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OFFICE OF FAIR TRADING

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The Producer Responsibility Obligations  
(Packaging Waste) Regulations 1997

# Glaspak Limited

**A report by the Director General of Fair Trading to  
the Secretary of State for Trade and Industry on  
the competition scrutiny of the company's scheme**

**May 1998**

# GLASPAK LIMITED

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## GLOSSARY

cullet	waste glass that has been recovered for recycling
the Five Reprocessors	the companies which represent 95% of the glass container reprocessing market in the UK (see paragraph 4.1 <i>et seq</i> ).
the Glasmo Agreements	the agreements signed by five glass reprocessors, Glaspak Ltd and Glasmo Ltd (see paragraph 2.6)
the Glaspak Scheme	the scheme which is the subject of this report (see paragraph 2.1 <i>et seq</i> )
the Membership Agreement	the draft membership agreement for the Glaspak Scheme
obligated company	a company that, under the Regulations, is obliged to recover and recycle used packaging materials
PRN	a Packaging Waste Recovery Note, issued by a reprocessor as evidence of the volume of waste materials it has handled
the Regulations	the Producer Responsibility Obligations (Packaging Waste) Regulations 1997, SI 1997 No 648
the Secretary of State	the Secretary of State for Trade and Industry

# 1 GENERAL SUMMARY

- 1.1 This is a report of my competition scrutiny as required by regulation 31 of the Producer Responsibility Obligations (Packaging Waste) Regulations 1997 (the Regulations) of a draft scheme ('the Glaspak Scheme'), which was to have been operated by Glaspak Ltd.
- 1.2 Glaspak Ltd and Glasmo Ltd applied to me on 20 May for a competition scrutiny of the Glaspak scheme and certain related agreements ('the Glasmo Agreements'). Glaspak Ltd indicated that the object of the Glaspak Scheme was to promote the recovery and recycling of glass packaging waste to enable the United Kingdom to meet its obligations in European Community law. The Glasmo Agreements were placed on the public section of the register held by me under the Restrictive Trade Practices Act 1976. My officials expressed concerns about the structure of the Glaspak Scheme and minor amendments were made to the application. My officials asked for certain further information and discussed with the applicants how the Glaspak Scheme and Glasmo Agreements would be assessed by me. The principal features of the application, however, remained unchanged. Subsequently, after the full details had been supplied to my officials, I conducted a full public consultation on the Glaspak Scheme and the Glasmo Agreements.
- 1.3 Following the consultation, my officials made further representations to Glaspak Ltd and Glasmo Ltd to advise them that it was unlikely that the scheme would meet the requirements of the competition scrutiny. My officials were then informed that Glaspak Ltd no longer intended to apply for registration of the Glaspak Scheme in its existing form by the Environment Agency. The Glasmo Agreements were then determined and I am currently considering whether I should refrain from taking proceedings in relation to them before the Restrictive Trade Practices Court under section 21 of the Restrictive Trade Practices Act 1976.
- 1.4 I note, however, that the parties could agree at a later date to enter into new contracts on terms similar to the Glasmo Agreements. The wording of the draft membership agreement of the Glaspak Scheme ('the Membership Agreement' at Annex A) cross-refers to the 'Glasmo Agreements' but does not specify any particular contracts. The parties could therefore reactivate the Glaspak Scheme in a similar form at a later date.
- 1.5 **I am therefore completing my assessment and reporting to you so that, should you have to decide whether the Glaspak Scheme that has been submitted, or a similar draft scheme, meets the requirements of competition scrutiny, my advice on the Glaspak Scheme as submitted is available to you.**
- 1.6 **It is important to note that I have written this report as if the Glasmo Agreements had not been determined in order to make it clear why my officials advised Glaspak Ltd and Glasmo Ltd that the Glaspak Scheme in its current form was unlikely to meet the requirements of the competition scrutiny.**

## **Recommendation**

- 1.7 I recommend that, in accordance with regulation 31(5), you should advise the Environment Agency and Glaspak Ltd that the Glaspak Scheme in its current form does not meet the requirements of competition scrutiny.

## **2 THE GLASPAK SCHEME AND GLASMO AGREEMENTS**

### **Structure**

- 2.1 The Glaspak Scheme, to be operated by Glaspak Ltd, has been developed by the glass container industry. The purpose of the Glaspak Scheme will be to meet the total obligations of its members under the Regulations.
- 2.2 Membership of the Glaspak Scheme is open to glass packaging manufacturers carrying on business in the United Kingdom. There are currently eight qualifying companies which intend to join. New members may be admitted at the discretion of the directors of Glaspak Ltd.
- 2.3 With the cooperation of its members, Glaspak Ltd will undertake the following to discharge the producer responsibility obligations of the members of the Glaspak Scheme:
- a seek registration of the Glaspak Scheme under the Regulations;
  - b obtain from members in each year full details of their tonnage obligations in each packaging material;
  - c fulfil members' recovery and recycling obligations and report on its success in obtaining the necessary proof of performance;
  - d report to the Environment Agency on the members' obligations by the due date and pay the Agency such fees as are required; and
  - e charge all members annual fees on a quarterly basis.

Glaspak Ltd will prepare and forward annual returns to the Environment Agency to demonstrate that the obligations of the Glaspak Scheme's members have been discharged and it will also report back to the members on this matter.

### **Membership fees**

- 2.4 The fees charged to each member will be determined by the cost of demonstrating compliance with the Regulations, the fees payable to the Environment Agency and the administrative costs of running the Glaspak Scheme. The running costs will be allocated among the Glaspak Scheme's members in the same proportion as their total tonnage obligations under the Regulations bear to the total tonnage of packaging waste for which the Glaspak Scheme is responsible.

## **Staff structure**

- 2.5 The board of Glaspak Ltd will consist of one director from each member company, plus one from British Glass, the industry's trade federation. The Chairman will be elected from among the directors. Glaspak Ltd will contract with another organisation, initially British Glass, for the supply of statistical, administrative and financial services.

## **The Glasmo Agreements**

- 2.6 The five companies which historically represent around 95% of the glass container reprocessing market in the United Kingdom have all signed agreements in substantially the same form with both Glaspak Ltd and Glasmo Ltd ('the Glasmo Agreements'). The latter company was established by United Kingdom glass packaging manufacturers to assist in the recycling and recovery of waste glass. The five companies which have signed the Glasmo Agreements are: United Glass Ltd; Rockware Glass Ltd; PLM Redfearn Ltd; Lax & Shaw Ltd; and Gregg & Co (Knottingley) Ltd, and they have all indicated their intention of becoming members of the Glaspak Scheme. Intending members of the Glaspak Scheme will not, however, be required to enter into one of the Glasmo Agreements as a condition of membership. All of the agreements that have already been concluded have been registered under the Restrictive Trade Practices Act 1976 and are available for public inspection. An example of one of the Glasmo Agreements is reproduced in Annex A.<sup>1</sup>
- 2.7 Under the Glasmo Agreements, the glass reprocessors will pass to Glasmo Ltd, free of charge, all the glass Packaging Waste Recovery Notes (PRNs) that they generate under the Regulations. This means that they will not retain any glass PRNs either for their own use in meeting their recovery and recycling obligations, or for distribution or sale to third parties who deliver waste to them for reprocessing. Glasmo Ltd will sell, for a fixed amount, the glass PRNs to third parties - including to schemes within the meaning of regulation 2(1), such as the Glaspak Scheme. The Glasmo Agreements do not come into effect unless the Glaspak Scheme is registered under the Regulations.
- 2.8 Glasmo Ltd will sell the PRNs it receives from its members at a price which will be fixed in relation to the cost of developing the collection infrastructure said to be required to meet the United Kingdom's obligations under European Community law for the recovery and recycling of waste glass packaging. Glasmo Ltd has said that it proposes to charge £6 per tonne for glass PRNs in 1998.

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1 Following notification that Glaspak Ltd no longer intended to apply for registration of the Glaspak Scheme in its current form by the Environment Agency, the Glasmo Agreements were then determined and I am currently considering whether I should refrain from taking proceedings in relation to them before the Restrictive Trade Practices Court under section 21 of the Restrictive Trade Practices Act 1976.

