

## Preliminary Options Appraisal – Detailed SWOT Analysis

### Option 1 – Retain commingled collections and responsibility for disposal

Description– Fortnightly collection of dry recyclate in a single bin using standard vehicles. The Districts would be responsible for complying with the terms and conditions of the disposal contract as well as for monitoring its performance and its procurement.

Strengths	<ul style="list-style-type: none"> <li>• The collection methodology is simple for residents to use and therefore tends to be the most popular recycling system deployed in the UK.</li> <li>• High collection productivity because only a single type of container is being emptied on each visit. There is no requirement for additional crews for this methodology.</li> <li>• No increase in vehicle lease costs because the collections can be undertaken with single bodied trucks. Split bodied trucks which are needed when two different waste streams have to be collected at the same time are more expensive to purchase and maintain. These trucks also have a lower payload and need to be tipped off more often.</li> <li>• Single bodied trucks use less fuel than split bodied trucks.</li> <li>• The Districts would continue to receive both Recycling Credits from the County Council and income from the sale of materials.</li> <li>• Benefit from any upturn in market conditions.</li> <li>• The Districts do not need to purchase any additional collection containers except for new properties and as replacements.</li> <li>• The cost of a full scale communication campaign is avoided because there is no service change.</li> <li>• The procurement exercise would evaluate the impact of travelling to all the tipping locations proposed by the bidders.</li> <li>• Bins have less manual handling implications than the use of bags.</li> <li>• The single bin keeps all the materials dry and in particular the paper and card which reduces the risk of rejection by the re processor.</li> <li>• The bin is more stable in windy weather conditions which reduces the risk of materials escaping into the environment.</li> </ul>
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Weaknesses	<ul style="list-style-type: none"> <li>• Significantly higher gate fees than dual stream collections.</li> <li>• The Districts would still be responsible for the gate fee.</li> <li>• Materials tend to be of a poorer quality and the level of contamination is higher when a single bin is used.</li> <li>• Lower income from the sale of materials because of the quality and contamination issues.</li> <li>• The District has to pay for the cost of rejected loads.</li> <li>• Retaining the existing service methodology means that residents won't get any additional recycling capacity which is particularly useful at peak times such as Christmas.</li> <li>• Time and expense occurred in monitoring and procuring the contract</li> <li>• There is no service refresh which tends to improve participation and compliance with service rules.</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• The Districts may gain greater financial support from the Extended Producer Responsibility scheme proposed in the National Waste Strategy if it retains responsibility for disposal.</li> <li>• The County Council could offer financial incentives to retain disposal responsibility.</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• The Districts may not get any bids for commingled collections. This is because there is very little appetite for commingled materials, limited local processing capacity and the Districts do not have the benefit of a transfer station. In such circumstances a change of service becomes almost inevitable.</li> <li>• The tipping location may be further than the current facility being used which would increase operational costs, despite the procurement exercise evaluating the impact of travelling distance.</li> <li>• The income received from the sale of materials is vulnerable to market volatility.</li> <li>• Commingled collections increase the risk of rejected loads which affects both income and recycling performance.</li> <li>• The Extended Producer Responsibility scheme proposed in the National Waste Strategy may not financially incentivise commingled collections.</li> <li>• The proposed deposit return scheme could have an impact on infrastructure requirements, tonnage levels and the income from the sale of materials.</li> <li>• Risk of contractual disputes with the provider.</li> </ul>

## Option 2 – Retain commingled collections and transfer responsibility for disposal to the County Council

Description– Fortnightly collection of dry recyclate in a single bin using standard vehicles. The County Council would take on responsibility for procuring the disposal contract including the monitoring of its performance.

