropriate for the supply of domestic bulk LPG) than the figure in Table 1.

TABLE 2 [REDACTED] ROCE with holding gains

Year ended 31 December							per cent
	1999	2000	2001	2002	2003	2004	Average
ROCE (historical cost)	[REDACTED]						
ROCE with revalued assets							
ROCE with revalued assets (averaged holding gain)					[REDACTED]		
ROCE (lowest) (averaged holding gain)							

Source: CC analysis of information supplied by [REDACTED].

5.14 We had a number of concerns with the data used in this calculation and with the precise methodology, and we remain of the view that [REDACTED] has earned returns on its capital employed in all years following 2001 [REDACTED].

Summary

5.15 As described in paragraph 5.2, in a competitive market we would expect competition to result in pressure on profit levels towards the cost of capital. We therefore considered whether the evidence on profitability was consistent with our conclusions on the competitiveness of the industry.

5.16 We have found that the major suppliers have earned, on average over the period 2001 to 2004, ROCEs in excess of the WACC which we have calculated in Appendix K, although none of them earned returns that were both persistently and substantially in excess. The evidence on profitability of the major suppliers between 2001 and 2004, is therefore not inconsistent with a finding of a lack of competitive pressure on the major suppliers, but not conclusive on the point either.

Health and safety rationale for business practices

5.17 We have noted above that LPG is a hazardous product, and its supply is therefore subject to a regulatory regime. Safety considerations are therefore a key issue in this investigation and the major suppliers maintained that there was a safety rationale and justification for a number of business practices, namely:

- (a) exclusivity of supply;
- (b) ownership of tanks by the supplier of LPG;
- (c) uplift of tank when the customer switches to a new supplier; and
- (d) the requirement for a three-month notice period.

5.18 We set out in Appendix D our assessment of the impact of safety management on business practices. We noted in that appendix (as we have in paragraph 2.12) that the major suppliers' approach to safety management involves an integrated safety management system, whereby the supplier takes full responsibility for the installation and the underlying liability associated not only with the delivery of the LPG, but also with the installation of the tank and associated fittings and their ongoing

maintenance. Within this system, the major suppliers tend to subcontract some of the activities, such as the provision of emergency services out of working hours, engineering services, tank installation, and uplift. They argued, however, that they were nonetheless able to maintain responsibility for such activities, and control over their performance.

- 5.19 The major suppliers argued that, within the current legislative framework, the integrity of the safety management system described above, including the clear allocation of roles and responsibilities, is paramount. We have noted above that certain features of this system may contribute to switching costs and higher barriers to entry, in particular the uplift of the tank at the end of the supply relationship.⁵³ Some smaller suppliers from whom we heard (for example, the evidence of ALGED on our website) also argued strongly that suppliers should retain ownership of tank: but suggested that transfer of the ownership of a tank from the old to the new supplier, rather than to require the change of the tank itself, would give the consumer the benefit of 'virtually owning' the tank. Some smaller suppliers, moreover, quite readily supply to customer-owned tanks. Some customers from whom we heard also argued that they should be able to own their own tank and seek competing offers from suppliers.
- 5.20 We have noted above the three aspects of the safety management framework: overriding general, and in some cases more detailed, legal obligations; the ACoPs and LPGA CoPs; and finally the variations between each of the major supplier's own safety policies. As noted by the HSE, however, current safety practices may also reflect the commercial approach of the suppliers. In principle, it would be possible for the safety regime to amount to a cloak for anti-competitive behaviour, in which case the practices outlined above would not be justified on safety grounds and might have evolved differently. The major suppliers disputed this, arguing that the agreed practices reflected the requirements of the underlying regulatory regime, and that it was wrong to attempt to divorce commercial and safety issues. We therefore considered whether the business practices outlined above, which contribute to the cost and inconvenience of switching, were required under the existing regulatory regime or were otherwise required to ensure the safety of domestic bulk LPG supply.
- 5.21 As noted at paragraph 3 of in Appendix D, the integrated approach under the current supply model has recognizable advantages from a safety perspective: clear responsibilities; and simplicity for the customer. The analysis in Appendix D also points to the following conclusions in relation to each business practice identified above.

Exclusivity of supply

- 5.22 In principle, the relevant safety legislation does not require or favour the use of exclusive domestic bulk LPG supply contracts. However, if exclusivity were not the norm, there would be some uncertainty as to which supplier was responsible for dealing with gas escapes under the GSIUR (see paragraph 1.22 of Annex 1 to Appendix D).
- 5.23 Moreover, if a customer had gas delivered from a series of suppliers, the safety obligations on each delivery may be more onerous, and there may be duplication of functions. For example, inefficiencies would be likely to result from suppliers' obligation to satisfy themselves that the tank is safe before delivering LPG, and the need to replace the emergency notice each time a new supplier fills the tank,

⁵³Switching costs and barriers to entry are addressed above.

potentially two to three times a year (for further details, see paragraphs 1.21, 2.33, 4.22 and 6.8 of Annex 1 to Appendix D).

- 5.24 We therefore accept that exclusivity of supply appears to be a practice which helps to satisfy safety requirements under the current UK legal regime. The practice provides clarity as to whose gas is in the tank and which supplier is responsible for delivering emergency services. Moreover, in the absence of an approved certification system and an industry-wide emergency service, it would seem to constitute a more efficient means of complying with the current safety regime than non-exclusive supply.

Ownership of tank by suppliers

- 5.25 In order to test suppliers' arguments in support of their ownership of tanks, we asked them to contrast the current ownership situation to alternative ownership models⁵⁴ (namely ownership by customers or ownership by third parties). The comments we received are set out in detail in Appendix D.
- 5.26 As noted by the HSE in their evidence on our website (to which we referred in paragraph 2.13), none of the obligations currently imposed on suppliers by the legislation outlined in paragraphs 2.5 to 2.8 appears to derive from ownership of the tank itself. Hence, if ownership were vested in the customer or a third party but the supplier remained responsible for carrying out the 'safety activities' (maintenance and repair) associated with that tank under contractual arrangements, there would not appear to be any significant difference from the present situation in terms of the scope and applicability of the regulatory obligations. Separation of maintenance and repair from installation and removal activities has the potential, in certain circumstances, to reduce the overall integrity of the safety management framework. But we note that some of the major suppliers currently use subcontractors to perform the installation and uplift of its tanks (albeit that the contractors' work is to the supplier's specifications and under the supplier's control). This suggests that, even if tank installation and removal were the responsibility of a third party, this would not necessarily affect to a material extent the effectiveness of the existing regulatory regime, providing that the supplier was able to carry out due diligence when it took over the safety activities to ensure the tank was of a good quality and had been installed properly.
- 5.27 As we discuss further in Appendix D, if the supplier of LPG did not own the tank and was not responsible for 'safety activities' such as the installation, maintenance, repair and removal of tanks, the application of the relevant legislation set out in paragraph 2.8 would differ from the present situation. For example, the obligations under the PSSR to establish and operate within safe operating limits, to maintain the pressure system in good repair and to set up a written scheme for periodic examination of the tank by a competent person attach to the 'user' of the tank, as defined in the PSSR—that is the employer or self-employed person who has control of the operation of the tank. A tank under the full control of a domestic customer (ie where the domestic customer has not contracted a commercial entity to take responsibility for safety activities) would not be covered by these Regulations. In addition, there is a degree of doubt as to whether these safeguards would apply where a tank-leasing company or other third party was responsible for maintaining and repairing a tank. In such a situation, it is unclear whether the person responsible for maintenance and repair or the person responsible for LPG delivery would be the 'user' for the purpose of the regulations. (For further details, see paragraphs 2.21 to 2.31 of Annex 1 to Appendix D. The Appendix also sets out the uncertainty that may result in the application of

⁵⁴The various ownership models are hypothetical scenarios used to test the strength of the parties' arguments.

other health and safety regulations—the GSIUR, the DSEAR and the MHSWR—if the supplier does not own the tank.) In addition, one of the major suppliers argued that separation of the supply and safety activities could affect liability under the GPSR. It was also noted to us that domestic customers, unlike companies, are not subject to criminal sanctions.

- 5.28 We concluded that ownership of tanks by suppliers is not necessarily the only safe model and is not a stated requirement of the relevant regulations, but it presents significant advantages over alternatives. We note that there is universal opposition by suppliers to the ownership of tanks by customers, even though the supply of LPG to a relatively small number of customer-owned tanks is not unknown in the industry. Widespread ownership of tanks by domestic customers does not appear to be a workable model under the current legal regime. Ownership of tanks by a third party would create some legal difficulties, could lead to duplication of safety management costs and could result in the lowering of safety standards due to potential uncertainties over the allocation of safety responsibilities.

Uplift of tank when customer switches to new supplier

- 5.29 The relevant legislation does not require tanks to be uplifted on change of supplier. To the extent that the PSSR applies to tanks used for the supply of domestic bulk LPG, where a tank changes ownership, there is an obligation on the previous owner to pass certain documents on to the new owner, such as tank examination reports (see paragraph 2.16 of Annex 1 to Appendix D) though one of the major suppliers commented that the provisions of the PSSR do not provide for the complete history of the tank and its fittings or the pipework to be transferred to the new owner.
- 5.30 In order to test suppliers' arguments in support of the uplift of tanks on change of supplier, we asked them to contrast the current business practice with the alternative of transferring the tank to the incoming supplier. The supplier's views and comments are set out in detail in Appendix D.
- 5.31 We concluded that the widespread practice of uplifting tanks instead of selling them to the incoming supplier is not compelled on safety grounds: the tanks are broadly similar; key differences due to historically lower levels of standardization are being addressed and the quality/safety of an acquired installation can be ascertained by reviewing statutory tank safety records and if needed carrying out a non-routine site inspection or examination. There are risks associated with uplifting tanks, though these are normally small and controllable. The transfer of tanks by mutual agreement between suppliers also carries certain risks, but these can also be managed and tank transfer is not inherently unsafe. Overall, we see no reason to prefer tank uplift to tank transfer on safety grounds. The safety management framework could have evolved or been adapted to allow transfer arrangements, on reasonable terms and conditions (including the price of the transferred tank), without compromising safety. In the course of the inquiry, the HSE consistently supported the view that tank uplift on change of supplier cannot be justified on safety grounds, and we note that several suppliers have transferred tanks in-situ on occasion.

Three-month notice period

- 5.32 We do not consider that a three-month notice period for changing supplier is necessary on safety grounds. The notice period is not fixed at three months either by safety regulations or by codes of practice; coordinating the logistics of tank exchange can be achieved within 14 days in accordance with LPGA CoP 26; and it is not

necessary for a customer to use all the gas remaining in the tank, as it can be transferred into the new supplier's tank.

- 5.33 In the course of the inquiry, suppliers accepted that existing notice periods could be significantly reduced.

Overall conclusions

- 5.34 We have acknowledged the importance of safety, and accept that current arrangements do represent one way to ensure safety. But we were concerned to examine to what extent the business practices set out at paragraph 5.17 are necessary to ensure safety. (We are not, however, expressing any view on whether any feature of the market resulting from these business practices could be regarded as having had adverse effects on competition even if the business practices were required on the grounds of safety.)
- 5.35 We found that the exclusivity of supply is a practice which helps to satisfy the safety requirements under the current UK legal regime and may be a more efficient means of managing safety than non-exclusive supply. While ownership of tanks by suppliers is not necessarily the only safe model, and is not a requirement of the current legal regime, it presents significant advantages over customer ownership (under which some of the existing health and safety regulations would not apply) and appears to be a more legally certain and efficient way of managing safety than ownership of tanks by commercial third parties. We do not accept, however, that the practices of uplifting tanks and requiring a three-month notice period for terminating supply are required under the existing regulatory regime, nor that they are necessarily the most efficient way of managing the supply of domestic bulk LPG.

6. Findings

- 6.1 We concluded in paragraphs 3.11 to 3.14 that the supply of domestic bulk LPG in Great Britain and in Northern Ireland can each be regarded as an economic market in which to assess competition.

Great Britain

- 6.2 The market in Great Britain is highly concentrated, one supplier currently accounting for almost one-half of the market and the major suppliers for about 90 per cent of supply. The following features of the market, either alone or in combination with each other, prevent, restrict or distort competition in the supply of domestic bulk LPG in Great Britain:
- (a) the widespread practice, when a customer switches supplier, of the outgoing supplier removing its tank from the site and of the incoming supplier replacing it with an essentially similar tank, with the consequential costs of removing and installing tanks, which:
 - (i) to the extent that these costs are reflected in upfront charges to individual customers, acts as a barrier to customer switching;
 - (ii) to the extent that these costs are borne by the incoming supplier, acts as a disincentive to competing for the business of existing customers and/or leads them to offer a higher price than would otherwise be the case;

- (iii) to the extent that the practice gives rise to customer inconvenience (whether actual or perceived), acts as an additional barrier to customer switching; and
 - (iv) given the cost disadvantages potential competitors face in competing with an incumbent supplier and given the relatively low number of new customers in the market for the supply of domestic bulk LPG, acts as a barrier to expansion (see paragraphs 4.48(a) and 4.96(a));
- (b) the lack of information among customers in that:
- (i) some customers are not aware of their ability to switch supplier or of alternative suppliers;
 - (ii) suppliers often do not provide sufficient information in advance about customers' liability for switching charges;
 - (iii) there is uncertainty about the likely level of inconvenience of the switching process, which contributes to customer perceptions of inconvenience;
 - (iv) customers generally are not aware of prices on offer from alternative suppliers and face some search costs in finding the cheapest supplier; and
 - (v) customers cannot accurately assess which supplier will be most competitive over the 'whole life' of the supply arrangement, which is likely to inhibit them from seeking alternative price quotations and switching to another supplier (see paragraphs 4.48(b) and 4.84(a));
- (c) the imposition of contractual restrictions on switching, including the use of lengthy fixed minimum terms in introductory contracts; requiring contract renewal (with a further lengthy fixed minimum term) as a condition of selective discounts; three-month notice periods for termination; and lack of clarity as to the extent of contractual liability (see paragraph 4.48(c));
- (d) limited ability of suppliers to identify and target their marketing efforts on each others' customers (see paragraph 4.48(d)); and
- (e) the practice among most suppliers of offering selective discounts to customers, in that, given the high level of switching costs in the market for domestic bulk LPG, they reduce the potential rewards to competitors for attempting to win customers away from their current suppliers and thereby discourage firms from competing to win customers from one another (see paragraphs 4.84(b) and 4.96(b)).