- 2.9 In the first instance, Glasmo Ltd will sell glass PRNs to companies and/or registered schemes that can demonstrate that they have glass *recycling* obligations. Thereafter, any surplus glass PRNs will be sold at the same price to companies and/or schemes with *recovery* obligations under the Regulations.
- 2.10 Glasmo Ltd and Glaspak Ltd contend that the Glasmo Agreements are made for the purposes of the Glaspak Scheme to increase the use of recycled glass packaging waste in the manufacture of packaging, packaging materials or other products or materials supplied by the Glaspak Scheme's members and thus comply with its obligations under regulation 12(3)(d) and paragraph 10(a) of Schedule 4 Part IV to the Regulations.

### **3 COMMENTS RECEIVED FROM THIRD PARTIES**

- 3.1 Consultation notices were placed in the week ending 5 December 1997 in the *Financial Times*, *Materials Recycling Week*, and *Packaging Week* (see Annex B). In addition, letters were sent to a number of interested parties. The views of respondents are summarised in the following sections.

#### **Benefits of the Glasmo Agreements**

- 3.2 A number of respondents supported the proposals and saw them as the best method of ensuring the required increase in the levels of glass collection at minimum cost. Some felt that it was a genuine attempt to fulfil the environmental objectives of the legislation, as well as keeping down the cost of PRNs, in that the set price would be targeted at the lowest possible sum to enable the recovery targets to be achieved.
- 3.3 Other comments in favour of the proposals were that the cost of compliance would be minimised while, at the same time, investment would be made to encourage and facilitate increased recovery and recycling. It was also suggested that, under the proposals, PRN prices would be more stable and so more able to guarantee the required steady rise in glass recycling. It was also felt that the planned and centrally coordinated response of the Glaspak Scheme was more likely to deliver the regulatory targets on time than an unproven decentralised approach, and would do so at appreciably lower cost.
- 3.4 The beneficial effect of Glasmo Ltd's intention to develop strong relationships with local authorities and compliance schemes was also noted as it could create the basis for the collaborative, team-orientated approach required to drive up glass collection rates to the required levels. The use of 'open book' accounting procedures was also welcomed as it was felt that this should ensure that any suspicions that had been expressed about the proposals would be shown to be groundless.

#### **Monopoly concerns**

- 3.5 On the other hand, a number of respondents expressed concerns about the apparent monopoly aspects of the proposals: no matter how discontented the suppliers of waste cullet might be about the arrangements, they would have little or no opportunity to negotiate with other reprocessors. Some respondents also thought that the Glasmo Agreements would result in less efficient operation of the marketplace at higher cost to all concerned. It was suggested that the growth of a glass collection infrastructure would be most rapidly achieved if the price of glass PRNs were allowed to move freely. There was concern that a small group of reprocessors might be able to determine and restrict UK recycling capacity, and that capacity should be demand-led, and not subject to such manipulation.

- 3.6 It was suggested that lowest cost compliance would only be achieved if the markets were allowed to function in a truly competitive fashion. It was felt that a lack of market forces and competition would seriously reduce the incentive for Glasmo Ltd members to improve the efficiency and capacity of the glass collection system. It was felt that an element of competition was not only healthy but desperately needed to stimulate and promote waste glass recycling, and that PRNs should flow back through the system in order to stimulate recovery and collection.
- 3.7 It was also suggested that the Glasmo Agreements were based around the idea of the major manufacturers combining to form a cartel to fix the price of PRNs, rather than allowing market forces to prevail. It was suggested that the market value of the PRN should be allowed to settle at the level required to ensure that all glass collected could be recycled. It was noted that there had been no indication that the glass recycling industry intended to increase the prices paid for cullet to increase current levels of collection.
- 3.8 The comment was also made that material-specific schemes have, as one of their main objectives, the promotion of the use of that material's packaging over any other material.

### **The PRN price**

- 3.9 It was suggested that there was no clear economic basis on which Glasmo Ltd proposed to fix the price of glass PRNs at £6 per tonne: such price fixing would circumvent the market and create a barrier to entry for other recyclers. It was also suggested that the fee for 1998 was set at a low level to enable Glaspak Scheme members to meet their own obligations at lowest possible cost.
- 3.10 A number of respondents questioned how glass reprocessors could promise PRNs for £6 per tonne if the Glasmo Agreements were allowed to operate, but that the same reprocessors would charge around £30 per tonne if the operation of the Glasmo Agreements were prevented. If no competitive market existed, there would be nothing to stop the price of glass PRNs rising unnecessarily in future years, and the proposals provided no opportunity for future charges to be challenged. It was also noted that the pricing policy granted considerable flexibility to Glasmo Ltd as it could include infrastructure costs, which were totally within its control, as part of the price.
- 3.11 It was suggested that Glasmo Ltd setting prices above those that would prevail in a competitive compliance market would lead to excessive glass reprocessing by non-member glass reprocessors and cause excessive recovery of other packaging materials. However, if Glasmo Ltd set prices below those that would prevail in a competitive compliance market, this would lead to insufficient glass reprocessing by non-member glass reprocessors and insufficient recovery of other packaging materials.

## **Local authority concerns**

- 3.12 Many local authorities and their representatives commented that those authorities which collect glass and fund the collection infrastructure should receive the PRNs for the tonnage they sold to reprocessors. The authorities could then sell the PRNs back to the producers and use the income to invest in local collection infrastructure and promotion. It was felt that if the benefit of the PRN resulting from local authority collections could not be passed to the authorities those authorities would be disadvantaged. It was also noted that a number of local authorities have indicated a wish to develop multi-material kerbside schemes in preference to bottle banks, and that Glasmo Ltd may be able to use its power (in the form of the giving of grants) to stifle the development of such schemes.
- 3.13 There was some concern that local authorities which operate collection schemes would have little influence on how money generated from glass collected would be used, and if they were denied such an important source of funding, many local authority schemes might disappear.

## **Collectors' complaints**

- 3.14 It was said that, if implemented, the Glasmo Agreements would deny all deliverers of waste access to the PRNs issued in respect of the materials which they delivered. It was suggested that the scheme will discourage collection of glass from the domestic waste stream, which would also work against the multi-material collection schemes which some claim to be the most cost-effective of all the options for domestic waste collection. It was said that PRNs should and must be available to the waste owner so that a healthy market is created for PRNs that in turn generates money for re-investment in recycling.
- 3.15 It was suggested by some that collectors which arranged and paid for the collection of glass should be entitled to receive the PRN (perhaps at an administrative cost) because they had done the work of collecting the bottles and should receive the benefit of the PRN value; it was noted that many such schemes were already in operation. The £6 charge would be an artificial surcharge placed on the cost of such recovery operations, and could be used to promote alternative schemes in the public and private sector which may otherwise be uneconomic. It was suggested that charging for PRNs was a positive discouragement to those considering recovery of packaging waste material.

## **The 'green mountain' of cullet**

- 3.16 Many respondents referred to the problems in the glass recycling industry created by the excess amounts of green glass which had been collected, but which had no viable UK market. They questioned the logic of Glasmo Ltd's proposal to expand bottle bank collection where green glass could make up approximately 50% of glass

collected when there was no apparent market for this collected green glass. Viable markets for this surplus needed to be found and it was suggested that Glasmo Ltd funding could be used to pursue alternative uses.

### **Restrictions on those who will receive PRNs**

- 3.17 Some respondents particularly supported the idea that PRNs would be sold first to obligated companies and schemes, but it was considered by some that Glasmo Ltd would be dictating to the market for PRNs in deciding who would be sold PRNs and how much they would cost. Concern was expressed over the proposal to ration the sale of PRNs to ‘those who are making a substantial contribution to increasing glass recycling’. It was felt that by controlling the supply of PRNs, Glasmo Ltd would in effect have control of who could and could not meet their legal obligation, and that there was the potential for Glasmo Ltd to abuse its power.

### **Insufficient funding**

- 3.18 The PRN price proposed by Glasmo Ltd was said by some to be insufficient to meet the long term aims of the Regulations. It was suggested that the proposed charge of £6 per tonne may not provide sufficient funding to increase and expand collection to the levels required. It was suggested that in order to meet overall targets, glass recycling had to increase above the level specified by Glasmo Ltd, but its limited investment plans suggested that it was ignoring such responsibilities.
- 3.19 It was noted that the barriers to entry to the glass reprocessing industry were very high, and that Glasmo Ltd members would continue to have control over almost all the glass reprocessing capacity: this would significantly reduce Glasmo Ltd members’ incentive to improve efficiency and increase capacity of the glass collection system. Should the United Kingdom need a more rapid increase in recovery of glass, it was suggested that Glasmo Ltd would have no incentive to achieve this. Concern was also expressed that the glass container manufacturing capacity would be saturated but Glasmo Ltd had, apparently, no plans to stimulate or develop alternative markets.

