

**A SUBMISSION TO THE DEPARTMENT OF
THE ENVIRONMENT, COMMUNITY AND
LOCAL GOVERNMENT ON THE
DISCUSSION DOCUMENT, *ALTERING THE
STRUCTURE OF HOUSEHOLD WASTE
COLLECTION MARKETS***

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1. Introduction

We welcome the opportunity to respond to the discussion document, *Altering the Structure of Household Waste Collection Markets*, which was released in June 2011 by the Minister for the Environment, Community and Local Government (“the Minister”), “to help inform public consultation on the Government’s commitment to reorganise household waste collection.”¹

The discussion document outlines two alternative models of household waste collection:

- The status quo in Ireland referred to as competition in the market or side-by-side competition, in which firms compete to collect household waste by selling their services to individual households. This is the way most markets are organised and it is no doubt for that reason that the discussion document uses the term ‘normal competition’ to describe such market arrangements; and,
- The status quo in many developed countries, referred to as competitive tendering or competition-for-the-market. Under this model firms compete for the sole right to provide household waste collection services to households for a defined period of time and geographic area. Periodic tenders are called by the local authority and, other things being equal, the successful bidder is the one that charges the lowest price for the collection service. The local authority acts as an agent for householders. Since the winner has an exclusive right to supply collection services the discussion document uses the term ‘franchise competition.’ Such competition is used to a limited extent in Ireland (e.g. the green bin collection in the Dublin Region).

The discussion document argues in favour of competitive tendering. One of the major reasons this choice is the presence of economies of density. The evidence suggests these economies are considerable.² The discussion document then lists a set of 24 consultation questions grouped under nine headings.

We welcome the discussion document’s proposal to restructure the household waste collection using the competitive tendering model. We believe that given the choice between competitive tendering and the status quo of side-by-side competition

¹ From the Department’s website under the heading, “Reorganising Household Waste Collection,” at <http://www.environ.ie/en/Environment/Waste/PublicConsultations/#Reorganising%20Household%20Waste%20Collection>. Accessed 29 August 2011.

² See, for example, Competition Authority (2005) and Eunomia (2009)

that competitive tendering is the best model, in terms of providing a cost effective household waste collection service. We have consistently argued for this approach in a series of reports and papers, so we see no need to rehearse those arguments here.³ In terms of the consultation questions we will answer those where we feel that we have something to contribute, based on our expertise. Hence there are a number on which we will not comment.⁴

2. Objectives and Alternate Measures

There are three questions under this heading.

Q.1 What should be the objectives of the Government's approach to policy on household waste collection?

The objective of household waste collection should be to maximise societal welfare, which implies that government should intervene only where there are market failures. In the case of household waste collection, market power and externalities are the two most important market failures.⁵ Market power is a concern in these markets because economies of density are likely to lead, under side-by-side competition, to local geographic monopolies that charge a price exceeding cost. Such excessive prices are a concern in their own right, and they may also lead some households to decide not to avail of a household waste collection and either backyard burn household waste or dump it on the roadside. In both cases the costs will be borne by others – the costs will be externalised. Competitive tendering solves the market power problem and, by securing the lowest cost for household waste collection, provides a greater incentive for households to avail of a collection service than side-by-side competition.

Externalities arise in various ways in waste management markets, but one that is particularly pertinent to waste collection is congestion externalities. Having several competing operators collecting waste on the same route would contribute to local road congestion. Competitive tendering of local waste franchises would also address this problem.

³ See, for example, Gorecki et al (2010).

⁴ Q.18, 22-24.

⁵ For further discussion see *ibid*, pp. 37-38.

Q.2 Should the Government be considering alternatives to franchise bidding and, if so, which alternatives are appropriate and why?

The Government should not be considering alternatives to competitive tendering for household waste collection. The evidence suggests that both in theory – the presence of economies of density - and practice – numerous studies evaluating the impact of competitive tendering, that competitive tendering is the best model for household waste collection.⁶

Q.3 Should legislation enable local authorities to choose from a range of options in relation to regulation of the structure of its waste collection market, including franchise bidding and other viable options; or should the focus be on implementing a single preferred structure on a national basis?

The legislation should mandate competitive tendering as the only option for household waste collection, given the discussion above in relation to Q2. However, some parameters of the model should be open to local variations. Local areas have varying levels of population density, housing types, road network quality and road congestion. Such factors affect the costs and optimal structure of local waste collection arrangements. It is therefore important that the legislation is sufficiently flexible that local authorities can adapt competitive tendering to their particular circumstances. For example, in a rural area with low household density and hence high transport costs, it might be preferable to have a single collection vehicle that can take the material from the brown, green and black bins, while in a dense urban area the option of specialist vehicles to collect a narrower range of bins might be appropriate. Equally, it may be efficient to pool tenders across some local areas because, for example, there is only enough material for one transfer station serving a particular geographic area. The model should permit enough flexibility for such efficiencies to be realised.