6.3 That competition is constrained in this market is evidenced by:

- (a) sustained differences between average prices of suppliers and a degree of independence (from one another) in the movements of these average prices (see paragraph 4.83(a));
- (b) individual suppliers charging different prices to different customers, which are largely unrelated to differences in costs (see paragraph 4.83(b)); and
- (c) low switching rates and limited numbers of customers threatening to switch, which exist despite the availability of lower prices from other suppliers, and despite evidence that customers do not have a strong preference for the service of their existing supplier (see paragraph 4.83(c)).

- 6.4 We note also that we found that the major suppliers earned, on average over the period 2001 to 2004, ROCEs that were in excess of the WACC which we have calculated, although none of them earned returns that were both persistently and substantially in excess.
- 6.5 In our view, none of the above adverse effects of the features of the British market is a necessary consequence of existing safety requirements.
- 6.6 We conclude that there are features of the market for supply of domestic bulk LPG in Great Britain which prevent, restrict or distort competition. These are as set out in paragraph 6.2. While some marginal customers may negotiate competitive prices, we conclude that the large majority of customers in the market are paying higher prices than would be the case if these features did not exist. (An estimate of the minimum cost to customers is at paragraph 4.80.)

Northern Ireland

- 6.7 We have noted in paragraphs 4.45, 4.81 and 4.95 that the Northern Ireland market shares a number of characteristics with that in Great Britain, but to differing extents.
- 6.8 In our view, the following features of the market, either alone or in combination with each other, prevent, restrict or distort competition in the supply of domestic bulk LPG in Northern Ireland, with the further detrimental effects of higher prices for customers of domestic bulk LPG than would otherwise have been the case:
- (a) the widespread practice, when a customer switches supplier, of the outgoing supplier removing its tank from the site and of the incoming supplier replacing it with an essentially similar tank, with the consequential costs of removing and installing tanks, which:
- (i) to the extent that these costs are reflected in charges to individual customers, acts as a barrier to customer switching;
 - (ii) to the extent that these costs are borne by the incoming supplier, acts as a disincentive to competing for the business of existing customers;
 - (iii) to the extent that the practice gives rise to customer inconvenience (whether actual or perceived), acts as an additional barrier to customer switching; and
 - (iv) given the cost disadvantages potential competitors face in competing with an incumbent supplier and given the prospect for decline in the market for the supply of bulk LPG in Northern Ireland, acts as a barrier to expansion (paragraphs 4.52(a) and 4.98);
- (b) the lack of information among customers in that:
- (i) some customers are not aware of their ability to switch supplier or of alternative suppliers;
 - (ii) suppliers often do not provide sufficient information in advance about customers' liability for switching charges; and
 - (iii) there is uncertainty about the likely level of inconvenience of the switching process, which contributes to customer perceptions of inconvenience (paragraph 4.52(b));

- (c) contractual restrictions on switching, including the use of lengthy minimum terms in introductory contracts; three-month notice periods for termination; and lack of clarity in contracts (paragraph 4.52(c)); and
- (d) limited ability of suppliers to identify and target their marketing efforts on each others' customers (paragraph 4.52(d)).
- 6.9 That competition in this market is constrained is evidenced by the matters set out in paragraphs 6.3(a) and (c).
- 6.10 In our view, none of the above features of the market in Northern Ireland is a necessary consequence of existing safety requirements.
- 6.11 We conclude that there are features of the market for supply of domestic bulk LPG in Northern Ireland which prevent, restrict or distort competition. These features are as discussed in paragraph 6.8. While some marginal customers may negotiate competitive prices, we conclude that the large majority of customers in the market are paying higher prices than would be the case if these features did not exist.

7. Remedies

- 7.1 Having identified those features of the market that we consider have an adverse effect on competition, we now turn to consider measures to remedy, mitigate or prevent this adverse effect. This section begins by setting out the framework for our assessment of remedies. It then sets out our assessment of the remedies options set out in the remedies notice published on 23 August 2005, and also of several further options put to us during the course of the inquiry. This section also sets out our consideration of relevant customer benefits (RCBs). It then identifies our chosen package of remedies, and considers issues of costs and proportionality. This section concludes by setting out our decision on remedies.

Framework for the assessment of remedies

- 7.2 The CC is required by the Act⁵⁵ 'in particular to have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the adverse effect on competition and any detrimental effects on customers so far as resulting from the adverse effect on competition'. Such detrimental effects may affect existing or future customers and must be in the form of higher prices, lower quality, less choice or less innovation in relation to goods or services in any UK market (whether or not in the market to which the feature or features concerned relate).⁵⁶ As noted in our Guidance (*CC3, Market Investigation References: Competition Commission Guidelines*, 2003 paragraph 4.9): 'when deciding what is an appropriate remedy, the Commission will consider the effectiveness of different remedies and their associated costs and will have regard to the principle of proportionality'.
- 7.3 The CC has made several general observations about factors relevant to its consideration of effectiveness (*CC3*, paragraph 4.13 *et seq*). First, an effective remedy will make clear the persons to whom it is directed and any other persons who might be interested in it. Secondly, in considering its effectiveness, the CC will consider the prospects of a particular remedy being implemented and complied with. A third relevant consideration is the time period within which the effects of the

⁵⁵Section 134(6).

⁵⁶Section 134(5).

remedy will be seen. Other factors may also be relevant to the CC's consideration of effectiveness, depending on the facts of the case.

- 7.4 In considering whether a remedy is reasonable and practicable, the CC will consider the cost associated with implementing the remedy (CC3, paragraph 4.10). The CC will endeavour to minimize any ongoing compliance costs to the suppliers, subject to the effectiveness of the remedy not being reduced (CC3, paragraph 4.12). However, the CC will balance those costs against the benefit to the UK economy and to customers in particular. The CC has said (CC3, paragraph 4.10) that in 'choosing between two remedies which it considers would be equally effective, it will choose the remedy that imposes the least cost or that is the least restrictive'.
- 7.5 In general, the CC will seek to implement (or recommend) remedies that address the adverse effect on competition, though it may also choose to address the detrimental effect on customers in addition or as an alternative (CC3, paragraph 4.6).⁵⁷ Although it remains an option, the CC has said: 'it is unlikely that the Commission, having decided that there is an adverse effect on competition, will decide that there is no case for remedial action, at least before it has given attention to any RCBs that may accrue from the market features' (CC3, paragraph 4.7).

Assessment of remedy options

- 7.6 We consider below each of the remedy options as outlined in the remedies notice, together with additional options that have been put to us in the course of the inquiry:
- (a) tank transfer;
 - (b) standardization of the switching process;
 - (c) information for customers on the switching process;
 - (d) changes to customer contracts (including reducing notice periods);
 - (e) improving information on suppliers and their offers; and
 - (f) reducing the scope for selective discounting.
- 7.7 As part of our consideration of the tank transfer remedy, we have given particular consideration to how this remedy would apply to metered estates. This is set out in a subsection of the section on tank transfer. The remedies considered here could apply equally to the features of the market in Great Britain identified as having an adverse effect on competition and to the features of the market in Northern Ireland identified as having an adverse effect on competition. Where we have identified particular considerations in relation to the application of any elements of this package in Northern Ireland, these are referred to specifically.
- 7.8 A full account of the evidence we have received in relation to each remedy option, and our consideration of that evidence, is provided in Appendix L.

⁵⁷The CC has said (CC3, paragraph 4.22) that it 'will first look for a remedy that would be effective in dealing with the adverse effects on competition of the market features rather than seeking to deal with any detrimental effects on customers'. However, the CC is prevented from taking action to address future (rather than existing) detrimental effects on customers if it is not also remedying the adverse effect on competition (section 138(6) of the Act).

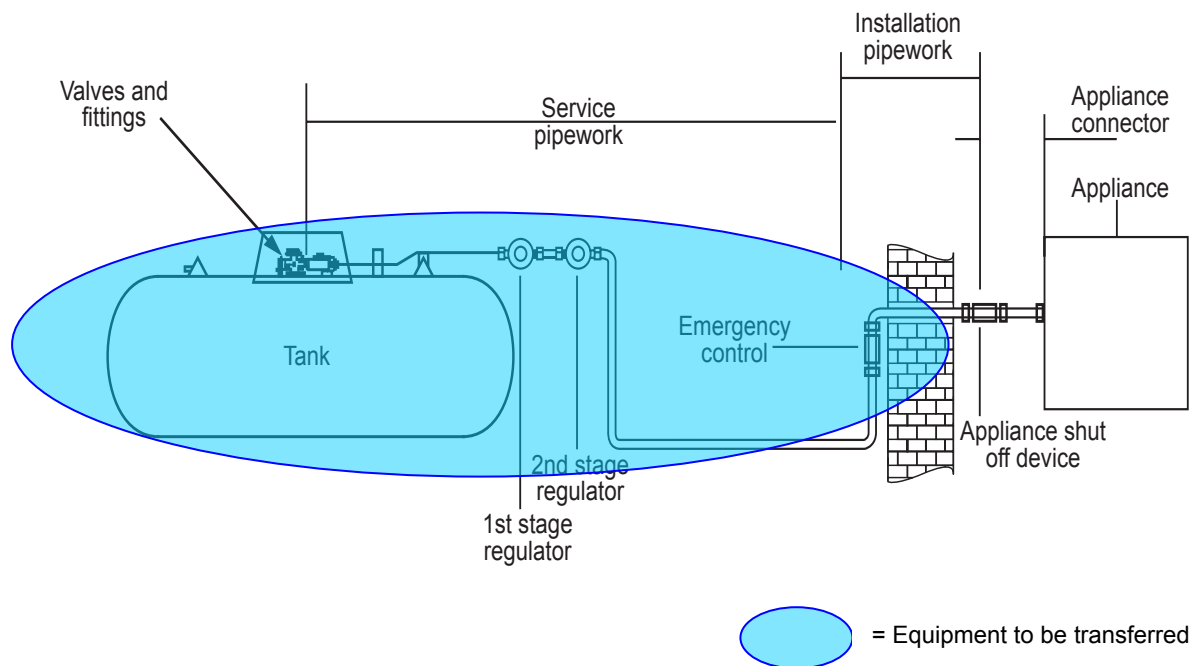
Tank transfer

- 7.9 As proposed in our remedies notice, a tank transfer remedy would involve a customer's chosen new supplier being required to give that customer the right to request the transfer of the ownership of the tank currently used in their supply from the outgoing supplier to the incoming supplier, rather than be obliged to have that the tank uplifted and a new one installed by the incoming supplier. Having received a request from the customer that he or she would like to retain the existing tank, the incoming supplier would then have the right to buy that tank, together with the associated pipework (where owned by the outgoing supplier) and valves and regulators, from the outgoing supplier.
- 7.10 The tank transfer remedy would give an incoming supplier in receipt of a request from its customer the right to buy the tank. It would not mandate the transfer of tanks from outgoing suppliers to incoming suppliers. The incoming supplier would retain the right to have the outgoing supplier's tank uplifted and one of its own tanks installed if it so wished. However, if an incoming supplier in receipt of a request from a customer for a tank transfer decided not to acquire the existing tank from the outgoing supplier, preferring to have the tank uplifted and install a new tank, it would be required to explain to the customer why it had not complied with his or her request.
- 7.11 By removing the need for a tank to be uplifted and a new one installed each time a customer switches supplier, the tank transfer remedy would substantially reduce the inconvenience faced by customers switching supplier. It should also (as discussed below, see paragraph 7.75 *et seq*) reduce the cost to suppliers of customer switching and should therefore result in customers in general facing lower switching charges than would otherwise have been the case.
- 7.12 In our remedies working paper, we proposed that the tank transfer remedy should apply equally to above-ground tanks, underground tanks and to metered estates. Although some of the responses we received to the remedies working paper [§] raised specific issues that would need to be taken into account in applying this remedy to underground tanks, there was no disagreement with the proposal that the remedy should apply to both types of tank. We continue to consider that the tank transfer remedy would apply both to above-ground and underground tanks, and the consideration of tank transfer set out below is on this basis. However, several suppliers [§] raised concerns about its application to metered estates. As noted above, we set out our consideration of the application of our remedies to metered estates separately at the end of this section.
- 7.13 In order to reach a view on whether tank transfer remedy would be effective, reasonable and practicable, we considered several specific questions:
- (a) What is to be transferred?
 - (b) How will tanks be valued?
 - (c) What will the process of tank transfer involve and what elements of that process will the CC need to specify?
 - (d) What impact will tank transfer have on safety?
- What is to be transferred?*
- 7.14 On the basis of discussions with the major suppliers, there is a clear consensus that transfer will need to include the tank and all valves (including the emergency control

valve) and regulators fitted to the service pipework. The transfer of valves and regulators together with the tank will avoid the need for work to be done on the tank prior to transfer. Thus, transfer should include all those components listed in the LPGA Code of Practice No 1 Part 2 Section 3 (including UPSO/OPSO valves⁵⁸) where they are present in the installation. The equipment that will typically transfer as part of a tank transfer is illustrated in Figure 1.