### **Use of funds**

- 3.20 The comment was made that the Glasmo Agreements would allow the value of the PRN to be ring-fenced within Glasmo Ltd. It was considered possible that such a situation would allow Glasmo Ltd members to be the first to receive funds and certain collectors and processors may be favoured at the expense of others. It was also suggested that the level of bottle banks, which Glasmo Ltd planned to increase, was currently at saturation point. However, others suggested that an increase in bottle banks was the best way to increase collection to the required levels.

## 4 LEGAL FRAMEWORK

- 4.1 The draft membership agreement for the Glaspak Scheme is the principal document furnished to me under paragraph 9 of Schedule IV, part III as containing ‘full particulars of the agreement for the constitution of the scheme including any rules or regulations to be observed by its members’. Under clause 6.1 of the Membership Agreement ‘the parties acknowledge that Glaspak Limited has entered into an agreement with Glasmo Limited and certain members of Glasmo Limited’. This clause refers to the fact that the five companies (‘the Five Reprocessors’) which historically represent around 95% of the glass container reprocessing market in the United Kingdom have all signed agreements in substantially the same form with Glaspak Ltd and Glasmo Ltd. Clause 6.2 of the Membership Agreement states that the Glasmo Agreements are made for the purposes of the Glaspak Scheme as one of the ways in which the operator of the scheme, Glaspak Ltd, will ensure that the necessary obligations on the Glaspak Scheme are fulfilled.
- 4.2 In all cases where draft schemes have been subject to competition scrutiny by me, I have evaluated both the draft membership agreements and other information provided to my officials by the relevant parties. This has given me a broad picture of how the proposed schemes would be organised and operated if my advice were accepted by the Secretary of State and the scheme registered by one of the environment agencies. I have continued to do this for the Glaspak Scheme. Clause 6 of the draft membership agreement makes explicit reference to the Glasmo Agreements and I know (all the Glasmo Agreements being on the public part of the register held by me under the Restrictive Trade Practices Act) that all the key glass reprocessors have signed one.
- 4.3 Regulation 31(3) requires me pursuant to regulation 31(1)(a) to advise the Secretary of State:
- whether a scheme has, or is likely to have, the effect of restricting, distorting or preventing competition; and
  - if it does, whether that effect is greater than is necessary for achieving the environmental and economic benefits mentioned in section 93(6) of the Environment Act 1995.
- 4.4 Regulation 31(3) also requires me, pursuant to regulation 31(1)(b), to advise the Secretary of State whether the scheme does lead, or is likely to lead, to an abuse of market power.
- 4.5 Therefore, under regulation 31, I must assess whether the operation of the Glaspak Scheme will have an actual or potential detrimental effect on competition and whether this effect is outweighed by environmental considerations. I must also assess whether the operation of the Glaspak Scheme leads or is likely to lead to an abuse of market

power. If there will be an actual or potential abuse of market power, then I do not have to weigh competition and environmental concerns: there is no justification for an abuse of market power.

- 4.6 Regulation 31(1) requires an effects-based analysis, and in undertaking competition scrutiny under regulation 31(1)(a) I must look beyond the simple wording of the membership agreement and the memorandum and articles of association of the scheme operator, Glaspak Ltd. This is because when assessing whether any scheme does, or is likely to, have an appreciable effect on competition, I have to look to see whether that scheme is part of a broader network of agreements which, if taken separately may not have an appreciable effect on competition, but, if taken together, may well have an appreciable effect on competition. Agreements in such a network do not all have to be identical in form: an exclusive distribution agreement and an exclusive purchasing agreement may be part of a relevant network of agreements in the same way that a scheme membership agreement and an exclusive supply agreement made for the purposes of the scheme may be part of a relevant network.
- 4.7 The same effects-based analysis is also required for my competition scrutiny under regulation 31(1)(b). This part of the regulation is concerned with market structure and should prevent firms from using schemes created under the Regulations as a way of impeding competition by raising prices and restricting choice, for example. Any scheme is therefore similar to a joint venture vehicle which will change market dynamics and I must assess whether the scheme does or is likely to create a position of market power and whether existing market power or market power so created does or is likely to lead to an abuse.
- 4.8 There are four factors which I have taken into account in this analysis. First, if the Glaspak Scheme were to be registered, certain proposed members of the Glaspak Scheme would be legally bound to do certain things under the Glasmo Agreements. The registration of the Glaspak Scheme and hence its operation would therefore have an immediate and actual effect on competition because certain parties will then be bound immediately to do certain things under the Glasmo Agreements. Secondly, one way in which Glaspak Ltd intends to meet the obligations of the Glaspak Scheme is by purchasing PRNs which have been passed by some of its members to Glasmo Ltd under the Glasmo Agreements. Glaspak Ltd has not made substantive alternative arrangements to the Glasmo Agreements. Thirdly, the principal firms within Glasmo Ltd are substantially the same as the principal firms within Glaspak Ltd. I cannot be sure that the arrangements between the Five Reprocessors, Glaspak Ltd and Glasmo Ltd can ever be truly at arm's length. Fourthly, in part five of the enclosures to their letter addressed to my officials dated 10 October 1997, on behalf of both Glaspak Ltd and Glasmo Ltd, Allen & Overy said the parties believed the Glasmo Agreements were a multilateral agreement which later is referred to as the 'Glasmo scheme'. I am of the view that it is not possible to distinguish adequately in this analysis between a scheme (such as the Glaspak Scheme) and an agreement (such as one of the Glasmo Agreements) which has been made for the purposes of that scheme.

- 4.9 In assessing the Glaspak Scheme I must look at the context in which I have been told it will operate and hence at the market positions of the Five Reprocessors and the impact on the market of the Glasmo Agreements. The effect that the operation of the Glaspak Scheme is likely to have on the market is derived from the collective effect that its respective members would or would be likely to have on the market. Similarly, whether the market position derived from the operation of the Glaspak Scheme would lead to an abuse of that market position is derived from the collective market position enjoyed by its respective members.
- 4.10 If I were to advise the Secretary of State that the Glaspak Scheme did not meet the requirements of competition scrutiny and the Secretary of State accepted this advice, the Glasmo Agreements already furnished to me under the Restrictive Trade Practices Act would be dealt with in the ordinary way.<sup>1</sup> If the Secretary of State had rejected such advice, then, in due course, it is likely that the Glaspak Scheme would have been registered by the Environment Agency. I would then have had to examine the Glasmo Agreements under regulation 33 which applies to agreements made for the purposes of a registered scheme. My officials made this clear to the parties in a letter addressed to Allen & Overy, their solicitors, dated 6 August 1997 in which it was said ‘we are content to proceed on the basis that the [Glasmo Agreements made by Glaspak [Ltd] with Glasmo [Ltd] are made for the purposes of the Glaspak Scheme, and that the agreements will fall within regulation 33 if Glaspak [Ltd] becomes the operator of a registered scheme’. However, I have concluded that I am not yet able to act under the Regulations in this way.
- 4.11 Under regulation 33, I would have to assess whether an agreement made for the purposes of a registered scheme, one party to which was the operator of that scheme, would have an actual or potential detrimental effect on competition and whether this effect would be outweighed by environmental considerations. I would not be able to assess whether such an agreement would lead to an abuse of market power. Unless there is an unforeseen change in circumstances, I am persuaded that my advice to the Secretary of State following a competition scrutiny of the Glasmo Agreements under regulation 33 would be substantially the same as my advice in this report.

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1 See footnote on page 6.

## 5 THE MARKET

### Market definition

- 5.1 The Glaspak Scheme will affect competition in both the purchase of glass cullet and the sale of PRNs.

#### *The purchase of glass cullet*

- 5.2 When defining markets it is necessary to look at the ability of customers to switch to substitute materials. The customers in this market are the glass mills who use cullet to manufacture glass and glass products. Glass can be made either by reprocessing cullet or by processing virgin materials. Manufacturers therefore currently view cullet and virgin materials as substitutes and the price of cullet is determined by the price of virgin materials (although the price of cullet is slightly higher than the cost of virgin materials because less energy is used when making glass from cullet). From the perspective of glass manufacturers, it would be reasonable to view cullet as part of a wider market including virgin materials.
- 5.3 My concern here, however, is with competition between *purchasers* of glass cullet, and therefore my interest is whether a seller of cullet will view other purchasers as competitors to glass manufacturers. Apart from use in glass manufacturing, the only other use for glass cullet is to grind it up for use in building materials. The value of glass cullet for such uses is, however, much lower than its value in glass manufacture, and suppliers of cullet will not view this as a viable substitute. The purchase of glass cullet for reprocessing in glass manufacturing therefore appears to be a separate product market.
- 5.4 The geographic scope of the market will be determined by the ability of suppliers to sell to buyers from different areas. Currently the vast majority of glass cullet collected in the United Kingdom is sold to UK customers. While, according to Glasmo, some tens of thousands of tonnes of glass cullet are exported, this will represent a relatively small proportion of all cullet currently collected in the UK. This is mainly due to the high transport costs incurred when supplying export markets. While this situation may change in the future, at the present it seems appropriate to view the UK as a separate geographic market.