3. The Role of Local Authorities

It is envisaged that the local authorities will, quite correctly, play a key role in delivering competitive tendering. However, as both a purchaser – through administering the tendering process, and, potentially, a provider, through a local

⁶ See references in footnote 2 above and OECD (2008).

authority operated household collection service, the local authority may face a conflict of interest.

Q.4 Should all local authorities be required to ensure that a household waste collection service is available for all households in their respective areas?

Yes, household waste collection service should be available to all households. Recall that one of the reasons for intervention in household waste collection is to reduce externalities – backyard burning and/or roadside dumping. If households cannot avail of a collection service then resort may be made to these alternatives. Variations in the nature of the service delivered may still be permitted; for example, the tender for a collection service might specify that for households with long driveways or lanes should place their bins at the kerbside for collection.

Q.5 How can the dual local authority role of local regulator of collection services and service provider best be balanced?

The dual role as purchaser and provider can best be reconciled if the local authority collection service is spun off into a Direct Service Operator (“DSO”), which is arms length from the local authority. Hence in the tendering process the DSO is treated like any other bidder. Reference to the UK experience with competitive tendering can be helpful in this regard. However, it should be noted that this is much less of an issue in 2011/2012 than in earlier years due to local authorities exiting direct provision of household waste collection through in-house operations. In 2009, of the 33 local authorities 19 had exited collection⁷ and since then more have followed this route or indicated their intention to do so.

4. The Household Waste Collection Industry

The discussion document poses two questions concerning the household waste collection providers.

⁷ EPA (2011, Table 13, p. 23).

Q.6 Are there any characteristics of the household waste collection industry in Ireland, or the Irish waste disposal and treatment industry, which may inhibit the benefit of reorganised household waste collection market structures?

Household waste collectors may be vertically integrated through owning downstream facilities such as transfer stations, landfills, mechanical biological treatment plants, incinerators and so on. If entry into the markets for necessary facilities is difficult or impossible (e.g. because of planning constraints or cost conditions), such vertically integrated firms might charge higher prices to non-integrated household waste collectors for access to these downstream facilities than to themselves. This would then place non-vertically integrated household waste collectors at a competitive disadvantage and hence limit the benefits of competitive tendering. It is therefore important in designing the competitive tendering process to take this into account. More specifically, advice should be sought from the Competition Authority on whether access to facilities is likely to be limited in a way that might harm competition in waste collection markets. If this does pose a problem in some or all areas, there are various options for safeguarding competition. For example, necessary facilities might be bundled with the waste collection franchise (which is probably more practicable if they were owned by the State to begin with) or appropriate pricing rules could be specified that should be followed by vertically integrated household waste firms so that no breach of competition law occurs.

Q.7 How best can the interests of household waste collection service providers be preserved, while also protecting the interests of households, businesses and delivering the required environmental performance?

The purpose of introducing competitive tendering is to promote societal welfare, not the interests of household waste collection service providers. It is to promote and protect competition, not competitors. For example, the geographic boundaries for household collection franchises should be drawn in such a way that each area takes advantage of available economies of density and scale, while at the same time facilitating bidders that can offer lower prices by serving two or more contiguous areas. The purpose should not be to demarcate geographic areas in order to assist particular firms or types of firms.

5. Supporting Implementation

The implementation of policy is an important subject, especially when competitive tendering is to be administered across Ireland at the local authority level.

Q.8 Were the Government to decide to introduce a system of franchise bidding, how best could the introduction of that system be supported; in particular, which supports, if any, should be provided to local authorities and which supports, if any, should be provided to private sector service providers, such as information and technical support?

The Department of the Environment Community and Local Government (“DoEC&LG”) should provide support and advice as to how to implement and administer competitive tendering. Templates for contracts and terms of supply should be prepared. Seminars should be held explaining the mechanics of tendering and likely pitfalls, dos and don’ts. This might involve presentations by:

- those familiar with household waste collection tendering from another jurisdiction, such as Northern Ireland;
- lessons learnt from agencies that have studied the market for household waste collection (e.g. OFT, 2006);
- Dublin drawing on its experience with competitive tendering for the green bin; and,
- The Competition Authority on how to: (i) detect household waste collection cartels that allocate bids and raise prices; and (ii) gather evidence that could be used in a subsequent criminal prosecution of the cartel for breaching the Competition Act 2002, as amended.