FIGURE 1

Typical domestic installation



Source: Based on LPGA chart.

Note: diagram does not show UPSO/OPSO valve, which would be included in equipment to be transferred.

7.15 We are aware that the service pipework (between the vessel and the emergency shut off valve) is in some instances owned by the supplier and in others is owned by the customer. The different arrangements routinely adopted by the major suppliers are discussed in more detail in Appendix L. For the purposes of the tank transfer remedy, we are concerned to ensure that the incoming supplier is able to acquire the existing tank and use that tank to supply gas to the newly acquired customer. Thus, if the service pipework is owned by the outgoing supplier, ownership of the service pipework should transfer to the incoming supplier along with the tank and the tank fittings. This will remove any scope for the outgoing supplier to use its ownership of the pipework to deny the incoming supplier the ability to supply the customer. The incoming supplier would then be free to transfer the ownership to the customer, depending on the supplier's preference, if this could be agreed. If the service pipework is owned by the customer, the incoming supplier should have the ability (as it does now) to negotiate with the customer as to whether the ownership should remain with the customer or be transferred to the incoming supplier.

7.16 We are aware that this approach requires the outgoing supplier (and the customer) being clear as to who owns the pipework. We understand that this should already be

⁵⁸Under pressure shut off/over pressure shut off valves, used to protect the pipework when pressure becomes too high or too low.

known, and we consider that, where it is not known, greater clarity would be useful in any case.

- 7.17 In addition to tanks, fittings and pipework, we have also considered whether telemetry equipment should be transferred from the outgoing supplier to the incoming supplier. We note that telemetry units use proprietary technology, such that a telemetry unit installed by one supplier would be of no use to another. Thus, the telemetry unit of the outgoing supplier will have no value to the incoming supplier, and there is no reason for it to transfer to the incoming supplier with the tanks and fittings (and pipework).
- 7.18 Some suppliers [redacted] raised the question of how telemetry equipment should be removed on transfer of a tank and who should bear the cost of this. We note that telemetry equipment is only currently installed on a minority [redacted] of the domestic bulk installations supplied by one of the major suppliers in Great Britain, and therefore accounts for only around [redacted] per cent of the total number of domestic bulk LPG installations in Great Britain. Since the costs associated with the removal of the telemetry unit are the result of the outgoing supplier's decision to install it, we consider that the outgoing supplier should bear the cost of its removal. Although we note that the incoming supplier may be able to remove the telemetry unit and that it may prove cheaper for the incoming supplier to remove the unit rather than the outgoing supplier, because the unit will remain the property of the outgoing supplier we consider it appropriate that the outgoing supplier should remove the equipment. However, if the outgoing supplier fails to remove the equipment within two weeks of the transfer, the incoming supplier will be entitled to remove the equipment and hold it for collection by the outgoing supplier. We also note that, if the outgoing supplier and the incoming supplier agree that the incoming supplier should remove the telemetry unit, they will be free to make the necessary arrangements at any time.

How will tanks be valued?

- 7.19 We accept that, as noted by one of the major suppliers [redacted], there will be a set of tank prices for which both the outgoing supplier and the incoming supplier should have an incentive to transfer the tank and fitting (plus any service pipework owned by the outgoing supplier). In simple terms, if the outgoing supplier is offered a price which is more than the value of the equipment to be transferred to it minus the cost associated with uplifting the tank, it should have an incentive to sell the tank. Similarly, if the incoming supplier can acquire the equipment to be transferred at a price less than the cost to it of acquiring and installing a new (or refurbished) tank, it should have an incentive to acquire that equipment.
- 7.20 Some suppliers [redacted] and [redacted] have argued that negotiations between outgoing and incoming suppliers would be too costly and could lengthen the time taken to complete a transfer. They argued that a methodology should be established to determine a binding price at which the tank should be transferred. However, we consider that a tank price that is negotiated between the outgoing supplier and the incoming supplier should have the advantage of reflecting the value of the individual tank to each of these suppliers. We therefore consider that there is value in allowing the suppliers to negotiate a mutually acceptable price for the equipment to be transferred.
- 7.21 However, we consider that simply leaving the price at which a tank should transfer to be negotiated would in practice give the outgoing supplier a veto over the effectiveness of the remedy. An outgoing supplier that considered itself likely to be a net loser from the tank transfer remedy would be able to demand a sufficiently high price for all its tanks such that no incoming supplier would wish to acquire them. We

therefore consider that the incoming supplier and the outgoing supplier should have an opportunity to negotiate an agreed price for the tank to be transferred, but that a 'backstop price' should be established, providing a price at which the outgoing supplier will be obliged to sell the tank to the incoming supplier. We also consider that, in order that the opportunity to negotiate should not unduly delay the transfer process, the window for negotiation should be limited to two working days. We note that, under this approach, if either the incoming supplier or the outgoing supplier believes negotiation to be too costly, it can decline to enter into any negotiation, which will result in the tank being priced at the backstop price.

- 7.22 We consider that, in order to be effective, the valuation methodology used to generate the backstop price must be simple, robust and easy for suppliers to use. We discussed with the major suppliers a valuation methodology that would see base prices established for the assets according to their current replacement costs, the depreciation of these base prices over the expected life of those assets, and some uplift for the cost of 10-year and 20-year tests. By including each of these elements in the valuation methodology, we intended to ensure that, in general, the transfer price for a tank should provide the incoming supplier with the means to recover the value that remains in the tank from the outgoing supplier, thereby minimizing distortions in its investment decision. Similarly, by including each of these elements in the valuation methodology, the incoming supplier should have sufficient information to decide whether it wishes to acquire the existing tank or to install a new one. Taking these elements, the methodology could then be used to create valuation tables, which would allow individual suppliers to look up the backstop price of a tank on the basis of, say, its capacity and its age.
- 7.23 Three of the major suppliers [redacted] were broadly supportive of such a methodology. All these suppliers suggested that tanks could be categorized by ranges of capacity and whether the tank was above-ground or underground. These suppliers also suggested that it would be unnecessarily complex to value different assets (eg the tank, fittings, regulators etc) separately, and since new tanks are generally not supplied without fittings and since regulators are not costly, it would be sufficient to determine a single value for all the assets to be transferred. One of these suppliers [redacted] suggested that, instead of using a particular asset life for tanks and fittings, we should use a methodology that saw the value of a tank returned to the base price (ie the value as new) following every 20-year test.
- 7.24 A fourth major supplier, which had favoured the use of a methodology to produce a binding tank price without negotiation, [redacted] proposed a very different tank valuation methodology. This supplier in principle agreed that the tank valuation methodology should use current replacement costs of the assets to be transferred. It envisaged using tables to provide base prices and adjustments in respect of: each tank type; each relief valve type; whether there was an adaptor; the screw type on the float gauge; whether the filling adaptor would need to be changed; the condition of the bleed screw and the fixed liquid level gauge; whether the design code of the tank would permit the colour of the tank to be changed and the cost of doing this; the type of hood; the type, age and condition of the first- and second-stage regulators; whether there is an UPSO/OPSO valve; whether there is telemetry equipment that would need to be removed; the ownership, type, age and condition of the pipework and whether it complies with the GSIUR and LPGA Codes of Practice; the paperwork and written scheme of examination (WSOE) and any costs to be incurred as a result of incomplete paperwork for the tank; any costs to be incurred as a result of incomplete paperwork for the valves; any risk premium incurred by the outgoing supplier in insuring any ongoing liability in connection with the transferred tank; and the siting of the tank and the cost of any remedial work (eg cutting down trees, resiting sheds etc). The supplier envisaged that the values within each of the tables

would need to be agreed by suppliers as part of the process of setting up the tank transfer system.

- 7.25 We note that none of the suppliers has disagreed with the principle that tank valuation should be based on the current replacement cost of the equipment to be transferred. We have been told by a tank manufacturer [redacted] that new tanks are usually supplied with fittings. We therefore consider it appropriate to use a single base price for a tank plus its fittings, since it is on this basis that they would be replaced. We have been told by one of the major suppliers [redacted] that the cost of a first stage regulator, a second stage regulator and 'relevant kit' is £[redacted]. Since this represents around 5 per cent of the replacement cost of a 600 kg tank (and would represent a lower percentage of the replacement cost of larger tanks), we do not consider the additional complexity that would be involved in creating and maintaining separate base prices for regulators would not result in a corresponding benefit in terms of the effectiveness of the valuation methodology. We therefore consider that the valuation methodology should use a single base price for all equipment to be transferred and that this should reflect the replacement cost of a tank including fittings.
- 7.26 In order that suppliers are not disincentivized to invest in good quality tanks, we consider these the replacement costs used in the calculation of these base prices should be those of good quality tanks and fittings, eg those that are compliant with the Pressure Equipment Directive (PED). We consider it important that the replacement cost of tanks used in our valuation methodology should reflect the range of prices at which tanks are actually available in the UK. We therefore consider that the base price of each different category of tank should reflect an average of prices actually available to suppliers in the UK, in the period immediately prior to the (re)calculation of that base price, for a new PED-compliant tank including valves and fittings, but excluding delivery.
- 7.27 Three of the major suppliers [redacted] have suggested that, in order to maintain a relatively simple valuation methodology, we should establish categories of tank by ranges of capacity (eg less than 250kg, 250–500kg, 500–750kg, 750kg–1,000kg, 1,000–2,000kg, more than 2,000kg) and whether they are above-ground or underground. Each category of tank could then be ascribed a base price on the basis of the nearest replacement cost of that category of tank. We have been told by a tank manufacturer [redacted] that it currently supplies just six types of tank for domestic use in the UK, so that any tank being replaced would need to be replaced with one of these six types of tank. We therefore consider that it is appropriate to categorize tanks by reference to their capacity and whether they are above ground or below ground and to ascribe each tank a replacement cost on that basis.
- 7.28 In order that the valuation methodology should not distort investment decision, it will be necessary for base prices to be recalculated periodically by reference to the current replacement costs of the different types of tank. Since the price of new tanks is driven by the steel price, we consider that it should be sufficient to recalculate the base prices by reference to current replacement costs of tanks every three years, while indexing the base prices by the steel price index every 12 months in between recalculations. In order to maintain confidence in the valuation methodology, it is necessary for the indexing and recalculations to be carried out by an independent third party, and we consider that this role should be performed by the OFT.
- 7.29 In our remedies working paper, we suggested that the base price of a tank (including fittings) should be depreciated to the scrap value over an appropriate asset life, which we suggested would be 60 years. In responses to the remedies working paper several smaller suppliers [redacted] and one major supplier [redacted] expressed the view that

tanks and fittings cannot be expected to last for 60 years, and some noted that their own internal accounting policies depreciated the cost of a tank over substantially less than 60 years (most often 20 years).

- 7.30 It is important to note that the approach to depreciation used in our valuation methodology does not need to reflect the internal depreciation policies of the various suppliers. In particular, although it may be reasonable for suppliers fully to depreciate the capital cost of a tank over 20 years, if our methodology were to do so, we would value a 21-year tank at scrap, which could significantly underestimate its actual value both to the outgoing and the incoming supplier, thereby distorting investment decisions. However, we understand that general acceptance of the valuation methodology by suppliers will be important for the effectiveness of our tank transfer remedy. We have therefore revised our valuation methodology in a way that takes account of the intuitive appeal of a 20-year asset life for tanks, but still ensures that investment decisions are not distorted by allowing uplifts in value for the cost of 10-year and 20-year tests. The depreciation profile produced by this valuation methodology is shown in Figure 5 of Appendix L.
- 7.31 Given this valuation methodology, it is important not only to establish appropriate base prices for different categories of tank but also the cost of 10-year and 20-year tests. As with base prices for tanks and fittings, we consider that, in order that the valuation methodology should not distort investment decisions, it will be necessary to ensure that the cost of a 10-year test and the cost of a 20-year test used in the methodology reflect market rates. Since suppliers may conduct tests in-house, so that the cost of a test would be an internal transfer price, we consider that, although the data is readily available, it would not be appropriate to allow an individual supplier to recover the costs it had actually incurred in testing the tank through the tank transfer price. As with the base price of a tank, we consider that the costs of a 10-year and a 20-year test used in our methodology should reflect an average of the prices at which these tests are available to different suppliers in the UK and from different providers. As with base prices of tanks and fittings, we consider that the OFT should recalculate the cost of 10-year and 20-year tests to be used in the valuation methodology every three years. In the intervening period, we consider that it should be sufficient to index these costs every 12 months by RPI, as a proxy for labour costs. Again, this indexing should be done by the OFT.
- 7.32 Similarly, scrap values play an important role in the valuation methodology. Although we have currently set the net scrap value as equal to a nominal £10, reflecting the fact that currently the value of the metal is offset by the cost of making the tank fit for scrap, it will be necessary to ensure that the scrap values assigned to particular categories of tank reflect market rates. This should be relatively straightforward since the scrap value of a tank reflects the weight of metal in the tank and the steel price. However, in order to maintain confidence in the valuation methodology we consider that the OFT should recalculate the scrap value for each category of tank by reference to the weight of the tank and the market price for steel every three years. In the intervening period, it should index these scrap values every 12 months according to the steel price index.

The tank transfer process

- 7.33 We do not consider that it is necessary or desirable for us to specify every aspect of the tank transfer process. Indeed, we consider that, as the industry becomes accustomed to tank transfer, the processes used by individual suppliers and the industry as a whole to effect tank transfer will develop and adapt. However, just as it is necessary to determine a backstop price for tank transfer in order to prevent the outgoing supplier from having an effective veto over the remedy, we also consider it

necessary to set out certain essential elements of the tank transfer process and, in particular, to create a set of obligations on the outgoing supplier that remove any similar veto.