#### *The sale of PRNs*

- 5.5 An important issue for any scheme under these Regulations is the availability of PRNs. I therefore need to consider the effect of the scheme on new markets which have been created by the regulations, such as the market for PRNs. An important question here is whether there will be a single market including all PRNs, or a separate market for those PRNs arising from glass reprocessing. This will depend on

the extent to which different types of PRN will be viewed as substitutes. Some obligations can be met by PRNs from any waste stream, but others require material-specific PRNs. The proportion of a company's obligations which will be material specific are as follows:

<i>Year</i>	<i>Total obligation</i>	<i>Material-specific obligation</i>	<i>Proportion which is material specific</i>
1998	38%	7%	18%
1999	38%	7%	18%
2000	43%	11%	26%
2001	52%	16%	31%

The proportions which are material specific will be the same for all obligated companies.

- 5.6 When a company is meeting a material-specific obligation, it will not view other types of PRN as substitutes, but when it is meeting a general obligation it clearly will. When defining the product market the main principle is usually to assess whether the amount of substitution will prevent prices rising above competitive levels. In other words, if a monopolist tried to set the price of glass-specific PRNs above competitive levels would so many customers switch to other types of PRN that such a price rise would not be worthwhile? Even if some customers would not switch between PRNs from different waste streams, enough of them doing so would prevent a monopolist from raising prices. The substitute PRNs should then be included in the same market: assuming that it is not possible for a supplier to price discriminate between those customers who are captive to glass-specific PRNs and those who are not.
- 5.7 In this case the proportion of demand which will be material specific is less than half of all the obligations incurred by firms with obligations. However, this does not necessarily mean that it would not be possible to raise the price of glass-specific PRNs. This will depend on the size of the total *supply* of glass-specific PRNs. If there were to be a shortage of these PRNs, so that the level of supply only slightly exceeded the proportion of demand which was material-specific, it might be possible for Glasmo Ltd to exploit this shortage by raising prices.
- 5.8 Glasmo Ltd states that its proposals will yield at least an additional 80,000 tonnes of glass each year which could be recycled by its members. This will provide an overall recycling rate for glass of 25%-29.4% in 1998 up to 38.5%-45.3% in 2001.
- 5.9 Glasmo Ltd also predicts that an additional 300,000 tonnes of green cullet will be generated by the Glaspak Scheme, although this cullet will not be reprocessed by members of the Glaspak Scheme because there will not be sufficient demand for green

glass in the UK. This cullet could, however, either be exported or used in road surfacing. If this green cullet is included, Glasmo Ltd projects a total recovery rate for glass in the UK of 26.5%-31.2% in 1998 rising to 50%-58% in 2001. These rates would be below the total UK obligations (for recovery and recycling) of 38% in 1998. In the following years the obligation falls within the range of Glasmo Ltd estimates. Therefore, if Glasmo Ltd meets its forecasts, it will still not generate enough glass PRNs to meet the UK's total obligations in respect of glass in 1998, and the position in following years is uncertain. Overall, it seems likely that PRNs from other materials will be required to meet obligations arising from glass in some years. Glasmo Ltd is unlikely to generate surplus PRNs available to meet obligations in other materials.

- 5.10 A further factor in this case is that Glasmo Ltd does not (at present at least) intend to exploit any market power it might enjoy in glass PRNs by raising its prices above competitive levels. Indeed it intends to set its prices below this level, which leads to a different set of competition problems. For example, Glasmo Ltd might restrict the supply of PRNs below competitive levels. In addition, if prices were set below the market clearing level, Glasmo Ltd would be forced to ration PRNs, which might lead to further distortions. In these situations the issue may not be the price at which PRNs are available, but whether sufficient PRNs are available at all.
- 5.11 It is clear that some degree of substitution between different types of PRN will take place. If Glasmo Ltd restricts the supply of glass-specific PRNs available, however, or rations the available supply in a way which distorts competition, significant competition effects could occur on companies with obligations in glass. It therefore seems appropriate to look at competition effects within a separate market for glass-specific PRNs.

### **Market structures and potential entry**

- 5.12 Both of the markets defined above will be dominated by the members of the Glaspak Scheme. In particular, the Five Reprocessors who have agreed to supply all their PRNs to Glasmo Ltd free of charge account for over 95% of the glass container reprocessing market. They will therefore account for a similar proportion of the demand for glass cullet and the supply of glass-specific PRNs.
- 5.13 New entrants to these markets would incur significant sunk costs - the cost of a new furnace for example is approximately £13 million. New entry in the foreseeable future therefore appears to be unlikely.

## 6 ECONOMIC ASSESSMENT

- 6.1 My main concern is the effect that clause 3(2) of the Glasmo Agreements will have on the operation of the Glaspak Scheme. This clause will restrict the persons to whom PRNs may be supplied. The clause states:

The member [of Glaspak] agrees to supply Glasmo all its Packaging Recovery Notes free of charge within one month of the reprocessing to which the glass Packaging Recovery Note relates.

- 6.2 Due to my knowledge of the close inter-relationship between the Glaspak Scheme and the Glasmo Agreements explained above and using an effects-based analysis, I have been convinced that I cannot examine the Glaspak Scheme without taking into account the effect on the market place of Clause 3(2) of the Glasmo Agreements.
- 6.3 Clause 3(2) of the Glasmo Agreements means that all PRNs arising from cullet delivered to these reprocessors will be held by Glasmo Ltd. Glasmo Ltd has told my officials that its policy on selling PRNs will be to sell first to companies with recycling obligations in glass, and then to companies with other obligations in glass or other materials. The price of PRNs will be set by Glasmo Ltd at a level which will allow it to cover the costs of funding an expansion in glass collection sufficient to yield an additional 80,000 tonnes of glass each year which will be useable by Glasmo Ltd members, plus up to 300,000 tonnes of green glass (see paragraphs 5.8 and 5.9). Hence, Glasmo Ltd is acting as the central planning authority for the distribution of PRNs generated by the five reprocessors rather than the five reprocessors and Glasmo Ltd relying on the ordinary operation of market forces and the price mechanism.
- 6.4 I shall consider below the effects of the scheme on competition and whether any anti-competitive effects are necessary to achieve any environmental or economic benefits which the Glaspak Scheme produces. I shall then consider whether the Glaspak Scheme does lead or is likely to lead to an abuse of market power.

### **Effects on competition and abuse of market power**

- 6.5 As I have explained above, the Glaspak Scheme is likely to have a direct effect on competition in more than one market:
- a it will have an effect on competition in the market for the purchase of glass cullet; and
  - b it will have an effect on competition in the market for the sale of PRNs arising from glass recovery.

I am also of the view that the operation of the Glaspak Scheme is likely to lead to an abuse of market power in the same markets.

- 6.6 In addition, the Glaspak Scheme is likely to have indirect effects on competition in the markets for packaging. In each case where I am examining the effect on competition of a scheme, I need to analyse only the effect on competition of that scheme and not its object. I acknowledge that Glaspak Ltd has indicated that the object of the Glaspak Scheme is to promote the recovery and recycling of glass packaging waste to enable the United Kingdom to meet its obligations under the European Parliament and Council Directive 94/62/EC on packaging and packaging waste.<sup>1</sup> For the purposes of competition scrutiny under regulations 31 and 33, I need to take account of only appreciable effects on competition.

