Market share analysis

1. This appendix presents our market share analysis.

Sales trends

2. Figure 1 shows that over the period 2004 to 2007 cylinder and drum volumes in Great Britain have been relatively stable.

FIGURE 1

Sales volumes of packaged chlorine in drums and cylinders to customers in Great Britain, 2004 to 2007

[✂]

Source: CC estimates based on BOC, Ineos Chlor , Albion, Air Products, Gerling Holz and Rhodia data.
Notes:
1. Gerling Holz provided an estimate of sales volumes for 2007. We assume this volume was supplied prior to 2007.
2. Rhodia exited the market in 2006. We use data for 2005 and assume sales volumes in 2004 were the same as those in 2005.

Market concentration in cylinder distribution

3. Table 1 shows share estimates for the distribution of cylinders to customers in Great Britain (based on volume supplied). There is a high degree of concentration in the market before the merger, indicated by an Herfindahl-Hirschman Index (HHI) of [✂] The merger would result in a very large increase in the HHI: [✂], leading to an HHI of [✂] following the merger. In addition, there would only be two remaining competitors to the merged entity, both with a small share of supply.[1]

[1]CC merger guidelines state that a combined market share of 25 per cent or above would normally be sufficient to raise concerns regarding the effect of the merger on competition. In its guidelines, the OFT states that it is likely to regard any market with an HHI in excess of 1,800 as highly concentrated.

TABLE 1 **Share of supply for the distribution of packaged chlorine in cylinders in Great Britain**

	2004		*2005*		*2006*		*2007*	
	Volume (tonnes)	*Volume share (%)*	*Volume (tonnes)*	*Volume share (%)*	*Volume (tonnes)*	*Volume share (%)*	*Volume (tonnes)*	*Volume share (%)*
BOC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Ineos	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	[✂]	**[60–80]**	[✂]	**[60–80]**	[✂]	**[70–90]**	[✂]	**[70–90]**
Air Products	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Gerling Holtz	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Rhodia	[✂]	[✂]	[✂]	[✂]	-	-	-	-
Total	[✂]		[✂]		[✂]		[✂]	
Pre-HHI	[✂]		[✂]		[✂]		[✂]	
Post-HHI	[✂]		[✂]		[✂]		[✂]	

Source: CC estimates based on BOC, Ineos Chlor, Albion, Air Products, Gerling Holz and Rhodia data.

Notes:
1. Gerling Holz provided an estimated of sales volumes for 2007. We assume this volume was supplied prior to 2007.
2. Rhodia exited the market in 2006. We use data for 2005 and assume sales volumes in 2004 were the same as those in 2005.

4. Figure 2 shows share estimates for the distribution of packaged chlorine in cylinders over the period 2004 to 2007. BOC and Ineos Chlor's share has increased compared with 2005 levels. This corresponds to the timing of Rhodia's exit from the distribution of packaged chlorine.

FIGURE 2

Share of cylinder supply to customers in Great Britain, 2004 to 2007

[✂]

Source: CC estimates based on BOC, Ineos Chlor , Albion, Air Products, Gerling Holz and Rhodia data.
Note: Rhodia exited the market in 2006. We use data for 2005 and assume sales volumes in 2004 were the same as those in 2005.

Market concentration in drum distribution

5. Table 2 shows market share estimates for the distribution of drums to customers in Great Britain (based on volume supplied). Again, there is a high degree of concentration in the market before the merger, indicated by an HHI of [✂] in 2007, although the merger will result in a smaller increase in the HHI than in the case of cylinders:

[✂], leading to an HHI following the merger of [✂]. However, there will remain only one sizeable incumbent competitor to the merged entity (Albion).[2]

TABLE 2 **Share of supply for the distribution of packaged chlorine in drums to customers**

	2004		*2005*		*2006*		*2007*	
	Volume (tonnes)	*Volume share (%)*	*Volume (tonnes)*	*Volume share (%)*	*Volume (tonnes)*	*Volume share (%)*	*Volume (tonnes)*	*Volume share (%)*
BOC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Ineos Chlor	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	[✂]	[50–70]	[✂]	[50–70]	[✂]	[70–90]	[✂]	[70–90]
Air Products	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Albion	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Gerling Holz	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Rhodia	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]		[✂]		[✂]		[✂]	
Pre-HHI	[✂]		[✂]		[✂]		[✂]	
Post-HHI	[✂]		[✂]		[✂]		[✂]	

Source: CC estimates based on BOC, Ineos Chlor , Albion, Air Products, Gerling Holz and Rhodia data.

Notes:
1. Gerling Holz provided an estimated of sales volumes for 2007. We assume this volume was supplied prior to 2007.
2. Rhodia exited the market in 2006. We use data for 2005 and assume sales volumes in 2004 were the same as those in 2005.

6. Figure 3 shows share of supply estimates for the distribution of packaged chlorine in drums over the period 2004 to 2007. BOC and Ineos Chlor's share of supply initially increased following Rhodia's exit from the market in 2005.

FIGURE 3

Share of drum supply to customers in Great Britain, 2004 to 2007

[✂]

Source: CC estimates based on BOC, Ineos Chlor , Albion, Air Products, Gerling Holz and Rhodia data.
Notes:
1. Gerling Holz provided an estimated of sales volumes for 2007. We assume this volume was supplied prior to 2007.
2. Rhodia exited the market in 2006. We use data for 2005 and assume sales volumes in 2004 were the same as those in 2005.

[2] In addition to Albion, Gerling Holz supplies one industrial customer with a grade of chlorine not currently available from Great Britain-based distributors. Air Products also continues to supply a small volume of drums.