- 7.34 The beginning of the tank transfer process will trigger a number of obligations on the outgoing supplier (discussed below). In order to avoid a situation in which the outgoing supplier faced obligations of which it was unaware, we consider that the tank transfer process should begin at the point at which the outgoing supplier receives notice of termination of contract. This notice may be sent by the customer or forwarded by the incoming supplier.
- 7.35 We also consider that the incoming supplier should be obliged to forward any notice of termination of contract and any request to transfer the tank as soon as is reasonably practicable and in any event not later than three working days after the incoming supplier has received notice of the customer's intention to terminate the contract (and request to transfer the tank). We recognize that obliging the incoming supplier to notify the outgoing supplier of termination of contract as soon as is reasonably practicable will provide the outgoing supplier with the opportunity to defend the customer and perhaps to change the customer's mind within the customary 14 day cooling-off period. We also recognize that, as a result, the incoming supplier may begin working towards tank transfer only to have the customer decide he or she no longer wishes to switch. However, on balance, we consider that, in relation to a remedy that gives the incoming supplier the right to buy the outgoing supplier's tank, obliging the incoming supplier to notify the outgoing supplier of the termination of the customer's contract as soon as is reasonably practicable strikes the right balance between the interests of the incoming supplier and the outgoing supplier.
- 7.36 The applicability of the PSSR in relation to the supply of domestic bulk LPG is discussed in detail in paragraph 19 of Appendix D. We note that, in order to comply with Regulation 14 of the PSSR, the user of a pressure system (in this case the supplier of LPG into a domestic bulk tank) should be in possession of the last report relating to the pressure system and any such previous reports if they contain information that would materially assist in assessing whether the system is safe to operate or whether any repairs or modifications to the system can be carried out safely. We also note that, in order to comply with Regulation 8 of the PSSR, a supplier should also have a WSOE for the tanks to which it supplies gas. We consider that these documents should provide an incoming supplier with information as to the condition of the tank and the safety processes of the outgoing supplier and that this information could help to inform an incoming supplier's decision on whether to acquire that tank. Furthermore, this information would be important in enabling the incoming supplier to ensure the tank's safety in the future. We therefore consider that, in all cases, the outgoing supplier should provide the incoming supplier with a copy of the most recent test certificate for the tank to be transferred and a copy of its WSOE.
- 7.37 We also note that, depending on the age of the tank and whether it has been refurbished, the outgoing supplier may have additional documentation in relation to the tank. The evolution of Regulations and CoPs relating to document retention is discussed in paragraph 39 *et seq* of Annex 2 to Appendix D. We further note that the ACoP for the PSSR, and the LPGA CoP 1 part 1, section 9 and part 3, section 7, set out specific information, retention of which would provide one way of complying with the PSSR. This is discussed in paragraphs 41 and 42 of Annex 2 of Appendix D. Given this, other documents that a supplier might have in relation to a tank include any designer's/manufacturer's/supplier's documents (eg the manufacturer's pressure test certificate), and certificates relating to modifications to the tank. In the case of

underground tanks, a supplier is also likely to have documentation relating to its cathodic protection. In order to allow the incoming supplier to take as fully-informed a decision as possible on whether to acquire the tank, and in order that the incoming supplier is in the best position safely to maintain the tank in the future, we consider that the outgoing supplier should be obliged to provide technical and safety documentation relating to the installation to the incoming supplier. In line with the guidance provided in the ACoP on the PSSR, where a tank is transferred, we consider that the outgoing supplier should be obliged to pass on to the incoming supplier all documents held under Regulation 14 of the PSSR. In any event, we consider that the outgoing supplier should provide to the incoming supplier all the retained technical and safety documentation in relation to the relevant installation (including the tank, service pipework, regulators and other fittings), including details of its WSOE and, in relation to underground tanks, full documentation relating to any cathodic protection of the tank.

- 7.38 We believe that the incoming supplier should be provided with this documentation as soon as possible in the transfer process. Given that three of the major suppliers [X] have said that they would be able to provide this documentation within a week, we consider that the outgoing supplier should be obliged to provide copies of such documentation to the incoming supplier within five working days of having received notice of the customer's termination of his or her contract.
- 7.39 The major suppliers have expressed different views on whether it will be necessary for the incoming supplier to examine the tank before deciding whether or not to acquire it. The HSE has said that, on the basis of the safety regulations, an incoming supplier would not necessarily need to examine the tank before supplying into it. It noted that the incoming supplier should have documentation from the outgoing supplier in relation to the age and design of the tank and its history. It also noted that the incoming supplier would need to do a visual inspection of the customer's site (eg to check accessibility and lines of sight) and that a visual inspection of the tank could be undertaken at the same time. The HSE suggested that a further examination of the tank would only be necessary if something in the documentation or visual inspection gave cause for concern.
- 7.40 Given the differing views of the major suppliers and given the view of the HSE set out in the previous paragraph, we do not intend to oblige an incoming supplier to examine a tank as part of the tank transfer process. However, we acknowledge that some suppliers may wish to examine the tank as part of the transfer process, and we intend to leave room in time period allowed for them to do so. We note that all the major suppliers have said that they would be able to arrange an examination within 14 days.
- 7.41 We consider that the title to the tank should transfer from the outgoing supplier to the incoming supplier at the point at which the outgoing supplier has received full payment for the tank from the incoming supplier. We note that, title having transferred, the incoming supplier will need to change the signage on the tank, which will indicate among other things, who to contact in case of emergency and how to contact them. Responsibility for the safety of the tank, and responsibility for provision of emergency cover will transfer to the incoming supplier at the same time as title transfers. However, although responsibility will transfer at that moment, we recognize that there may be practical difficulties faced by the incoming supplier in ensuring that the signage is changed at precisely the moment title transfers, and we note the importance of ensuring that emergency cover provision does not fall between the two suppliers. We therefore consider that, although responsibility for tank safety and provision of emergency cover will transfer from the incoming supplier to the outgoing supplier at the moment title transfers, the outgoing supplier should be obliged to deal

with any call-outs it receives until the signage has been changed, up to a maximum of two weeks following transfer of title, by which time the incoming supplier must have changed the signage.

- 7.42 One of the major suppliers [X] expressed concern that obliging the outgoing supplier to deal with any call-outs received until the signage is changed would provide an incentive for the incoming supplier to delay changing the signage for as long as possible in order to avoid the costs associated with emergency cover. We consider that this can be dealt with first by obliging the incoming supplier to change the signage as soon as possible after title has transferred (and in any event no later than two weeks after transfer of title). Second, we consider that the incoming supplier should be obliged to meet any claims by the outgoing supplier for costs incurred in dealing with any emergency call outs in the two weeks following transfer, in order to provide an additional incentive on the incoming supplier to change the signage as soon as possible, thereby removing his liability for such costs.
- 7.43 The HSE has told us that the GSIUR is being reviewed. We recognize that, to the extent that this review results in changes to the arrangements for emergency cover (eg if it results in a nationwide arrangement emergency cover), it may be necessary to revise the way in which emergency cover provision is dealt with in our remedy.
- 7.44 Another major supplier [X] has noted that sometimes, when acquiring a new customer, it becomes apparent that the site of the tank needs to be changed (eg because recent construction has placed it in violation of safety distances). Where this happens, it is possible that the customer will need to undertake civil works (eg the laying of a concrete base) before the tank can be resited. This supplier argued that the incoming supplier should not be held to be in breach of the time period allowed for tank transfer where the delay results from the customer needing to complete groundworks. We therefore consider that, where a tank is being resited, the incoming supplier should be permitted to 'stop-the-clock' on the tank transfer process pending completion of work by the customer.
- 7.45 We considered whether we should build a dispute resolution mechanism into the tank transfer process. However, we note that such mechanisms can be complex and costly and we decided that, especially given the small size of this market, a better approach would be to design a remedy that minimized the scope for disputes and which encouraged suppliers to resolve any disputes among themselves. We have given responsibility for the management of the transfer process to the incoming supplier, who will have an incentive to resolve disputes with the customer it hopes to acquire and retain and who, for the same reason, will have an incentive to work with the outgoing supplier to make sure that the transfer happens as smoothly as possible. We have also placed a number of obligations on the outgoing supplier to do what it needs to do in order to expedite the transfer. If the outgoing supplier fails to fulfil these obligations, it will be in breach of the undertakings and may find itself the subject of enforcement proceedings. We do not, therefore, consider that it is necessary to provide either a customer-supplier or a supplier-supplier dispute resolution process as part of the remedy. However, we note that, if the industry reaches the view that such processes would help it to comply with the remedy, suppliers are free to establish them.
- 7.46 Taking into account the obligations on the incoming and outgoing suppliers to complete various parts of the transfer process within the periods stipulated above, we consider that the incoming supplier should be obliged to complete a tank transfer process within 28 days of the outgoing supplier being notified of the customer's termination of his or her contract.

What impact will tank transfer have on safety?

- 7.47 We have considered carefully whether our tank transfer remedy would have an impact on safety. Our consideration of all the relevant issues is set out in depth in Appendix L. Here we summarize each of our principal considerations and set out the reasons for our views.
- 7.48 One of the major suppliers [X] had expressed concern that the tank transfer remedy should not result in the loss of the clear allocation of responsibility for safety of the tank that had resulted from the ‘cradle-to-grave’ integrated supplier model. Since we envisage that responsibility for the safety of the tank will pass from the outgoing supplier to the incoming supplier at the moment title transfers, we consider that responsibility for the safety of the tank at any given moment will be clearly allocated under tank transfer.
- 7.49 Another major supplier [X] has noted that the incoming supplier may have a claim against the outgoing supplier under the Sale of Goods Act (SOGA) if the outgoing supplier had provided goods that were not fit for purpose. The same supplier [X] has also noted that the outgoing supplier may have liabilities under the PSSR if it provides a defective tank. However, we do not consider that the possibility of litigation under SOGA or liability under the PSSR will result in any loss of clarity about responsibility for safety. Indeed, we note that the possibility of action by the incoming supplier could bring benefits by reinforcing the incentive on suppliers to maintain tanks even if they believe those tanks may be transferred to another supplier.
- 7.50 It has been put to us by the same major supplier [X] that the tank transfer remedy will increase the average age of tanks and will therefore have a negative effect on safety. We do not accept this for two reasons. First, we do not accept that tank transfer will necessarily lead to an increase in the average age of tanks since it is possible that an increase in the amount of switching, some of which will inevitably result in the incoming supplier deciding to uplift the existing tank and install a new one, will reduce the average age of tanks. Second, we are not persuaded that the condition of a tank is necessarily a function of its age, as opposed to, for example, how it has been maintained.
- 7.51 The same major supplier [X] put to us that the tank transfer remedy would leave each supplier facing increased diversity in its tank population, making it more difficult for suppliers to manage their tank population and thereby reducing safety. We note that there have been a number of corporate acquisitions in the LPG industry and that some suppliers have experienced a greater diversity in their tank populations as a result, but this has been successfully managed. Although we accept that tank transfer might increase the diversity of a supplier’s tank population to a greater extent than corporate acquisition, we consider that the suppliers’ track records in dealing with tank diversity following acquisition suggest that they could reasonably be expected to manage such an increase. We also note that incoming suppliers will retain the right not to acquire existing tanks, so that individual suppliers will be able to decide whether to acquire individual tanks on the basis of whether the diversity of their tank population would be kept within a manageable level. We therefore do not consider that the tank transfer remedy would reduce safety.
- 7.52 The same major supplier [X] put to us that the tank transfer remedy would result in an increased number of suppliers being involved in a tank throughout its life, which would—even if the suppliers had the same safety standards—reduce levels of safety. This supplier cited discussions with its insurance broker, who the supplier claimed had said that it would consider tank transfer to be a higher risk than the current

system of uplift and installation. We discussed this issue with this supplier's insurance broker and note that the broker had stated this view on the basis that under tank transfer, the incoming supplier would have no information on the tank to be acquired, which will not be the case. The broker also noted that it would try to negotiate down any attempt by insurers to increase premiums as a result of tank transfer by stressing the relatively small proportion of its client's business that is represented by domestic bulk LPG, the supplier's generally good safety record and any specific safety measures the supplier had put in place, all of which suggests that there are reasons to expect that suppliers will be able adequately to manage the risk associated with tank transfer. As noted in paragraph 7.48, we do not accept that tank transfer will lead to a lack of clarity about responsibility for tank safety. Given this, and given our discussions with the insurance broker, neither do we accept that having a greater number of suppliers involved in a tank throughout its lifetime will reduce safety.