It is important that there is a shared understanding of competitive tendering across local authorities, which can learn from each other’s experience. In addition, such a shared understanding is likely to facilitate a common approach to tendering across Ireland. This will reduce bidding costs for household waste collectors that might want to bid in more than one local authority area. By reducing transaction costs, competition should be enhanced and costs minimised.

It is also important that once the purchasers – the local authorities – have gained a shared understanding of the competitive tendering process, that this is imparted to the providers – the household waste collection firms. The more familiar the providers are with what is to be introduced, the more able and willing will they be to bid. Indeed,

there may be certain issues, such as contract templates and geographic market areas subject to competitive tendering, where further public consultation might be appropriate.

6. Householder Responsibilities

The householder is responsible for availing of a collection service, which causes the discussion document to raise the following question:

Q.9 Should householders be required to either avail of a collection service or to demonstrate compliance with their household waste obligations if they do not have their waste collected by a properly authorised service provider?

As noted above, one of the grounds for intervention in household waste collection is the market failure caused by households not availing of a collection service and using unauthorised illegal methods of disposal, with the result that others bear the cost. In the case of burning the waste, the cost is imposed on residents of Ireland and beyond through the emission of pollutants; in the case of illegal dumping, the clean up and visual disamenity costs are more local in nature. The evidence suggests that in 2009, 19 per cent of occupied households did not avail of a household waste collection service and, in some areas, particularly rural, the figure rose to as high as 54 per cent (EPA, 2011, p. 26). It may also, of course, be that in some instances a service was not available. Hence there are good grounds for ensuring that households avail of a household waste collection service or if they do not specify how they dispose of their waste so as not to create externalities.

This is an important issue for tendering in rural areas, but much less so for urban areas where collection rates approach 100 per cent of households. The price that is bid will depend, amongst other things, on the expected market size. If (say) only 50 per cent of households avail of a collection service then the average costs are likely to be much higher than if 100 per cent sign up. Hence this suggests that the bar should be set high for those that do not avail of a household waste collection service, given that one will be available (see answer to Q.4). Indeed, it is our suggestion that the default position is that a household will be required to avail of the collection service unless they can demonstrate, in a specified period before the tender is let, that they can from an environmentally sustainable point of view dispose of their waste and that as such will provide the local authority with ongoing monitoring reports. Such an

approach will provide those bidding for the waste collection franchise with a reliable certain number of households and their location on which to base their bids.

7. Low Income Households

Currently low income households receive waivers of various kinds, which raises the issue of what comparable mechanisms should be put in place under competitive tendering.

Q.10 What approach should be taken to meeting the needs of low income households?

In general, the most appropriate way to protect low income households is through the tax and benefit system, which is designed to identify these sorts of households and can provide appropriate levels of support across the full range of needs that households have. Setting up a separate support system for every service that households require adds to administrative cost. Nevertheless, we recognise that service-specific waiver systems have been a preferred means of delivery for many local authorities.

Q.11 How should such supports be funded, and in that context how should the prevention of waste be incentivised?

If the decision has been made to provide waivers to low income householders, in part no doubt on equity grounds and in part because of a concern that such households due to budget constraints will not avail of a waste collection service, but perhaps use alternative unauthorised methods of disposal, two issues arise. First, how should the assistance be structured so that the household retains the incentive to separate and recycle waste; and, second, how should the assistance be delivered to the household. On the first issue, the pricing of household waste collection charges consists of a fixed or standing charge, paid irrespective of the volume of waste collected, and second a variable part relating to waste collected – a per lift or weight – and hence is more likely to influence householders behaviour. Thus one option would be for the State to pay for the standing charge and for the household to pay the variable charge, since that is more likely to influence behaviour. Since the costs of waste collection will vary across the country due to variations on local population density etc., there is a

further question as to whether all households should be compensated for the full standing charge, which implies a cross-subsidy to high cost areas.

8. Competition & the Tender Process

As the discussion document makes clear the objective of competitive tendering is to ensure that the competitive process works well, which means that careful attention needs to be paid to contract design and implementation.

Q.12 Which agency or authority should perform the detailed design and management of the tender process?