### ***The market for the purchase of glass cullet - effect on competition***

- 6.7 In this market, glass reprocessors purchase glass cullet from collectors. As stated above, the Five Reprocessors account for approximately 95% of the glass container reprocessing market, and will therefore account for a similar proportion of the demand for glass cullet. The Five Reprocessors will collectively possess significant buyer power in this market. This means that through a network of different agreements (namely the Membership Agreement and the Glasmo Agreements), the high market share of the five reprocessors and relatively high barriers to entry, the operation of the Glaspak Scheme is likely to have an appreciable effect on competition.
- 6.8 The Five Reprocessors have agreed that they will not provide PRNs to other firms who deliver glass cullet to them. Instead all PRNs will be passed to Glasmo Ltd. The Five Reprocessors have also agreed that they will not receive any payment from Glasmo Ltd for these PRNs. The Glasmo Agreements do not directly restrict the prices which these firms will pay for glass cullet. However, the Glasmo Agreements do restrict their ability to provide PRNs, or offer higher prices in return for retaining PRNs.
- 6.9 In a competitive market, where these restrictions did not exist, the Five Reprocessors would need to reach agreement with firms delivering glass cullet on the provision of PRNs. They would either need to supply PRNs to collectors, or pay a higher price for cullet in return for the right to retain the PRN. This is the situation which is beginning to develop in other waste products, such as paper. The value of the PRNs received (or the higher price paid in compensation for retaining the PRNs) provides collectors of waste packaging with an incentive to increase the amount of waste product they collect and supply for reprocessing.
- 6.10 The Glasmo Agreements prevent this process from happening because the Five Reprocessors will retain all PRNs and pass them to Glasmo Ltd. Since the Five

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1 *Official Journal* - L 365, 31.12.1994, p 10.

Reprocessors will receive no compensation from Glasmo Ltd for supplying Glasmo Ltd with all the arising PRNs, the Five Reprocessors will have no incentive to compensate collectors for the PRNs that they pass to Glasmo Ltd, and not to the collectors. Effectively, the Five Reprocessors will form a buyers' cartel, which will refuse to provide collectors with PRNs and will have no reason to compensate those collectors for not receiving PRNs. Collectors will not be able to take their cullet elsewhere since the Five Reprocessors represent around 95% of glass reprocessing capacity. This change in the functioning of an ordinary competitive market also shows that the operation of the Glaspak Scheme is likely to have an appreciable effect on competition.

- 6.11 This effect on competition would be reduced if firms collecting cullet were able to sell to reprocessors abroad. As explained above, this is unlikely in the short term. The potential for international trade in cullet may change once the Regulations have come into full effect, but at present it seems reasonable to me to view the market for the purchase of cullet as purely domestic.
- 6.12 I therefore conclude that the operation of the Glaspak Scheme is likely to have the effect of restricting competition in the market for the purchase of glass cullet due to the fact that collectors of waste will not be able to receive a PRN from those reprocessors to whom they will deliver glass cullet.

### ***The market for the purchase of glass cullet - abuse of market power***

- 6.13 For reasons given above explaining that the operation of the Glaspak Scheme will have an appreciable effect on competition, the Five Reprocessors will collectively dominate the market for the purchase of glass cullet. Registration and hence operation of the Glaspak Scheme is the vehicle through which the Five Reprocessors as principal members of the Glaspak Scheme will therefore collectively possess significant market power.
- 6.14 The operation of the Glaspak Scheme will lead to a coordination of behaviour between the Five Reprocessors which will significantly impede competition because the Five Reprocessors will refuse to supply PRNs on demand to collectors of waste. This potential abuse of market power is in the market for glass cullet because it affects the terms under which cullet can be sold.
- 6.15 The Five Reprocessors will not, however, benefit directly from their refusal to provide PRNs, since they will provide these to Glasmo Ltd free of charge, but Glasmo Ltd will then sell these PRNs to its members (and other companies and schemes with recycling obligations in glass) at a fixed price. Glasmo Ltd predicts that this price will be about £6 per tonne. This is expected to be significantly lower than the price PRNs would fetch in an open market, which may be as high as £30 per tonne. This price will therefore be significantly lower than the price the Five Reprocessors would have to pay to collectors if they were competing to obtain the PRNs. This explains why it will

be in their interest to operate collectively within the Glaspak Scheme under the Glasmo Agreements rather than purchase PRNs at competitive prices. A further incentive is the resulting distortion of competition between firms discussed below.

- 6.16 This analysis is based on the assumption that I can be sure that the price of £6 per tonne will remain in place. In reality, I have been given no such guarantees and it could be that the price of £6 per tonne is operating as an additional barrier to entry into the glass reprocessing market. I cannot be sure that at a later date Glasmo Ltd will not exploit the potential for monopoly profits and hence benefit in some way the Five Reprocessors and the Glaspak Scheme.
- 6.17 The market power relevant here is derived from the market power of the Glaspak Scheme members. The registration and operation of the Glaspak Scheme will give effect to the market power held by the Five Reprocessors. The operation of the Glaspak Scheme will allow an abuse of market power by having detrimental effects on the terms under which cullet can be sold. Registration and operation of the Glaspak Scheme will lead or is likely to lead to an abuse of market power by the Five Reprocessors and Glasmo Ltd. I therefore conclude that the operation of the Glaspak Scheme will lead or is likely to lead to an abuse of market power in the purchase of glass cullet.

***The market for the sale of PRNs arising from glass reprocessing - effect on competition***

- 6.18 As explained above, I shall examine the effect of the Glaspak Scheme on the market for PRNs arising from glass recycling. Clause 3(2) of the Glasmo Agreements requires the Five Reprocessors to pass all their PRNs to Glasmo Ltd. Since these firms account for 95% of the glass reprocessing capacity there will be virtually no competition in the supply of PRNs. By selling their PRNs via Glasmo Ltd they will act collectively in the sale of PRNs and there will be virtually no scope for competition in the supply of glass-specific PRNs. For the reasons given above, this effect on competition will be appreciable.
- 6.19 Registration and hence operation of the Glaspak Scheme is the vehicle through which Glasmo Ltd will be in a position to effect competition on this markets. I therefore conclude that the Glaspak Scheme is likely to restrict competition in the supply of glass-specific PRNs.

***The market for the sale of PRNs arising from glass reprocessing - abuse of market power***

- 6.20 It will be Glasmo Ltd's policy to discriminate between potential purchasers of these PRNs. Although Glasmo Ltd will not favour Glaspak Scheme members, it will initially only supply companies who have obligations arising from glass packaging - which will include its own members as well as some other companies. It will supply

only companies which have obligations in other materials if there is insufficient demand from companies with glass recycling obligations. In practice, the projections which Glasmo Ltd has made mean it is unlikely that enough PRNs will be available to match demand. Some companies, particularly those with obligations in other materials who wish to purchase glass PRNs, may therefore be denied access to them.

- 6.21 Glasmo Ltd will have market power in the market for the sale of glass-specific PRNs and its policy of discriminating between companies depending on the materials which they handle will be an abuse of that market power. Registration and hence operation of the Glaspak Scheme is the vehicle through which Glasmo Ltd will acquire this significant market power. The operation of the Glaspak Scheme will thus allow an abuse of market power by having detrimental effects on the supply of PRNs. Registration and operation of the Glaspak Scheme will lead or is likely to lead to an abuse of market power by Glasmo Ltd. I therefore conclude that the Glaspak Scheme will lead to an abuse of market power in the supply of glass-specific PRNs.

### ***Different types of packaging and different obligated firms - effects on competition***

- 6.22 The Glaspak Scheme is also likely to have indirect effects on competition. First, by discriminating between companies according to the materials they handle, Glasmo Ltd is likely to affect competition between types of packaging. In particular, companies which handle glass will be likely to gain an advantage over those handling other materials. This may encourage the use of glass rather than other packaging materials and is therefore likely to distort competition between packaging materials. This distortion in favour of glass packaging will clearly benefit glass reprocessors, such as the Five Reprocessors who are members of Glasmo Ltd and the Glaspak Scheme, and thus provides a further incentive for them to operate the restriction described above.
- 6.23 Secondly, Glasmo Ltd will supply PRNs at a price fixed to cover the costs it incurs from promoting glass collection. It will not increase the prices of PRNs to reflect any excess demand. In a competitive market the price would rise to match demand with supply. Those companies which found it cheapest to reduce their use of packaging would do so, while those which found it most expensive would continue to purchase PRNs. Looked at another way, those companies which place the highest value on the use of glass packaging would purchase PRNs at the market price, while others would be forced to reduce their use of packaging (or switch to other types of packaging if PRNs in these materials were cheaper). Whether or not a company continued to use glass packaging would reflect the value placed on this packaging by the company and its customers.
- 6.24 Since Glasmo Ltd expects to set a price below the market rate, demand for PRNs is likely to exceed their supply. This shortage will be reinforced by Glasmo Ltd's decision to set investment at a level which is unlikely to match all the obligations arising from the use of glass packaging. Glasmo Ltd is therefore likely to be forced to find some way of rationing PRNs among obligated companies. Glasmo Ltd has not

supplied my Office with any details on how it intends to ration these PRNs, but it is unlikely to produce the same outcome as a competitive market price. The companies which receive the PRNs will not necessarily be those who place the highest value on the use of packaging (or found it most expensive to reduce their use of packaging). This misallocation may distort the ability of companies to compete in other markets. A system of rationing is therefore likely to distort competition between obligated companies.