- 7.53 The same major supplier [X] has argued that, because a supplier will no longer be certain that a tank will remain in its ownership, tank transfer could create an incentive for it and other suppliers to do no more than maintain their tanks at the lowest common denominator level, thereby reducing safety levels. However, we note that the supplier will not be certain that a tank will transfer to another supplier. If the customer does not switch, the supplier will retain the tank. If the customer switches but the incoming supplier declines to acquire the tank, the tank will return to the supplier's stock. As long as the supplier retains ownership of the tank, it will be responsible for the tank and will still need to comply with the safety regulations. This should provide the supplier with an incentive to maintain the tank to its usual safety standards.
- 7.54 Furthermore, as this supplier has noted, if a tank is transferred, the outgoing supplier retains responsibility for having maintained the tank during its period of ownership. If the tank later proves to be defective, the current supplier may be able to bring action against that supplier under SOGA and may be able to bring action against that supplier for not having fulfilled its responsibility under the PSSR. This should provide an additional incentive for a supplier to maintain tank safety standards.
- 7.55 It was also put to us by the same major supplier [X] that bringing action under SOGA or the PSSR would be difficult and that it would be made more difficult because of problems in establishing when a defect occurred and therefore who was the owner of the tank at the time. However, while we accept that there would be some cost associated with such litigation, we do not accept that this would remove the incentive on the outgoing supplier to ensure that a transferred tank was fit for purpose. We also note that the responsibility for supplying a tank that is fit for purpose would fall on the outgoing supplier, and that it would not be necessary for the incoming supplier to establish under whose ownership the defect occurred in order to bring an action.
- 7.56 In addition, we note that, under the current system of uplift and installation, it could be argued that suppliers face an incentive to keep their costs as low as possible by failing to invest in safety, yet the industry appears to have a good safety record. For the reasons set out above, we do not accept that tank transfer will reduce the incentives on suppliers to invest in safety.
- 7.57 The same major supplier [X] and one of the other major suppliers [X] have argued that tank transfer will result in 'opportunistic entry' into provision of domestic bulk LPG by providing a means by which some supplier could acquire relatively low-priced tanks (eg tanks approaching a 10-year or 20-year test) and then not maintain those tanks, thereby acquiring and servicing customers relatively cheaply but with lower

safety standards. We note that, since tank transfer will only happen where a customer switches supplier, for opportunistic entry to be feasible, suppliers would need to be able to target customers on the basis of the age of their tank and the date of its next test. We are not convinced that this is feasible. We are also unconvinced that a system of tank transfer would provide greater opportunities for unscrupulous suppliers that currently exist. As noted above, the current system of uplift and installation already provides an incentive for suppliers to cut their costs by spending less on safety, yet the industry has a good safety record. Overall, we therefore do not accept that tank transfer will provide a means of 'opportunistic entry' that will reduce safety standards.

- 7.58 The same major supplier [redacted] has also argued that the tank transfer remedy will result in suppliers facing additional responsibilities. We accept that, formally, outgoing suppliers having transferred tanks will face responsibilities that they did not face previously, for example, under SOGA and under the PSSR. However, we do not accept that these additional formal responsibilities will result in an additional burden on suppliers. We note that the outgoing supplier will be responsible for supplying a tank that is fit for purpose, but we consider that the safety regime obliges suppliers to ensure that their tanks are fit for purpose in any case.
- 7.59 Our considerations of safety have led us to conclude that the tank transfer remedy will not, in itself, have an adverse effect on safety and that it is possible for the industry to operate a system of tank transfer in full compliance with the existing safety regime. We note that several of the major suppliers [redacted] have argued that tank transfer should be accompanied by a greater degree of regulation, ranging from tighter enforcement of existing standards, through the development of more standardized procedures and documentation, to a further Code of Practice to be approved by the HSE. One major supplier [redacted] suggested that it should be permitted to refuse to sell tanks to suppliers that, for example, do not abide by the LPG CoPs. However, we do not consider that it is appropriate for the CC to mandate the appropriate level and means of safety regulation in the industry. Indeed, we note from our discussions with the HSE that there are many different ways of ensuring the safe supply of domestic bulk LPG. We consider that it is a matter for the industry and the competent authorities (eg the HSE) to take such steps as they consider necessary best to ensure the safe implementation and operation of a system of tank transfer and we are confident that they will do so.

The implications of tank transfer for sale and leaseback arrangements

- 7.60 One of the major suppliers [redacted] has told us that many of its tanks are financed on a sale and leaseback arrangement and that these arrangements are such that, if the supplier sells off any tank, the whole financing structure has to be recalculated. This supplier [redacted] has informed us that its sale and leaseback agreement with [redacted], which it entered into in 2004, covers approximately [redacted] domestic tanks. (The supplier [redacted] is unable to calculate with precision the proportion of tanks covered by the agreement which are domestic.) If correct, this represents around [redacted] per cent of its total domestic tank population. It has been argued that this agreement will result in an additional cost associated with tank transfer for any supplier that secures finance in this way.
- 7.61 This supplier [redacted] initially stated that it would need immediately to unwind the entire agreement with an estimated one-off tax charge of £[redacted], but since determined this not to be the case. Instead, it [redacted] would be able to extricate tanks on an individual basis. It [redacted] estimated that the one-off cost of setting up a system to do this would be approximately £[redacted] for the system as well as employee costs of £[redacted] a year. [redacted] estimated that the tax charge of releasing a tank from the agreement would be

around £[redacted] as at 1 January 2006, although this would steadily decrease to zero over a [redacted]-year time period and would only apply to the tanks covered by the agreement. [redacted] informed us that it would have to make a payment to the other party to the sale and leaseback agreement [redacted] of a stipulated loss value [redacted]. We note [redacted] and we do not believe that we should be concerned with any inter-company charges within the [redacted] group arising from the unwinding of the agreement. [redacted] Assuming around [redacted] customers switch away from this supplier [redacted] each year, the additional tax charge to this supplier arising from its sale and leaseback arrangements would be approximately £[redacted] a year. We anticipate that the number of customers switching will increase as a result of our remedies but that the tax charge per tank will decrease. These additional tax charges will disappear entirely over time. We therefore do not believe that the remedy would bear unfairly on the supplier with this sale and leaseback agreement [redacted].

- 7.62 In response to our remedies working paper, another major supplier [redacted] asked about the implications of the tank transfer remedy for any future third-party sale and leaseback arrangements. We do not wish to prevent suppliers from entering into sale and leaseback arrangements. However, we consider that suppliers should be obliged to ensure that any future sale and leaseback arrangements they enter into do not impede tank transfer. We note that this could be achieved, for example, through the use of floating charges as security, allowing for tanks to be treated as stock and disposed of as appropriate.

Tank transfer and metered estates

- 7.63 Several major suppliers [redacted] have told us that tank transfer will be more complex for metered estates than for the usual type of domestic installation. We note that the types of tank used on metered estates may vary from those usually used in domestic installations and we will ensure that the tank valuation methodology contains suitable categories of tank, together with suitable base prices, in order that it may be applied to tanks on metered estates.
- 7.64 We also note that arrangements for the ownership of pipework on metered estates are different to the arrangements routinely in place for ownership of pipework on normal domestic installations, even within the same supplier. The practice of the major suppliers in relation to ownership of pipework is set out in detail in Appendix L.
- 7.65 The way in which pipework is dealt with when customers on metered estates switch is set out in more detail in Appendix L. We note under the current system of uplift and installation that, when customers on metered estates switch supplier, the pipework is normally the subject of negotiation between the outgoing and the incoming supplier. We consider that this should remain the case under tank transfer. We therefore consider that the tank transfer remedy should apply to those metered estates that fall within our terms of reference (as discussed in paragraph 3.17 above and in paragraphs 4 to 16 of Appendix A), with the tank valuation methodology applying in the same way as to other domestic installations, but with the pipework being the subject of negotiation between the suppliers.

Alternatives to tank transfer

- 7.66 In the course of our consideration of remedy options we considered a number of alternatives to tank transfer. Each of these alternatives is considered in more depth in Appendix L.

- 7.67 The OFT argued in favour of a remedy based on unbundling the provision of tanks and the provision of gas (and possibly also the provision of safety and maintenance services). However, although we accept that this remedy could be effective in addressing the adverse effect on competition of the various features we have identified in this market, we consider that this remedy option would necessarily be more intrusive than tank transfer. In particular, we note that this remedy option would require the CC to make an assessment of the relative pricing of tanks, gas and safety and maintenance services in order to ensure, for example, that suppliers did not attempt to use their position in the supply of tanks (in relation to which we have established there are barriers to switching) to secure unfair advantage in the supply of gas (and safety and maintenance services). We also note that this remedy would require changes to be made to safety regulations (eg the GSIUR and the PSSR) before it could be introduced, in order to ensure that responsibility for safety was clearly allocated between the owner of the tank and the supplier of LPG. Given that we consider that tank transfer will be an effective remedy, we do not consider it necessary to pursue this remedy further.
- 7.68 We have also considered a remedy based on customer ownership of tanks. While we consider that such a remedy would effectively address the adverse effect on competition we have identified, we note, however, the importance of safety considerations in this market and the fact that customer ownership of tanks would require changes to safety regulations before it could be more widely introduced. Given that we consider that tank transfer will be an effective remedy, we do not consider it necessary to pursue such a customer ownership remedy further.
- 7.69 Finally, we considered an alternative to tank transfer that was put to us by Calor. This proposal involved retaining the system of uplift and installation on switching, but obliging the incoming supplier to manage the process on behalf of its newly acquired customer and itself to undertake or arrange for an approved contractor to undertake the uplift of the existing tank and the installation of a new one. This proposal, which we published on our website and on which we invited comments, is discussed in Appendix L.
- 7.70 Calor argued that this remedy option would be effective in addressing the adverse effect on competition because it would make the switching process simpler for the customer by removing the need for the customer to organize and coordinate the incoming and outgoing supplier and allow switches to be completed in as short a time period as possible. Calor argued that this remedy would be cheaper and easier for suppliers to administer and, by maintaining the 'cradle to grave integrated supplier model', would maintain clear allocation of responsibility for safety.
- 7.71 We accept that Calor's remedy option could, in principle, to a limited extent, address the barriers to switching we have identified. However, we share with the consumer bodies we spoke to doubts as to whether it would be a sufficient improvement materially to reduce barriers to switching. We are also concerned that this remedy option would result in higher costs for an incoming supplier of acquiring a new customer than tank transfer and that it would therefore not have the same positive effect on suppliers' incentives to compete for new customers.
- 7.72 The responses we received from suppliers to our consultation on this proposal also gave us serious concerns about the practicability of the proposal. Significant concerns arose from the fact that the remedy would require the outgoing supplier to allow the incoming supplier (or an approved contractor chosen by the incoming supplier) to undertake work on its tank. When we consulted suppliers on this proposal, many expressed concern about this, and smaller suppliers in particular were concerned that the incoming supplier might not store the uplifted tank in a

location convenient for the outgoing supplier. ALGED also noted that this remedy option would do little to reduce the costs of customer switching to the suppliers, as existing tanks would still be uplifted and new ones installed.

- 7.73 As discussed in paragraph 7.48 et seq, we do not accept that tank transfer will lead to a lack of clarity about responsibility for safety and so we do not see Calor's remedy option as having advantages over tank transfer in this regard. Two of the major suppliers [X] and [X] said that Calor's remedy would itself raise health and safety concerns, since the outgoing supplier's tank would be uplifted, transported and stored in ways that the outgoing supplier itself had not checked.
- 7.74 On the basis of all these concerns, we decided not to pursue Calor's remedy option. However, we note that suppliers are currently free to agree to use Calor's proposed approach to deal with uplift and installation, and the introduction of our remedies should not alter this.

The costs of tank transfer vs the costs of uplift and installation

- 7.75 As noted above, the tank transfer remedy will give the incoming supplier a right to buy a tank that a customer has requested be transferred when he or she switches supplier. If tank transfer is to become commonplace without compulsion, it will be necessary for the incoming supplier to have an incentive to exercise its right to buy.
- 7.76 We have received estimates from each of the major suppliers of the costs they incur as incoming suppliers when a tank is uplifted and a new one installed and the costs they expect to incur as incoming suppliers when a tank is transferred. Three of the major suppliers [X] have provided estimates showing that they expect the cost to them as incoming suppliers will be lower under tank transfer than the under the system of uplift and installation. For two of these three suppliers [X] and [X], the expected reduction in cost was substantial. Just one of the major suppliers [X] expected its costs as an incoming supplier to be higher under tank transfer than under the system of uplift and installation, and the expected increase was very small.
- 7.77 These cost estimates suggest that two of the major suppliers will have strong incentives to exercise their right to buy existing tanks. One major supplier will have a less strong incentive to exercise its right to buy and it could be argued that one major supplier will not have an incentive to exercise its right to buy. However, given the likely attractiveness of tank transfer to customers, on balance, we expect that all suppliers will have incentives to exercise their right to buy.
- 7.78 We have not received detailed estimates from any smaller suppliers of the costs of participating in uplift and installation and tank transfer as an incoming supplier. However, it has been suggested to us [X] that the costs of tank transfer for a smaller supplier would be very much lower than the estimates provided by any of the major suppliers. This suggests that smaller suppliers will also have an incentive to exercise their right to buy.
- 7.79 We note in general that, as the system of tank transfer becomes established and suppliers become accustomed to it, we would expect the costs of transferring a tank to fall. This should mean that, other things being equal, incoming suppliers' incentives to exercise the right to buy existing tanks should increase.
- 7.80 As noted above, the tank transfer remedy places obligations on outgoing suppliers to expedite the transfer process, so that the cost incentives for the outgoing supplier to participate in tank transfer are not critical to the effectiveness of the remedy. However, we have also received estimates from the major suppliers of their costs as

an outgoing supplier under the current system of uplift and installation and their expected costs as an outgoing supplier under tank transfer. All of the major suppliers expect their costs as outgoing suppliers to be very substantially lower under tank transfer than under the system of uplift and installation. This reassures us that, although some suppliers might prefer not to see a system of tank transfer in place, they will at least face an incentive in most individual cases not to prevent transfer from taking place.

Standardization of the switching process

7.81 We have identified four different aspects of the switching process that contributed significantly to the barriers to switching faced by customers:

(a) what is required of the customer to make the switch happen;

(b) provision of information by suppliers;

(c) switching charges; and

(d) the time taken to effect a switch.

We have considered what measures should be taken to make the switching process easier for customers in each of these respects.

7.82 Currently, the customer is required to liaise with both the incoming and the outgoing supplier in order to ensure that the switch happens smoothly and there is a theoretical possibility that, if this coordination did not occur, the customer could be left without supply. In order to address this, we consider that the incoming supplier should be responsible for managing the switching process. This would mean that, aside from notifying the outgoing supplier of termination of a contract, the customer would only need to deal with the incoming supplier. We note that suppliers have not opposed this proposal. Incoming suppliers could minimize the customer's contact with the outgoing supplier still further by providing the customer with a pro forma letter terminating his or her contract with the outgoing supplier, which the incoming supplier could forward to the outgoing supplier. However, if the incoming supplier does this, in the same way and for the same reasons as discussed in relation to tank transfer, it will be obliged to pass on notification of termination of contract to the outgoing supplier as soon as is reasonably practicable, and in any event within three working days of having received it.