Local authorities or regional groupings of authorities, subject to the guidance and feed-back set out in response to Q.8 above, should have the responsibility for the design and management of the tender process. The local authority is close to the householders that will avail of the collection service and so has the incentive to ensure that the tender is not only designed to gain the competitive price, but also include appropriate monitoring and penalty clauses to ensure that the contracted quality of service is delivered. Householders are likely to complain to their local officials and representatives if a collection is missed or the waste spilled onto the sidewalk instead of in the collection vehicle.

Q.13 How best can the tender process be designed and managed in order to ensure the participation of as many competing service providers as possible?

Q.14 How best can the tender process be designed and managed in order to ensure vibrant competition among service providers?

By setting clear rules, carefully explaining the rules, providing tender documents that set out in readily understood manner the major aspects of the characteristics of the routes to be tendered, and consulting on the major aspects of the tender (as noted in response to Q.8). This clarity should also apply to the rules for selecting the tender winner.

Q.15 What size, or range, in terms of numbers of households, should tender areas be, and should there be differences between rural and urban areas?

The size and range of households subject to a single tender should take account of the trade-off between the cost of transporting waste and the benefit arising from economies of scale and scope. Bigger areas will tend to have more transport

cost, but also more economies of scale, and it is an empirical question where these two effects will offset.

A related issue concerns whether all tenders must relate to individual areas or whether tenders would be allowed for bundles of areas. This will be particularly important if a large number of small franchises are offered. The cost of serving two adjacent areas might be lower than the cost of serving each of the areas separately. This implies that more attractive bids should be made if bidders can tender for sets of areas than if they have to bid for every area separately. In effect, this would allow bidders to take into account economies of scope across areas.

Here is a stylised example. Suppose there are three areas, A, B and C. Each would cost 100 to serve, but if a firm were to serve both A and B it could save 10. If multiple bids were allowed, an efficient firm would bid 100 for each of the areas individually, but also submit a bid of 190 for the combination of A and B. By allowing this, the tendering authority could get the three areas served for 290 rather than 300.

Q.16 Should the tender process specify a minimum level of service which all bidding service providers must meet?

Yes the tender should specify the level of service required e.g. weekly or bi-weekly collection of bins and the level of waste segregation. The local authority may want to canvass the local householders on the type of service that should be made available before actually tendering. The tender process, as noted in response to Q.13 and Q.14, should be as clear as possible so as to minimise the costs of bidding.

Q.17 Should the tender process permit service providers to compete in relation to service provision, that is, for bidding service providers to offer levels of service superior to tender requirements?

Allowing bidders to provide bids in excess of the tender document would not only complicate the tender process, but would also raise issues concerning how the local authority will trade-off price and quality in selecting the winning bid. Such a process may be very subjective, possibly leading to court cases as the tendering process becomes more of a comparative evaluation process (or “beauty parade”). Furthermore, there may be more than one equilibrium trade off between price and quality raising the issue of how to select one bid over another.

Q.19 What measures should be taken to ensure that, following the selection of a winning bid, service interruption does not occur?

The successful bidder should have to satisfy certain performance criteria in terms of frequency of collection, type of collection, disposal of the waste and so on. Failure to do so should lead to penalties clearly set out in the tender document, with the ultimate sanction being removal of the contract. The winning bidder might be asked to post a bond to ensure compliance. The monitoring of some aspects of contract performance is relatively easy since householders will complain if the service level and quality fall short of that specified. In other aspects, the local authority may have to conduct inspections or receive periodic reports.

Q.20 What measures, if any, should be taken to help ensure that a winning bidder does not have a significant advantage over competing bidders in the subsequent tender process?

The winning bidder will have gained considerable knowledge of the area subject to tender. Hence in order to ensure that other bidders are able to compete effectively in the next round of tenders, as much of the information concerning the area subject to tender should be made available to all bidders so that a level playing field can be attained.

As we noted under Q6, there may also be some facilities related to waste collection or processing that are essential for offering service and which cannot be replicated. If this is so, the facilities may need to be bundled with the relevant franchise areas or be subject to mandatory access at reasonable terms and rates.

9. Paying for the Service

A number of potential options for payment are possible. Hence the consultation document raises the issue of the appropriate fee structure.

Q. 21 What form of fee structure would best meet our economic and environmental objectives?

Typically there is a fixed and a variable charge for household waste collection, with the former reflecting the fact that some of the costs of the collection of fixed. In

terms of the variable charge, weight or volume based pricing, when applied in an effective format, have been shown to provide significant incentives for households to segregate recyclable waste.⁸ However, pay by use pricing is also more costly to operate. Cost-benefit analysis should be used to identify which sorts of areas are appropriate for this sort of pricing.

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⁸ See, for example, Scott and Watson (2006).