- 6.25 For the reasons given above, these effects on competition will be appreciable. Registration and hence operation of the Glaspak Scheme is the vehicle through which Glasmo Ltd will be in a position to effect competition in these markets. I therefore conclude that the Glaspak Scheme is likely to distort competition between packaging materials, and between companies with packaging waste obligations.

### **Environmental and economic benefits**

- 6.26 I have concluded that registration and hence operation of the Glaspak Scheme will lead or is likely to lead to an abuse of market power. I therefore do not need to examine any further issues and may advise the Secretary of State that the Glaspak Scheme does not meet the requirements of competition scrutiny. However, if the Secretary of State were to decide to reject my advice on this issue, then I maintain that the Glaspak Scheme will have or is likely to have the effect of restricting and distorting competition. Under regulation 31(1)(a) I must then advise the Secretary of State on whether these effects are greater than is necessary to achieve any of the environmental or economic benefits mentioned in section 93(6) of the Environment Act 1995. Further, if the Secretary of State were to decide to reject my advice on the Glaspak Scheme entirely and the Glaspak Scheme were registered, then I would have to examine the Glasmo Agreements or any similar such agreements separately under regulation 33. As I have said, unless there is an unforeseen change in circumstances, this advice would be substantially the same as my advice in this report.
- 6.27 Briefly, the benefits mentioned in section 93(6) of the Environment Act 1995 involve achieving an increase in recovery and recycling and minimising the costs of doing so. Glasmo Ltd and Glaspak Ltd have argued that what they describe as the 'Glasmo scheme' will produce such benefits. I have explained above why I am examining these submissions as part of my analysis of the Glaspak Scheme. For the sake of consistency, I shall continue to refer to the Glaspak Scheme.
- 6.28 The parties have identified five reasons why the anti-competitive effects above are necessary for achieving those benefits:
- a consumers will benefit from lower product prices compared to a market response;

- b the Glaspak Scheme does not depend on market confidence to achieve increased recycling;
- c volatile PRN prices would undermine a market-based response;
- d Glasmo Ltd operating within the Glaspak Scheme will coordinate investment and publicity; and
- e the Glaspak Scheme will overcome a free-rider problem.

6.29 I shall consider each of these arguments in turn. In each case I shall consider how far they would be met in a scheme which did not restrict, distort or prevent competition and assess whether the Glaspak Scheme through the Glasmo Agreements is likely to produce any additional benefits.

***a - Consumers would benefit from lower product prices***

6.30 The parties argue that the Glaspak Scheme would generate the required expansion in glass recycling at a lower PRN price than a market-led system. This is achieved because the cost of glass collection will vary between different sources. In a market-based system, collectors would use first the cheapest possible source, then the next most cheapest source, and so on, until all obligations had been met. The price of PRNs would depend on the marginal cost of glass collection, that is the cost of the most expensive source that has to be used to meet the obligation.

6.31 By contrast, the operation of the Glaspak Scheme will set PRN prices equal to the average cost of all these sources of collection. This average will be lower than the marginal cost which would determine PRN prices in a market-based scheme. The parties argue that these lower PRN prices will lead to lower prices for consumers. The operation of the Glaspak Scheme will therefore be able to meet obligations at lower cost than a market-based scheme.

6.32 I do not dispute that the operation of the Glaspak Scheme will allow the setting of lower PRN prices than a market-based scheme, although there are no guarantees that there will not be increases in PRN prices at some later date. However, these lower PRN prices do not in themselves represent any economic or environmental benefit since they do not result from any cost savings in collecting the glass. Instead they result from Glasmo Ltd's ability to price-discriminate when it funds collection activity. Rather than paying a single market price, Glasmo Ltd plans to pay each collector only the minimum necessary to expand their collection activities. However, the costs incurred by the collectors will not be any lower than in a market-based scheme. It is simply that the financial rewards that would flow to the collectors in a market-based system will be captured by Glasmo Ltd and used to reduce the price at which it sells PRNs. This will not produce any economic benefits to society as a whole, it simply redistributes the benefits from collectors to purchasers of PRNs. In

economic terms, there is simply a transfer of producer surplus from the collectors to Glasmo Ltd and the purchasers of PRNs.

- 6.33 The operation of the Glaspak Scheme may, in fact, increase costs and produce other adverse consequences. First, the operation of the Glaspak Scheme within the context of the Glasmo Agreements may lead to higher costs and fewer economic benefits than a market-based approach. Glasmo Ltd will need to identify the cheapest options for increasing glass collection. In a market-based scheme, competition between collectors and reprocessors would ensure that only the lowest-cost collection routes would be used, so that the cost of meeting the obligations would be minimised. By contrast Glasmo Ltd will have to identify the lowest-cost sources itself. It is not clear to me how Glasmo Ltd will have enough information to identify the lowest-cost sources. Glasmo Ltd may therefore end up using higher-cost options than a market-based scheme.
- 6.34 Since Glasmo Ltd will set payments to cover a collector's costs, the collectors may also have an incentive to increase their costs in order to maximise these payments. The operation of the Glaspak Scheme may therefore produce incentives for collectors to become inefficient.
- 6.35 Additionally, third party respondents have suggested to my officials that a much higher amount of glass could be recovered than Glasmo Ltd is forecasting, and this could be done at costs which would be lower than the recovery costs of other materials. By limiting the amount of glass PRNs which will be available, the operation of the Glaspak Scheme may force businesses to meet their obligations in other materials where the recovery costs are much higher.
- 6.36 In my opinion the operation of the Glaspak Scheme is more likely to lead to higher overall collection costs than a market-based solution. It will therefore produce fewer economic benefits than a market-based scheme.
- 6.37 Secondly, low PRN prices may lead to fewer environmental benefits being realised. It is important to remember that the obligations on companies are not fixed. Firms can reduce their obligations if they reduce their use of packaging, or switch to materials with a lower environmental impact. If firms reduce their use of packaging this will produce more environmental benefits (via lower energy use, for example) than if the same amount of packaging is used but is then recycled. However, low PRN prices will mean that the costs imposed on companies obligated in glass will be lower than in a market-based system. This will encourage companies to continue using glass packaging where they would previously have reduced their use of glass or switched to other materials with a lower environmental impact. By setting artificially low PRN prices, Glasmo Ltd is likely to allow more glass packaging to be used, thereby reducing the environmental benefits arising from the obligations.

***b - The Glaspak Scheme does not depend on market confidence***

- 6.38 The parties state that under a market-based system adjustment to higher recycling levels will occur only if market participants accept that the obligations will be met, form price expectations based on that belief, and act accordingly. Any uncertainty or doubt over this commitment will undermine a market response. In contrast, the Glaspak Scheme involves a commitment by members of Glasmo Ltd to raise the level of recycling according to a clearly set out business plan.
- 6.39 The main argument here is that businesses may be uncertain as to whether the obligations will be fully enforced. This is because the Regulations require obligated companies to take only ‘reasonable steps’ to ensure that their recovery and recycling obligations are met. In a market-based system, if companies believe that it will not be possible to meet the obligations, the demand for PRNs, and therefore their prices, will fall. This will reduce the incentives on collectors and reprocessors to recover waste, which will itself increase the possibility that the obligations will not be met, further depressing the demand for PRNs. Any lack of confidence would then be a self fulfilling prophecy.
- 6.40 While this point may have some value as a theoretical argument I can see no evidence to indicate that this problem will actually arise. A number of market-based schemes have already been registered and these schemes are confident that they can meet their obligations, and there is no evidence that a lack of confidence is having an adverse effect on the market.
- 6.41 The Glaspak Scheme is an administrative scheme. It will therefore be completely reliant on the efficiency and effectiveness of the management of Glasmo Ltd in organising an increase in glass collection. There are many reasons why Glasmo Ltd could fail to meet the projections in its business plan: it might, for example, over-estimate the ability of particular collectors to increase the amount of glass they can collect. It might underestimate the total obligations of companies obligated in glass. Third party respondents have also told my officials that they are critical of Glasmo Ltd’s current reliance on bottle-bank recovery. They argue that there are other options for recovery (such as kerb-side collection) which will need to be pursued if the full potential for glass recovery is to be realised. In summary, while I have no doubt that a market-based system could achieve the UK’s recovery and recycling targets, I am less confident that an administrative scheme such as will be operated here will do so.