7.83 As discussed in relation to tank transfer and for the same reasons, we also consider that the outgoing supplier should be obliged to confirm the contractual status of the switching customer within five working days of having received notification of termination of the contract, and that failure to do so will mean that the customer is free to switch.

7.84 We considered whether an outgoing supplier should be able to prevent a customer from switching where the customer has an outstanding debt, as is currently the case in mains gas. Two of the major suppliers [X] and [Y] have noted that although other debt recovery tools are available, they are more expensive. We accept that preventing a customer from switching may be a relatively cost-effective means of debt recovery for suppliers. However, we note that other means of debt recovery are available and we consider that it would not be appropriate for suppliers to be able to prevent customers who have run up debts—and who may therefore be in need of the best deal—from switching.

- 7.85 We note that, even under the current system of uplift and installation, there is evidence that suppliers are acting on an incentive to keep down upfront charges levied on new customers. We expect that suppliers will continue to act on this incentive as competitive pressure in the market increases, following the implementation of this package of remedies. We therefore do not consider it necessary to cap the level of upfront switching charges that suppliers are permitted to levy on newly acquired customers.
- 7.86 However, we consider that the incentives to keep switching charges low are not the same for outgoing suppliers in relation to customers who are switching away from them. First, even if a customer were aware of the charges he or she would incur on switching away at the time he or she contracted with a supplier, the customer would be less likely to take those charges—which would be incurred at some future point—into account than charges he or she would face immediately, such as any upfront charges and the price of LPG. Second, the higher the charges levied by the outgoing supplier on a customer switching away from it, the lower the incoming supplier’s offer needs to be to win the customer. Thus, by increasing its switching charges, the outgoing supplier increases its chances of retaining the customer and reduces the profits its competitor can earn if the customer does switch.
- 7.87 We therefore consider that the switching charges outgoing suppliers are permitted to levy on customers who switch should be capped at zero. We consider that a cap of zero is appropriate because suppliers have other means of recovering the costs associated with customers switching away, such as upfront charges, standing charges and the per unit price of LPG, all of which are more visible to the customer at the time he or she chooses a supplier and all of which are therefore more likely to be the subject of competition between suppliers.
- 7.88 Currently, suppliers routinely have three-month notice periods, so that it often takes three months for a customer to switch supplier. We consider that, from the time the outgoing supplier receives notification of termination of contract, the switching process should take no more than 42 days (six weeks). This allows an incoming supplier to decide at the very last moment of the (28-day) tank transfer process not to acquire the tank and to make arrangements for the uplift of the existing tank and the installation of a new one (which LPGA CoP 26 states should be completed within 14 days). Since we would expect such cases to be rare, we expect the 42-day maximum period to leave suppliers in most cases with some room for manoeuvre.
- 7.89 Two of the major suppliers [X] and [X] have drawn our attention to the possibility of a need for a tank to be resited, and one of these suppliers [X] has noted that there are occasions when the customer needs to complete work (eg the laying of a concrete base) in order that a tank may be installed. Just as with tank transfer, we consider that the incoming supplier should be permitted to ‘stop-the-clock’ on the switching process, pending completion of work by the customer. The incoming supplier should also be obliged to notify the outgoing supplier of any such work and of the expected impact on the timing of the switch.
- 7.90 One of the major suppliers [X] has also pointed out that there may be occasions when completion of a switch in longer than 42 days suits a customer (eg if building work is being done). We do not expect this to be common, but we accept that the customer should be free to consent in writing that his or her switch will be completed in a period longer than 42 days.

Information for customers on the switching process

- 7.91 We consider that customers should be given every opportunity to take account of the way in which a prospective supplier would handle a switch away when deciding on whether to contract with that supplier. We therefore consider that each of the suppliers should be obliged to inform a customer before that customer contracts with that supplier when he or she will be able to switch to another supplier, what notice period he or she will need to give and what level of charges would be levied by the supplier on termination of contract (which will include any charges for early termination during any exclusive supply period).
- 7.92 We also consider that each supplier should provide documentation with its customer contracts that clearly and prominently provides information on when that customer will be free to switch to another supplier, what the customer needs to do to terminate its contract, what notice period will apply, and what is the maximum level of charges that it can levy on the customer on termination of contract. This should ensure that all new customers are provided with information on when and how they can switch.
- 7.93 In addition, given the possibility for exclusivity periods of up to two years (see below) we believe that it is important to ensure that a customer has access to information on the switching process, not only at the time he or she first contracts with a supplier, but throughout the contract period. We therefore consider that suppliers should make clearly visible on their websites—and if requested over the telephone—information for customers on whether and how they can switch supplier. We consider that making this information available on demand in this way strikes the right balance between ensuring customers have access to this information, while not burdening suppliers with the need to provide individually to customers who may not be interested in receiving it.
- 7.94 We also consider that permitting exclusivity periods of up to two years creates a risk that, once the exclusivity period has expired, a customer will be unaware that he or she is now able to switch and may have mislaid the information initially distributed on the switching process. We therefore consider that suppliers should write a ‘wake-up letter’ to each of their customers informing them that they will be, or are, free to switch supplier either, if they are eligible at that time to switch, no later than one month from the end of the transition period or, if not, within one month of the end of the customer’s exclusivity period. At this point, the supplier should also either provide information to the customer making it clear what is involved in switching (how to terminate their contract, the notice period and the level of any charges that will be levied) or where that information can be found (eg via a website address or telephone number).
- 7.95 We note that there is a low level of awareness of opportunities for switching in Northern Ireland that stems from the fact that the domestic energy market there is not yet liberalized. In preparation for the liberalization of the Northern Irish domestic energy market in 2007, we note that the General Consumer Council of Northern Ireland (GCCNI) is planning a campaign to inform customers about switching possibilities in energy and we consider that this provides an excellent opportunity also to provide information on switching for customers. We therefore recommend to the GCCNI that it include, in its provision of information to customers on switching opportunities in mains gas and electricity, information on the opportunities for switching supplier and how to go about switching supplier.

Changes to customer contracts

- 7.96 We have identified two particular aspects of customer contracts as features of this market that have an adverse effect on competition: notice period and exclusivity periods.
- 7.97 Notice periods in customer contracts are currently routinely three months. We consider that, having established that the switching process should take no more than 42 days, suppliers should be permitted to require notice periods of no longer than 42 days. As we discussed in relation to the maximum time period for switching, we expect that many switches may be completed within the 42-day maximum period, and we see no reason why, if the suppliers are ready to complete a switch within 42 days, the customer should be forced to wait out the remainder of the notice period before the switch is completed. We therefore consider that, if both suppliers are ready to complete the switch within the notice period, the outgoing supplier should waive any remaining notice period.
- 7.98 We do not accept that lengthy exclusivity periods, as some of the major suppliers [X] have argued, are justified by the need to recover installation and other customer acquisition costs. We note that we have decided not to cap upfront switching charges levied by suppliers on acquired customers so that suppliers are free to use such charges to recover costs, and also that suppliers may recover such costs through other means such as standing charges or levies on the per unit price of LPG, based on the amount of time they expect the customer to remain with them.
- 7.99 However, we do accept that a degree of stability may allow some suppliers to manage their costs better, for example by using hedging contracts. The CC also accepts that the length of any maximum exclusivity period should permit suppliers to offer a range of tariffs including price smoothing and lower prices in return for longer contractual commitments. In addition, the CC notes the point made by ALGED that, without a reasonable exclusivity period, smaller suppliers in particular might find it uneconomic to attract new customers. Thus, we consider that customer contracts should be permitted to contain maximum exclusivity periods of two years.
- 7.100 We intend these measures in relation to customer contracts to apply not only in relation to new contracts but also to existing contracts. This will mean that, from the end of the transition period allowed for the implementation of these remedies (see paragraph 7.158), all existing contracts will carry notice periods of no more than 42 days. Similarly, from the end of our transition period, exclusivity periods in existing contracts must be limited to no more than two years in total, including any time expired before the end of the transition period. If the end of the transition period means that a customer becomes eligible to switch, who was not previously eligible to switch, the supplier will be obliged to send him or her a ‘wake up letter’ within one month of the end of the transition period.

Information on suppliers and their offers

- 7.101 We have identified a lack of customer awareness of prices on offer from other suppliers and the difficulty in comparing those prices as a problematic feature of the domestic bulk LPG market.
- 7.102 Although several major suppliers (including [X] and [X]), have noted that customers can find out which suppliers serve their area by looking in *Yellow Pages*, most have agreed that a website could be developed to provide a single source of information, including a list of suppliers, the areas they cover and their contact details (eg address, telephone number and possibly a link to the supplier’s own website). It

should be possible to develop the website in such a way as to allow a customer to type in his or her postcode and receive a list of suppliers serving his or her area. Several suppliers [X] have suggested that the LPGA website could be used for such a purpose.

- 7.103 We note that the LPGA website already contains much of this information but that it is not available in a form readily accessible to customers. We have discussed with the LPGA the possibility of including more information on its website and the LPGA has indicated that it would be prepared to help in this way. Since the LPGA is not the only trade association for suppliers, we believe that it is important for other trade associations to provide similar information on their websites. We acknowledge that other trade associations, the only other at the moment being ALGED, may not be as well resourced as the LPGA, but we note that ALGED is currently setting up a website and do not consider that including this information on it would be difficult or costly. ALGED has suggested that details of its members should be provided on the LPGA website and vice versa. We note that the LPGA has said that it may be possible to provide information on the ALGED members on its website provided that ALGED were able to reciprocate. In order to maximize the possibility for the creation of such comprehensive sources of information, we consider that suppliers should be obliged to encourage their respective trade associations to work together so that the list of suppliers on each trade association website includes the suppliers that belong to the other trade association (or associations).
- 7.104 In addition, as some customers do not have access to the internet, we consider that it is important that the trade associations provide a helpline (which could be automated) which will allow customers to give their name and address and receive this information by post.
- 7.105 In order to ensure that customers are aware of these sources of information, we consider that suppliers should be obliged to include clearly on their invoices a statement that further information on the LPG industry can be obtained from the following websites and telephone helplines, followed by a list of all supplier trade association website addresses and helpline numbers.
- 7.106 We have also considered whether suppliers should also be obliged to improve the provision of information on their prices. In particular we considered whether pricing should be made more transparent, eg via published prices lists. However, as discussed earlier in our report (see paragraph 4.4) although we have not found coordinated effects in this market, we have found that a number of the conditions for coordinated effects are met. Price transparency is one of the conditions for coordination that is currently not met and we are concerned that measures to promote price transparency may facilitate coordination. We are especially concerned about this because we consider that, to date, the unilateral power that each of the suppliers has enjoyed over its own customer base has meant that there has been little incentive to coordinate but that our package of remedies, by removing this power, will increase the incentives for coordination. We have therefore decided not to facilitate greater transparency of prices in such a way that would make suppliers' prices more visible to other suppliers.
- 7.107 However, we consider that there are steps the suppliers could take to improve the ability of customers to compare prices. We note that some suppliers have declined to provide customers with quotes until they had conducted a site visit. We consider that suppliers should be able to provide customers with quotes on the basis of information that can be provided remotely by the customer (such as postcode, tank size, annual usage) without a site visit. We accept that a supplier will need to make a site visit before contracting with the customer, for example to ensure that the site is safe for

delivery, but we do not accept that a site visit is needed before any quote can be provided. We therefore consider that suppliers should provide quotes for provision of domestic bulk LPG to customers via their websites or over the telephone without first requiring a site visit. We accept that such quotes might be provided subject to confirmation after a site visit.

7.108 It has been put to us that comparing prices between suppliers is sometimes made more difficult by the fact that suppliers express prices on a pence-per-litre (ppl) basis, but measure LPG supplied to customers in cubic metres. On the basis of their bills, customers know how much they have paid for a given number of cubic metres of LPG, but it is difficult for them to compare this with prices quoted by other suppliers in ppl. The difficulty of the comparison is exacerbated by the fact that the ratio on which litres are converted into cubic metres depends on the assumed level of pressure. Different suppliers make different assumptions about pressure levels and use different conversion ratios.

7.109 We consider that suppliers should be able to continue to measure and bill for LPG in whatever units they wish. However, we consider that suppliers should include clearly on every customer invoice the delivery volume in litres and the price the customer has paid per litre. We also consider that suppliers should provide quotes in ppl.

Reducing the scope for selective discounting

7.110 We have identified selective discounting as a feature of the market for domestic bulk LPG in Great Britain that has an adverse effect on competition. We have not identified this as a feature of the market in Northern Ireland.

7.111 We expect that the package of measures discussed above will have the effect of making customers more aware of the possibility of switching supplier and how to do that, and also will have the effect of making the switching process easier and less costly. Thus, we expect that suppliers' ability to offer selective discounts will be undermined by the increased ability and willingness of customers to switch to other suppliers if they believe that their supplier does not provide a good deal. We also note that measures to reduce the scope of selective discounting, such as imposing uniform prices, might also increase the visibility of suppliers' prices to each other and thereby facilitate coordination. We do not therefore consider it necessary to put in place specific measures designed to reduce the scope for selective discounting.

Remedies and UK and EC competition legislation

7.112 We note that some smaller suppliers [§] have expressed concern that if they use the opportunities provided by our remedies to win customers off larger suppliers, those larger suppliers may react aggressively. Particular concern has been expressed about the potential for larger suppliers to target smaller suppliers' customers with unsustainably low prices. Some smaller suppliers have therefore requested that we include in our remedies some protection against such aggressive responses.

7.113 We expect that our remedies will increase the opportunities for suppliers to win customers from each other and that, as a result, competition in this market will intensify. It is possible that this more competitive environment will involve more aggressive pricing and that some suppliers may suffer as a result. However, we would expect all suppliers to ensure that their behaviour does not contravene the Competition Act 1998 (the Competition Act), which prohibits agreements with the object or effect of preventing, restricting or distorting competition and the abuse of a

dominant position. If there are grounds for suspecting that any supplier has breached the Competition Act, this should be reported to the OFT and the OFT may take enforcement action. We therefore do not consider it appropriate to make specific provision in our remedies to protect smaller suppliers.

7.114 We note that one of the major suppliers [X] has queried whether our remedies, and, in particular, our remedies relating to contracts for supply to metered estates, would be compatible with EU Council Regulation 1/2003/EC (the 'modernization regulation') which, among other things, requires that member state competition authorities do not prohibit agreements that would be permitted under Article 81(EU). In order to fall within the scope of Article 81, there must be an agreement between undertakings, decision or concerted practice which affects trade between member states. We note that most of the customer contracts our remedy will affect are contracts between suppliers and customers, which are not agreements between undertakings, and which therefore do not fall within the scope of Article 81. We accept that some contracts in relation to the supply of domestic bulk LPG to metered estates may be agreements between undertakings. However, we do not consider that any such agreements to supply domestic bulk LPG to metered estates would have an appreciable effect on trade between member states. We do not therefore consider that any of the agreements affected by our remedies fall within the scope of Article 81 and we do not therefore consider that any of our remedies are affected by the modernization regulation.

7.115 The same major supplier [X] has raised the issue that a supplier would be able to take advantage of the parallel exemptions provision in section 10 of the Competition Act. This provides that, where an agreement has no effect on trade between member states but otherwise would have the benefit of any EC block exemption regulation if the agreement had an effect on trade between the member states, then such an agreement is exempt from the Chapter I prohibition. This supplier noted that the proposed remedies would not reflect what is permitted under the Vertical Agreements Block Exemption Regulation (VBER)⁵⁹ which gives certain agreements the benefit of exemption from the application of Article 81(1) subject to various conditions applying. We understood the supplier to be referring to the fact that under VBER the exemption will not apply if any direct or indirect non-compete obligation exceeds five years, whereas our remedy seeks to restrict the duration of the exclusivity period in the contracts for supply to metered estates to two years. However, section 10 of the Competition Act is concerned with the application of the Chapter I prohibition and does not constrain our powers when fulfilling our duty to remedy an identified adverse effect on competition. In paragraph 7.99, we explain our reasons for concluding that a period of two years is appropriate. Article 3 of the modernization regulation does not apply to parallel exemptions under section 10 of the Competition Act. Accordingly, we believe that the proposed remedies can prohibit agreements that may be otherwise permitted under the parallel exemption provisions of the Competition Act.

Monitoring and enforcement

7.116 We expect that suppliers and customers will assist in the monitoring of our remedies. In order to maximize the opportunities for suppliers and customers to do this, we intend to oblige suppliers to encourage their trade associations to publish on their websites the obligations on suppliers that result from our remedies. However, the ultimate responsibility for the ongoing monitoring of our remedies will fall to the OFT.

⁵⁹Commission Regulation of 22 December 1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices (2790/99/EC).

We have discussed with the OFT what sort of provisions we should include in our remedies.

- 7.117 The tank transfer formula outlined in paragraph 7.22 to 7.32 will require the OFT to have certain information in order periodically to recalculate the base prices. It will be necessary for us to ensure that the OFT is provided with information on new tank prices at an appropriate time, in order that it can recalculate the base prices.
- 7.118 In addition to the information that the OFT will need to maintain the tank transfer methodology, it will also be necessary for us to ensure that the OFT is provided with information to allow it to monitor compliance with, and the effectiveness of, our remedies. We note that those required to comply with our remedies generally face an obligation to provide the OFT or the CC with such information as they may from time to time require, in order that the remedies may be monitored and enforced. However, in addition to such a general provision, the OFT noted that it would be helpful if the major suppliers could provide it with information that would allow it to assess compliance and also to assess the effectiveness of the remedy. This could include, for example, information on an annual basis on the total number of switches completed, the number of switches completed within required time period, the total number of tank transfers, the number of transfers completed within the required time period, and data to allow the calculation of market shares.

Relevant customer benefits

Framework for the assessment of relevant customer benefits

- 7.119 In deciding the question of remedies, the CC may 'in particular have regard to the effect of any action on any Relevant Customer Benefits (RCBs) of the feature or features of the market concerned'.⁶⁰ As the Act makes clear, the CC will be concerned with the effect of any remedy on RCBs; it will not seek to weigh the adverse effect of the feature, or features, of the market concerned against any resulting RCBs in deciding whether remedies are appropriate.⁶¹
- 7.120 RCBs are limited to benefits to relevant customers in the form of:
- (a) 'Lower prices, higher quality or greater choice of goods or services in any market in the United Kingdom (whether or not the market to which the feature or features concerned relate); or
 - (b) greater innovation in relation to such goods or services.'⁶²
- 7.121 A benefit is only an RCB if the CC believes that:
- (a) 'the benefit has accrued as a result (whether wholly or partly) of the feature or features concerned or may be expected to accrue within a reasonable period of time as a result (whether wholly or partly) of that feature or those features;
 - (b) the benefit was, or is, unlikely to accrue without the feature, or features, concerned'.⁶³

⁶⁰Enterprise Act 2002 section 134(7).

⁶¹The CC's approach to the assessment of RCBs is discussed in more detail in CC3, paragraph 4.26 et seq.

⁶²Enterprise Act 2002 section 134(8).

⁶³Enterprise Act 2002, section 134(8).

- 7.122 If the CC is satisfied that there are RCBs deriving from a market feature that also has adverse effects on competition, it will consider whether to modify the remedy that it might otherwise have imposed or recommended. When deciding whether to modify a remedy, the CC will consider a number of factors, including the size and nature of the expected benefit, how long the benefit is to be sustained, and the impact of the benefit on different customers. It is possible that the CC will decide that the benefits are of such significance compared with the effects of the market feature(s) on competition that no remedy is called for. However, such cases are likely to be rare.
- 7.123 We note that we have considered evidence relating to the safety implications of our possible remedies as part of our assessment of the reasonableness and practicability of each of our remedies. We will not therefore consider safety in the context of RCBs. Beyond safety, several possible RCBs have been noted by suppliers—one of the major suppliers in particular [X]—and each is considered in turn below.

Distributional efficiencies

- 7.124 One of the major suppliers [X] has argued that tank transfer would lead to a significant loss of distributional efficiencies, that depend on the current ‘cradle-to-grave’ integrated supplier model (in which a single supplier is responsible for supply of gas, provision of tank, provision maintenance services and safety from the time of initial installation to uplift). It has argued that the current model has the following economic advantages:
- (a) it allows the safe and efficient maintenance of tanks;
 - (b) it ensures the most efficient use of supply vessels, other assets and resources, allowing effective cost control;
 - (c) it facilitates technological advances, such as better valve design and new tank technology (eg telemetry);
 - (d) it allows the forecasting of customer demand, which in turn facilitates advance purchasing arrangements, logistical efficiencies and security of supply to the customer (eg through an automatic top-up system); and
 - (e) it facilitates provision of comprehensive public liability insurance at minimal cost to customers.
- 7.125 This supplier has also expressed concern that tank transfer would lead to a level of uncertainty about the level of retention of tanks, making it difficult for it to manage its tank population to its best advantage to the benefit of customers.
- 7.126 We note that this supplier has listed a number of the advantages it perceives result from the current ‘cradle-to-grave’ integrated supplier model, but we are not convinced that these will be diminished by the introduction of the tank transfer remedy. It is not clear, for example, why tank transfer will result in fewer technological advances in valve design, given that the valves and regulators used in domestic bulk LPG supply are also used in other applications, and given that the manufacturers of these valves and regulators would themselves be unaffected by the tank transfer remedy. Similarly, it is not clear why tank transfer would necessarily reduce a supplier’s ability to forecast customer demand, plan logistics efficiently and use advance purchasing arrangements, especially where exclusivity periods of up to two years are permitted.
- 7.127 Specifically in relation to the automatic top-up system, this supplier has suggested that any remedy that reduced the suppliers’ ability to predict the length of time for

which a customer could be expected to remain with the supplier could increase the cost and reduce the efficiency of the system. The supplier noted in particular that, in the absence of an exclusivity period, its logistics would become significantly more expensive and less efficient.

- 7.128 We note that another of the major suppliers [X] has said that higher levels of customer switching might actually increase the incentive for suppliers to use telemetry (automatic top-up) equipment, in order that they might 'stay close to the customer'. This supplier noted that the customer could contribute to the cost of the telemetry equipment and that, in some cases, this already happens. This supplier also said that the use of telemetry is more advantageous for commercial customers than domestic customers, suggesting that its use for domestic customers might be limited in any case.
- 7.129 Specifically in relation to telemetry and automatic top-up systems, we note that the evidence as to the effect of the remedy is mixed. As a general point in relation to all these distributional efficiencies, we note that, although they may benefit a supplier, it cannot be assumed that this benefit will be passed on to the customer, especially in a market where competition is not fully effective. We also note that, as our remedies facilitate a greater degree of competition in the market, customers should benefit to greater extent from any efficiencies enjoyed by suppliers. Furthermore, the more competitive market should provide suppliers with a greater incentive to seek efficiencies. In addition, we consider that allowing suppliers to include exclusivity periods of up to two years in customer contracts should allow suppliers a reasonable degree of stability and predictability in their customer base, so that any RCBs resulting from this (eg forward purchasing) should be maintained.
- 7.130 We therefore consider that the distributional efficiencies discussed above are not RCBs, nor are we persuaded that, if they were RCBs, the benefits would be adversely affected by our remedies.

New technology

- 7.131 The same major supplier that expressed concern about distributional efficiencies [X] also noted that it has made significant investments in new technologies which benefit domestic customers, including a telemetry system, a new delivery scheduling system, and on-board computers for its LPG delivery vehicles. This supplier has argued that it is unlikely that these investments would continue to operate in the absence of reasonable contractual exclusivity periods. It noted that it currently invests in telemetry equipment on the basis that it expects to recover its expenditure from the customer over a period of between three and three-and-a-half years. It also noted that a tank transfer system would mean that it would need to remove its equipment from tanks to be transferred, adding to the cost of the system.
- 7.132 It is not clear to us the extent to which the new technology listed by this supplier benefits customers, as opposed to the supplier itself. We note that our package of remedies limits contractual exclusivity periods to a maximum of two years. In practice, it is likely that many customers will remain with their supplier for some time beyond the expiry of the exclusivity period, so it is not clear whether our remedies would materially affect this supplier's cost recovery calculations. In any event, we note that suppliers could recover the cost associated with telemetry from customers by means of an upfront charge or a standing charge levied through the exclusivity period. Indeed, the use of telemetry equipment and different ways of charging for it could become part of a supplier's range of offers.

- 7.133 We do not therefore consider that the new technology discussed above is an RCB, nor are we persuaded that, if it were an RCB, the benefit would be adversely affected by our remedies.
- 7.134 Overall, on the basis of the evidence before us, we do not consider that the features of the domestic bulk LPG market that have been identified as having an adverse effect on competition result in RCBs that would be adversely affected by our package of remedies. We do not therefore consider it necessary to modify that package of remedies.

Scope of remedies

- 7.135 We have considered whether the package of remedies discussed above will apply both in Great Britain and Northern Ireland. We note that, with the exception of selective discounting, the features of the market that we identified in our provisional findings as having an adverse effect on competition existed both in Great Britain and Northern Ireland. The CC is not considering putting in place any remedies specifically designed to reduce the scope for selective discounting. Thus, the CC has considered each of the remedy options both in relation to Great Britain and Northern Ireland, with the exception of remedies specifically designed to reduce selective discounting, which were considered only in relation to Great Britain.
- 7.136 Only two of the suppliers are present in Northern Ireland. One of these suppliers [redacted] noted that it already levied relatively low [redacted] switching charges for new customers in Northern Ireland and argued that any remedy to cap switching charges would not be necessary there. It also expressed the view that there was already a substantial amount of information available to customers in Northern Ireland on switching, so that it doubted that measures to improve provision of such information would be needed. This supplier did not argue that any of the other remedy options should apply differently in Northern Ireland. The other supplier [redacted], said that it did not consider that our remedies should apply differently in Northern Ireland or would be any less effective in Northern Ireland. It did, however, note the small size of the Northern Ireland market.
- 7.137 We have considered the level of switching charges levied on new customers in Northern Ireland and the level of information that is available to customers in Northern Ireland as part of our assessment of features in the market that have an adverse effect on competition. We have reached the view that the upfront switching costs imposed on customers and the lack of awareness of customers of whether and how they can switch supplier are features of the market in Northern Ireland that have an adverse effect on competition. As discussed above (see paragraph 7.85), the CC has reached the view that it is not necessary to cap the level of upfront switching charges imposed on new customers. However (see paragraph 7.91 *et seq* and paragraph 7.101 *et seq*), the CC has reached the view the remedies are required to improve the provision of information to customers on the switching process and on the existence of alternative suppliers and their offers. These remedies are as relevant for Northern Ireland as Great Britain.
- 7.138 We note the small size of the domestic bulk LPG market in Northern Ireland. However, we consider that our remedy package is nevertheless proportionate to the size of that market. We expect that the bulk of the costs suppliers will incur in complying with this package, in particular with the tank transfer remedy, will depend on the number of customers they have. We do not therefore consider that the small size of the market in Northern Ireland creates the need for a different approach.