***c - Volatile PRN prices would undermine a market-based response***

- 6.42 The parties argue that under the Glaspak Scheme, PRN prices will be more stable since they represent the price required to fund a steady expansion of recycling. In contrast, under a market-based approach, PRN prices would be volatile, undermining the achievement of the objective at least-cost.

- 6.43 I do not expect that there will be a significant degree of price volatility in glass recovery PRNs. To some extent, their price will be constrained by the prices of other types of PRNs since, although PRNs in each material form a separate market, there is some substitution between them.
- 6.44 In any case, I do not view price volatility as necessarily undesirable. In a competitive market, price changes serve a useful purpose. They will reflect changes in supply or demand, and may indicate that excess demand or supply exists. For example, an increase in the price of PRNs would signal that demand had increased or that the supply of PRNs had fallen. In either case, higher prices would provide an incentive for increased recovery and ensure that supply increased to match demand.
- 6.45 In contrast, by setting a fixed price below market levels, Glasmo Ltd is likely to create an excess demand for PRNs. This will lead to the distortions and increases in costs described above. This is likely to increase the costs of meeting the UK's targets and reduce the environmental benefits produced.

***d - Glasmo Ltd operating within the Glaspak Scheme will coordinate investment and publicity***

- 6.46 The parties argue that delivering an outcome quickly is often best done in a planned and coordinated manner. Businesses and governments frequently plan and implement their plans in a controlled manner, when new initiatives must be achieved quickly. The parties cite wartime and civil defence emergencies as extreme examples. The parties argue that the Glaspak Scheme is designed to achieve results in precisely this manner.
- 6.47 The parties also cite academic research which argues that, although a decentralised (ie market-based) system can lead to lower costs, it can also lead to coordination problems, delays and duplication. Where urgency is required, this will make decentralisation undesirable.<sup>1</sup>
- 6.48 Although the parties have advanced these theoretical arguments, they have not provided any evidence to indicate why a market-based system would lead to significant coordination problems, delays or duplication. While implementation of a scheme has to be achieved within certain time limits, the obligations are being phased-in over several years. Comparisons with wars and civil defence emergencies do not seem especially appropriate.

***e - The Glaspak Scheme will overcome a free-rider problem***

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1 Patrick Bolton and Joseph Farrell (1990) 'Decentralisation, duplication and delay' *Journal of Political Economy*, Vol 98, No 4.

- 6.49 The parties argue that the obligations in glass must be met to a large extent by increasing the amount of glass which consumers deliver to bottle banks. According to the parties, kerb-side collection, where a local authority collects the glass from homes along with other domestic waste and then separates the glass products, will not be as efficient. It will be possible to increase the amount of glass recovery only if consumers can be persuaded to throw away fewer bottles and take more of them to bottle banks. Achieving this will require a programme of publicity and education.
- 6.50 The parties argue that an uncoordinated market will not achieve sufficient education and publicity since each player can ‘free-ride’ on others. The Glaspak Scheme can overcome this problem by pooling resources for publicity and education and drawing on experience and previous trials to find the optimal mix between publicity and investment in bottle banks. This argument raises two issues.
- 6.51 The first is why any scheme will be so reliant on education and exhortation. In other materials, commercial collectors will be incentivised to collect materials, sort them, and deliver them to reprocessors. The incentive will come from the value of the PRNs they generate. In the Glaspak Scheme, Glasmo Ltd will concentrate on increasing the number of public bottle banks. These rely on consumers separating glass from their other domestic waste and transporting the glass to a bottle bank. Consumers therefore incur part of the costs of recovery for which they receive no compensation (the cost to consumers here is their time rather than a financial cost, however, transportation costs may be incurred). Consumers are willing to incur these costs because of the environmental benefits they know they will generate. There is then a need to provide sufficient education and information on these benefits to generate enough recovery to meet the targets.
- 6.52 Alternative ways to increase the amount of glass recovery would include providing consumers with some direct financial reward for delivering glass waste to bottle banks, or paying local authorities to separate glass from other waste collected at the kerb-side. Further options include collecting glass from commercial premises (such as pubs and restaurants) who should be able to implement systems for separating glass from other waste. I am aware that Glasmo Ltd proposes, as part of its business plan, to increase the levels of collection from such commercial waste streams. However, it is the case that Glasmo Ltd sees the public bottle bank system as being the main method by which it would increase glass recovery levels.
- 6.53 If one accepts that the most efficient way to increase the amount of glass recovery is through public bottle banks, coupled with a programme of education and information, Glaspak Ltd and Glasmo Ltd would be correct to identify a market failure here. Publicity is clearly a public good. A publicity programme run by one reprocessor would (if it were successful) increase the amount of glass recovered and delivered to all reprocessors. Since the benefits flow to competing firms, reprocessors would be willing to spend less on publicity if they acted individually than if they acted collectively. On the assumption that bottle-bank systems are the most efficient way to

increase glass recovery, I accept that a coordinated approach to publicity and education are likely to increase the economic and environmental benefits produced by the Glaspak Scheme. Specifically, it may allow the amount of glass recovered and recycled to increase more quickly. However, it is not obvious to me why other options for increasing recovery should not be more rigorously pursued.

6.54 This then raises the second issue, which is whether the anti-competitive effects resulting from the operation of the Glaspak Scheme are greater than would be necessary for achieving these benefits. It is clear to me that they are.

6.55 A coordinated approach to publicity and education could easily be achieved without any restrictions to prevent reprocessors from competing to acquire PRNs from collectors or to prevent them from competing to sell PRNs independently. For example, Glasmo Ltd could impose a levy on the Five Reprocessors (perhaps based on fee per tonne of glass they receive) which could be used to fund education and publicity programmes. There may be other ways to fund these programmes, and it is not for me to dictate which option might be used, but this example clearly shows that it would be possible to achieve the same environmental and economic benefits without the anti-competitive effects I have identified above.

## 7 CONCLUSIONS AND RECOMMENDATION

- 7.1 I have drafted the main body of this report as if the Glasmo Agreements had not been determined in order to make it clear why my officials advised Glaspak Ltd and Glasmo Ltd that the Glaspak Scheme in its current form was unlikely to meet the requirements of the competition scrutiny. I have noted that Glaspak Ltd indicated that the object of the Glaspak Scheme was to promote the recovery and recycling of glass packaging waste to enable the United Kingdom to meet its obligations in European Community law. However, I have concluded that the Glaspak Scheme or any similar scheme would have or would be likely to have the following anti-competitive effects:
- a it would restrict competition in the purchase of glass cullet;
  - b it would restrict competition in the supply of glass-specific PRNs;
  - c it would be likely to distort competition between packaging materials; and
  - d it would be likely to distort competition between businesses with packaging waste obligations.
- 7.2 I have considered whether these restrictions and distortions of competition would have been greater than are necessary to meet the environmental and economic benefits mentioned in section 93(6) of the Environment Act 1995. I have concluded that there would have been one area where the Glaspak Scheme might - under certain assumptions - have produced more environmental and economic benefits than a purely market-based scheme. Specifically, the Glaspak Scheme might have overcome free-rider problems associated with providing publicity and education. However, I have concluded that the anti-competitive effects of the Glaspak Scheme would have been greater than would be necessary to achieve that benefit.
- 7.3 In any event, I have also concluded that the Glaspak Scheme or any similar scheme would have:
- a led to an abuse of market power in the purchase of glass cullet; and
  - b led to an abuse of market power in the supply of glass-specific PRNs.
- 7.4 I recommend that, in accordance with regulation 31(5), you should advise the Environment Agency and Glaspak Ltd that the Glaspak Scheme in its current form does not meet the requirements of competition scrutiny.