- 7.139 We therefore consider that each of our remedies in relation to tank transfer, the switching process (including provision of information on the switching process), changes to customer contracts and provision of information on suppliers and their offers should apply equally in Northern Ireland as in Great Britain.
- 7.140 As discussed in relation to the provision of information on suppliers and their offers, we note that in 2007, the domestic mains gas and electricity markets in Northern Ireland will be liberalized. We consider that the information campaigns that will surround this liberalization provide an excellent opportunity also to raise awareness of the opportunities for switching supplier. We therefore recommend to the GCCNI that it include information on switching supplier in its information campaigns on switching opportunities for domestic customers in mains gas and electricity.
- 7.141 We have considered whether some or all of our remedial measures should apply to all suppliers or only to the larger suppliers. The major suppliers have all argued that the measures should apply equally to all suppliers. Two of the major suppliers [redacted] and [redacted] have said that they would consider the application of some or all of the measures only to the larger suppliers to constitute discrimination. Both these suppliers noted that the CC had identified features that applied across the industry as a whole, and one of them [redacted] noted in particular that the CC had not identified any problem with the market share of the major suppliers. The other [redacted] also noted that, if our remedies are effective, market shares could change significantly over time and that it would be odd if we were only to impose remedies on the current major suppliers. A third major supplier [redacted] said that it would not expect there to be any problem in applying the measures equally to all suppliers and considered that it could provide an opportunity for a more standardized approach across the industry. A fourth major supplier [redacted] argued that, because the remedies are designed to benefit customers, smaller suppliers could actually be disadvantaged if the remedies do not apply to them.
- 7.142 We have also noted that ALGED, a trade association with many members from among the smaller suppliers, has not argued that any of the remedies we consider should be put in place should be applied only to the major suppliers. It did suggest that any remedies to reduce the scope for selective discounting should be applied only to major suppliers, but we consider that such remedies are not necessary. Indeed, ALGED appeared concerned that smaller suppliers should not be excluded from the scope of our remedies.
- 7.143 We note that our package of remedies is intended to improve customer awareness of switching opportunities and the benefits of switching, and to make it easier for customers to switch supplier. Given these aims, the effectiveness of this package would be significantly impaired if it were to apply only to some suppliers within the industry. We note that we have received no evidence that smaller suppliers will find it difficult to bear the costs associated with putting in place and operating whatever is needed to comply with this package. We therefore consider that our package of remedies should apply to all suppliers of domestic bulk LPG in Great Britain and Northern Ireland. We note, however, that obligations to provide information on a regular basis to the OFT for the purposes of assessing compliance with and the effectiveness of our remedies may only apply to the larger suppliers. Smaller suppliers will, in any event, be obliged to provide the OFT or the CC with such information as may from time to time be required.

The cost of the CC's package of remedies

- 7.144 As noted in relation to our assessment of the different remedy options above and, in more detail, in Appendix L, we do not consider that remedies other than those

included in our package would be effective in addressing the adverse effect on competition that we have found. We consider therefore that our package of remedies is the least costly and least restrictive package of remedies that would be effective. However, in order to ensure that our remedies are proportionate to the adverse effect on competition, we consider the cost of our package in relation to the scale of the detriment we have found.

7.145 One of the major suppliers [X] has provided the following estimates of the costs to it of implementing particular elements of the remedies package that the CC discussed with suppliers:

(a) initial cost of updating tank records to a condition suitable for participation in tank transfer: £[X];

(b) initial cost of writing to all customers to provide information on the switching process: £[X];

(c) initial cost establishing an industry website: £[X]; and

(d) ongoing cost of maintaining an industry website: £[X] per year.

This suggests an initial cost to that supplier of £[X] and an additional cost £[X] per year on an ongoing basis.

7.146 We consider that these estimates are for several reasons likely to provide the upper bound of the costs faced by individual suppliers in implementing these elements of the package. We note that the documents that outgoing suppliers will provide to incoming suppliers will generally be documents already in their possession, and that other major suppliers [X] have not identified significant costs associated with any need to update retrieval systems. In addition, we note that our package of remedies does not oblige suppliers to write to *all* customers with information on switching, but only to individuals who are eligible to switch at the time our remedies come into force or who have recently become eligible to switch because of the expiry of their exclusivity period. However, taking this supplier's estimates of the cost for the initial cost of updating document retrieval systems and writing to customers at face value (but excluding any costs associated with this supplier's unique sale and leaseback arrangements, discussed separately below), and assuming that all suppliers will face similar initial implementation costs in proportion to their market share, we consider that the initial implementation costs faced by individual suppliers will be unlikely to be in excess of a total of £210,000.

7.147 In addition to the initial costs of updating document retrieval systems and the initial cost of writing to customers, this supplier also identified costs for establishing and maintaining an industry website that would fall on the industry as a whole. We note that our remedies package does not envisage the creation of a new website, but rather the inclusion of information on existing (or soon to be created) trade association websites. The cost of ensuring this information is provided on those websites is likely to be less than the cost cited by the supplier as the cost of creating a new website. We also note that the information it envisages being included on the trade association websites (names, areas and contact details of suppliers) will not need frequent or major updating, and so it would expect any annual maintenance cost to be minimal. However, adding £30,000 for the initial uploading of information onto the trade association websites to the industry cost suggests an overall initial industry-wide implementation cost in the first year of our remedies of not more than £240,000.

- 7.148 Although the £[redacted] estimate provided by the major supplier [redacted] for the ongoing cost of maintaining a website seems high, taking this supplier's estimate and assuming that other suppliers would incur similar costs in proportion to their market share, provides an estimate of the ongoing annual cost to the industry of implementing this package of remedies of around £60,000.
- 7.149 As noted in paragraph 7.60 *et seq*, one major supplier [redacted] has told us that our tank transfer remedy would necessitate changes to the intragroup sale and leaseback agreement it has with [redacted] and has argued that we should consider the specific costs it would incur in relation to this in assessing the proportionality of our remedies. In addition to the initial first-year implementation costs of [redacted] to update tank records, [redacted] to write to customers and [redacted] as this supplier's share of the [redacted] cost of establishing an industry website, this supplier estimates that it will face additional initial costs associated with changing the sale and leaseback arrangement. It has told us that it will incur a cost of [redacted] to set up a system to extricate tanks from the agreement on an individual basis. Taking this figure at face value, this would suggest an initial first-year implementation cost for this supplier of [redacted]. This supplier has also told us that the system required to extricate tanks from its in-house sale and leaseback arrangement would cost a further [redacted] a year to run. Again, taking this figure at face value, and adding it to the [redacted] estimate it previously provided us with for the ongoing cost to it of our remedies, would suggest an ongoing annual cost to this supplier of [redacted].
- 7.150 We have estimated that the customer detriment resulting from the identified AEC is in the range of just over £4 million each year to some two or three times that amount. We consider that, even taking the lower bound of this range, the possible £240,000 cost to the industry of the initial implementation of its package of remedies, and an ongoing annual cost to the industry of £60,000, is proportionate to the gain to consumers that would result from a more competitive domestic bulk market.
- 7.151 We further note that the costs to individual suppliers of implementing our package of remedies will depend on the market share of each supplier. Although there will be some element of 'fixed cost', the fewer customers a supplier has, the lower the cost it will incur in managing records for tank transfer and in writing to its customers. Since the amount a supplier contributes to the funding of a trade association varies in accordance with turnover, so will suppliers' contribution to the cost of any trade association website. We therefore consider that no individual supplier will face a disproportionate cost in implementing its package of remedies.
- 7.152 This consideration has been particularly important in relation to smaller suppliers. Some smaller suppliers have responded to the CC's remedies working paper expressing concerns that that our remedies would disadvantage smaller suppliers. Although our remedies are intended to improve the functioning of the competitive process rather than protect or assist particular suppliers, we have fully considered the implications of the different aspects of its remedies for smaller suppliers. On the basis that the costs associated with tank transfer, standardization of the switching process, changes to contracts, and improving information for individual customers will be proportionate to a supplier's customer base, and on the basis that the information remedies aimed at improving awareness of suppliers and their offers are likely to be funded by trade associations, we are satisfied that smaller suppliers will not be adversely affected by the costs of these remedies. As competition in the supply of domestic bulk LPG increases, there will inevitably be winners and losers in the process and some suppliers will need to adapt their business models and become more efficient to survive. However, the CC is satisfied that smaller suppliers have as much opportunity to benefit from these remedies as larger suppliers.

7.153 We note that one of the major suppliers has stated that it will incur additional cost as a result of the need to adapt its in-house sale and leaseback arrangement to implement our remedies. Using the cost estimates provided by this supplier, we have calculated that it would incur initial first-year implementation costs of £[X] and an ongoing annual cost of £[X]. Taking the lower bound of our estimated customer detriment of £4 million a year and allocating that detriment on the basis of market share, this supplier's customers suffer a detriment each year of at least £[X] million. We therefore consider that our remedies, as they would affect this supplier, are proportionate to the gain to consumers that would result from a more competitive domestic bulk market.

Implementation of remedies

7.154 While undertakings must be offered by specific named companies, usually following bilateral negotiations with the CC, a single order or set of orders can be used to implement remedies across an industry. In addition, whereas undertakings offered by companies currently participating in an industry would bind those companies, an order or set of orders could be used to bind companies that enter the industry in the future, creating a more robust and durable remedy. We therefore consider it likely that our remedies will be implemented means of an order or orders rather than by seeking undertakings.

7.155 Several of the major suppliers have noted that it would take them some time to adapt to some of the CC's remedy options. One of the major suppliers [X] has suggested that it would need to train engineers to deal with the tank transfer remedy. Another major supplier [X] has suggested that to put in place the tank transfer remedy, it would need to train sales staff to do visual inspections of tanks. A third [X] has suggested that the tank transfer remedy would necessitate changing the level of authority that is needed within the company to approve an asset disposal. A fourth major supplier [X] has suggested that it would need to adjust its document retrieval systems. In addition, one of the major suppliers [X] suggested that the CC's tank transfer remedy could result in a shortage of engineers, so that it would take suppliers time to secure access to greater engineering resource.

7.156 One of the major suppliers [X] suggested that it would need six months to be ready to carry out tank transfers. Another major supplier [X] initially suggested that the changes it would need to make in order to be ready to carry out tank transfers would take no less than nine months to establish.

7.157 In our remedies working paper, we proposed a transition period of no longer than six months. Two of the major suppliers expressed concerns about this. The supplier that had earlier said that it would take it no less than nine months to be able to carry out tank transfers [X] said that it would take it 12 months to 'change its business model' to be ready for tank transfer. It said that it would approach this in two stages: first evaluating its existing document retrieval system; and second, transferring records. The other supplier [X] said that six months would not be sufficient. It suggested instead a two-stage transition period for the industry. In the initial six months, all stakeholders would work on development of the detailed processes underlying tank transfer, ideally resulting an industry Code of Practice. Then in the second six-month period suppliers would implement these processes (eg by recruiting and training staff). This supplier therefore asked for a 12-month transition period following the issuing of an order.

7.158 We accept that suppliers will need time to adjust to the requirements of our remedies. However, we note that it will be clear to suppliers from our report what remedies will be implemented, enabling them to begin the transition process even before orders

are finalized. We note that suppliers should therefore be able to undertake a substantial amount of the work needed to prepare for the coming into force of these remedies before the order is issued. This includes, for example, work on document retrieval systems and process development. We therefore consider that the remedy package should include a transition period of no longer than nine months from the making of the relevant order.

The CC's package of remedies

7.159 We consider that a package of remedies consisting of the following key elements and applied both in Great Britain and Northern Ireland would be effective and proportionate in remedying the various features of the domestic bulk LPG market identified as having an adverse effect on competition:

(a) tank transfer:

- (i) a customer's right to request tank transfer;
- (ii) an incoming supplier's right to buy the existing tank from the outgoing supplier; and
- (iii) incoming suppliers being given the opportunity to negotiate a price for a tank with the outgoing supplier, but an obligation on the outgoing supplier to sell for a 'backstop price' determined by a methodology;

(b) standardization of, and improved information on, the switching process:

- (i) outgoing supplier obliged to confirm contractual status of switching customer within seven days;
- (ii) suppliers to effect switches within 42 days;
- (iii) switching charges levied by the outgoing supplier capped at zero;
- (iv) provision of information on how to switch in contracts, on suppliers' websites and on the basis of a telephone call; and
- (v) sending of a 'wake-up letter' to customers at the end of the transition period on the expiry of any exclusivity period;

(c) changes to customer contracts:

- (i) notice periods of no more than 42 days;
- (ii) exclusivity periods of no more than two years; and
- (iii) waiving of remaining notice period where a switch is ready for completion before notice period has expired; and

(d) improved information on suppliers and their offers:

- (i) suppliers to ensure that their trade associations provide on their websites and on the basis of a telephone call a list of suppliers, the areas they serve, and their contact details;

- (ii) suppliers to include on their invoices a statement that further information on the LPG industry can be obtained on these websites and via those telephone numbers;
- (iii) suppliers to provide customers with quotes (subject to site visit) over the telephone and/or via their websites without previously visiting the site;
- (iv) suppliers to provide on invoices the amount of LPG delivered in litres and the price paid in ppl; and
- (v) suppliers to provide wake-up letters informing customers that they will be, or are, free to switch supplier either, if they are eligible at that time to switch, no later than one month from the end of the transition period or, if not, within one month of the end of the customer's exclusivity period.

7.160 We also consider that, in Northern Ireland, the GCCNI should include information on the opportunities for customers to switch supplier in the information it provides to energy customers in the context of the opening of the domestic mains gas and electricity markets to competition in 2007.

7.161 Accordingly, we have decided that these remedies should be implemented. We have further decided that implementation should be by means of an order and that those subject to the remedy should have a period of no more than nine months from the order in which to ensure that they are compliant.