May 1998

**John S Bridgeman**  
**Director General of Fair Trading**

# ANNEXES

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## A THE GLASMO AGREEMENT

**THIS AGREEMENT** is made on **BETWEEN:**

- (1) **GLASMO LIMITED** (registered number 3106314) whose registered office is at Northumberland Road, Sheffield S10 2UA (**'GlasmO'**);
- (2) **GLASPAK LIMITED** (registered number 3376396) whose registered office is at Northumberland Road, Sheffield S10 2UA (**'Glaspak'**);
- (3) (the **'Member'** as defined below)

### **WHEREAS:**

- (A) GlasmO was established in November 1995 by the glass container manufacturers in the UK with the aim of assisting in ensuring the most cost effective recycling and recovery of waste glass, in particular by promoting increased glass collection and reprocessing capacity in the UK;
- (B) Glaspak was established in May 1997 by the glass container manufacturers in the UK to act as, and as the operator of, a Scheme and therefore with the aim of performing the recovery and recycling obligations, and discharging all other obligations which it is capable of discharging, on behalf of its members in accordance with the Regulations;
- (C) For the purposes of the operation of the Scheme as described in (B) above, the parties have agreed that GlasmO will receive glass Packaging Recovery Notes from the Member;
- (D) GlasmO will sell the glass Packaging Recovery Notes which it receives from the Member, at a price to be determined by GlasmO in its absolute discretion, to companies and Schemes which have recovery and recycling obligations under the Regulations and shall use the proceeds of such sales to fulfil its aims;
- (E) This Agreement is made for the purposes of the Glaspak scheme and supersedes the agreement dated 15th June 1997 between GlasmO, Glaspak and the Member.

**IT IS AGREED** as follows:

### **1. INTERPRETATION**

- (1) In this agreement:

**'Member'** means a member of GlasmO Limited which carries on business in the United Kingdom as a manufacturer of glass containers.

**‘Obligations’** means the recovery and recycling obligations for packaging waste under regulation 3(5) and Schedule 2 of the Regulations.

**‘Packaging Recovery Notes’** means the documents available to the Member which confirm a certain tonnage of packaging waste has been reprocessed.

**‘Regulations’** means the Producer Responsibility Obligations (Packaging Waste) Regulations 1997 (SI 1997 No 648).

**‘Scheme’** means a scheme within the meaning of regulation 2(1) of the Regulations.

(2) In this Agreement:

- (a) references to the singular include the plural and vice versa;
- (b) references to one gender include all others; and
- (c) the headings are provided for convenience only and do not affect its interpretation.

## **2. CONDITIONS PRECEDENT**

- (1) This Agreement shall not take effect until Glaspak has been registered as a Scheme.
- (2) If by virtue of any provision of this agreement or of any other agreement or arrangement of which this agreement forms part, such agreement or arrangement is subject to registration under the Restrictive Trade Practices Act 1976, none of the parties to such agreement or arrangement who carry on business within the United Kingdom shall give effect to, or enforce or purport to enforce the agreement or arrangement in respect of any such provision until the day after particulars of the agreement or arrangement have been furnished to the Director General of Fair Trading under section 24 of that Act.
- (3) The provisions of clause 3 are conditional upon:
  - (a) the Packaging Recovery Notes satisfying any statutory or other regulatory or voluntary requirement in terms of form and execution;
  - (b) the Packaging Recovery Notes being only for waste for which there is an Obligation.

## **3. AGREEMENT**

- (1) The agreement dated 15th June 1997 between Glasmo, Glaspak and the Member is hereby terminated and shall be of no further effect.
- (2) The Member agrees to supply to Glasmo all its glass Packaging Recovery Notes free of charge within one month of the reprocessing to which the glass Packaging Recovery Note relates.

- (3) The Member shall use all reasonable endeavours to procure that the conditions in (a) and (b) of clause 2(3) above are fulfilled at the time of supply of the glass Packaging Recovery Notes to Glasmo.
- (4) In consideration of the Member supplying to Glasmo its glass Packaging Recovery Notes, Glasmo agrees to:
  - (i) receive the glass Packaging Recovery Notes, subject to the conditions in Clause 2 having been fulfilled;
  - (ii) act as a materials organisation in glass which shall involve, among other things, liaising with local authorities and government departments to ensure the establishment and use of an adequate network of waste glass collecting facilities;
  - (iii) sell, at a price to be fixed having regard to a formula to be established by Glasmo or in accordance with any other mechanism which Glasmo may in its absolute discretion determine, the glass Packaging Recovery Notes received from the Member to other companies and schemes which require them in order to discharge Obligations under the Regulations;
  - (iv) use the income from the sale of the glass Packaging Recovery Notes to fund the development of glass recycling infrastructure and its promotion; and
  - (v) act as a centre of information and expertise on glass recycling and as a channel of communication and best practice on glass recycling for the Member and others.
- (5) In consideration of Glasmo acting in accordance with this agreement, Glaspak agrees to act as a Scheme.

#### **4. CONFIDENTIALITY**

Each party shall keep the subject matter of this agreement confidential except as required by law or by any regulatory body or with the written approval of the other parties, such approval not to be unreasonably withheld or delayed.

#### **5. COSTS**

The costs and expenses incidental to the negotiation, preparation and completion of this agreement shall be borne by Glasmo.

#### **6. GENERAL**

- (1) None of the rights or obligations of one party under this agreement may be assigned or transferred without the prior written consent of the other party (such consent not to be unreasonably withheld).

- (2) This agreement and the documents referred to in it contain the whole agreement between the parties relating to the transactions contemplated by this agreement and supersede all previous agreements between the parties relating to these transactions.
- (3) In entering into this agreement no party may rely on any representation, warranty, collateral contract or other assurance (except those set out in this agreement and the documents referred to in it) made by or on behalf of any other party before the signature of this agreement and each of the parties waives all rights and remedies which, but for this subclause, might otherwise be available to him in respect of any such representation, warranty, collateral contract or other assurance; provided that nothing in this subclause shall limit or exclude any liability for fraud.
- (4) Either party may terminate this agreement by giving at least six calendar months' prior written notice to the other, save that such termination shall not affect the accrued rights of the parties arising out of the agreement as at the date it is terminated.

**7. GOVERNING LAW**

- (1) This agreement is governed by and shall be construed in accordance with English law.

**AS WITNESS** the hands of the parties (or their duly authorised representatives) on the date which appears first on page 1.

SIGNED by .....	SIGNED by .....
for GLASMO LIMITED	for GLASMO LIMITED
[in the presence of]:	[in the presence of]:

SIGNED by .....	SIGNED by .....
for GLASPAK LIMITED	for GLASPAK LIMITED
[in the presence of]:	[in the presence of]:

SIGNED by .....	SIGNED by .....
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## **B OFT NOTICE SEEKING COMMENTS FROM THIRD PARTIES**

### **Glaspak - notification of a compliance scheme**

#### **The Producer Responsibility Obligations (Packaging Waste) Regulations 1997 ('the Regulations')**

Under these Regulations, certain businesses have obligations regarding the recovery and recycling of packaging. They can either act alone to meet the requirements of the Regulations, or join a registered compliance scheme which will assume this responsibility for its members.

The Director General of Fair Trading has a duty to undertake a competition scrutiny of all compliance schemes prior to their registration with the Environment Agency or the Scottish Environment Protection Agency.

The Director General has received a submission concerning the operation of a new scheme set up by the UK glass packaging industry to be known as Glaspak ('the Glaspak Scheme'). The Glaspak scheme will be operated by Glaspak Limited and will be open to glass packaging manufacturers carrying on business in the UK.

Glaspak is also party to several agreements, to come into effect if Glaspak is registered as a scheme, involving the glass recycling and recovery organisation Glasmo Limited. These agreements ('the Glasmo Agreements') concern the supply of Packaging Waste Recovery Notes ('PRNs') by members of the Glaspak Scheme to Glasmo Limited and the subsequent sale of PRNs to third parties. The Glasmo Agreements are also subject to competition scrutiny by the Director General.

If the Director General finds that either the Glaspak Scheme or Glasmo Agreements raise competition concerns, the Director General may have to assess whether the effect of any restrictions on competition are greater than is necessary for achieving the environmental or economic benefits mentioned in section 93(6) of the Environment Act 1995.

The Director General invites comments from interested third parties on the Glaspak Scheme and the Glasmo Agreements and particularly on the environmental or economic impact of the Glasmo Agreements concerning the supply and sale of PRNs.

They should be addressed to:

David Blocksidge  
Office of Fair Trading  
Competition Policy Division  
Field House  
15-25 Bream's Buildings  
London EC4A 1PR

Please contact Mr Blocksidge if you require further information on either the Glaspak Scheme or the Glasmo Agreements. To ensure comments are considered in this consultation they should arrive at the Office by 5 January 1998.