Strengths	<ul style="list-style-type: none"> <li>• The collection methodology is simple for residents to use and therefore tends to be the most popular recycling system deployed in the UK.</li> <li>• High collection productivity because only a single type of container is being emptied on each visit. There is no requirement for additional crews for this methodology.</li> <li>• No increase in vehicle lease costs because the collections can be undertaken with single bodied trucks. Split bodied trucks which are needed when two different waste streams have to be collected at the same time are more expensive to purchase and maintain. These trucks also have a lower payload and need to be tipped off more often.</li> <li>• Single bodied trucks use less fuel than split bodied trucks.</li> <li>• All gate fees would be paid by the County Council.</li> <li>• Greater budget stability as the District would not be exposed to market volatility from the sale of materials.</li> <li>• The proposed deposit return scheme would not have an impact on income levels from the sale of dry recyclate because this benefit would have already been transferred to the County Council.</li> <li>• The Districts do not need to purchase any additional collection containers except for new properties and as replacements.</li> <li>• Time and expense saving as the District would not be involved in monitoring the contract or future procurements.</li> <li>• The cost of a full scale communication campaign is avoided because there is no service change.</li> <li>• The single bin keeps all the materials dry and in particular the paper and card which reduces the risk of rejection by the re processor.</li> <li>• Bins have less manual handling implications than the use of bags.</li> <li>• The container is more stable in windy weather conditions which reduces the risk of materials escaping into the environment.</li> <li>• Contractual disputes with the provider would be dealt with by the County Council.</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• The Districts would not receive either Recycling Credits from the County Council nor income from the sale of materials.</li> </ul>

	<ul style="list-style-type: none"> <li>• The Districts would not benefit from any upturn in market conditions.</li> <li>• The County Council procurement exercise may not evaluate the impact of travelling to all the tipping locations proposed by the bidders.</li> <li>• Materials tend to be of a poorer quality and the level of contamination is higher when a single bin is used.</li> <li>• The discussions with the County Council have not yet ascertained whether Districts would retain responsibility for rejected loads.</li> <li>• Retaining the existing service methodology means that residents would not get any additional recycling capacity which is particularly useful at peak times such as Christmas.</li> <li>• There is no service refresh which tends to improve participation and compliance with service rules.</li> <li>• The Districts would miss out on any incentives provided by the County Council to retain disposal responsibility.</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• The County Council may take on responsibility for rejected loads.</li> <li>• The Districts may gain greater support from both the extended Producer responsibility scheme and the County Council if it retains responsibility for disposal.</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• The Districts may not get any bids for commingled collections. This is because there is very little appetite for commingled materials, limited local processing capacity and the Districts do not have the benefit of a transfer station. In such circumstances transferring disposal to the County Council is unlikely to improve the situation and thus a change of service becomes inevitable.</li> <li>• There is a significant risk of increased operational costs if the tipping locations are not provided in a convenient location.</li> <li>• The Districts may still have to retain responsibility for rejected loads which is a potential cost pressure.</li> <li>• Commingled collections increase the risk of rejected loads which would affect recycling performance.</li> <li>• The Extended Producer Responsibility scheme proposed in the National Waste Strategy may not financially incentivise commingled collections.</li> <li>• The proposed deposit return scheme could have an impact on infrastructure requirements and tonnage levels.</li> <li>• The Districts may miss out on greater financial support from the Extended Producer Responsibility scheme if they transfer responsibility for disposal to the County Council.</li> </ul>

### Option 3 – Introduce dual stream collections using an additional bin for paper/card and retain responsibility for disposal

Description– Residents would present glass/cans/plastic in the existing blue bin every four weeks and card/paper in an additional bin every four weeks. The bins would be collected separately on alternate fortnights using standard refuse trucks. The Districts would retain responsibility for the disposal of the dry recycle.

Strengths	<ul style="list-style-type: none"><li>• The Districts are likely to receive bids because the recycling would be collected as two separate streams.</li><li>• Separating the dry recycle into two streams improves quality and also decreases levels of contamination. In particular it helps to keep the paper and card clean which is a requirement of the re-processors. In a single bin the card and paper gets contaminated by leakage from the other materials and shards of broken glass.</li><li>• Significantly lower gate fees than commingled collections.</li><li>• High collection productivity because only a single type of container is being emptied on each visit. There is no requirement for additional crews for this methodology.</li><li>• No increase in vehicle lease costs because the collections can be undertaken with single bodied trucks. Split bodied trucks which are needed when two different waste streams have to be collected at the same time are more expensive to purchase and maintain. These trucks also have a lower payload and need to be tipped off more often.</li><li>• Single bodied trucks use less fuel than split bodied trucks.</li><li>• The Districts would continue to receive both Recycling Credits from the County Council and income from the sale of materials.</li><li>• The service refresh should improve participation and compliance with service rules.</li><li>• The number of rejected loads should be lower.</li><li>• Higher income from the sale of materials because of improvements in quality and contamination levels.</li><li>• Benefit from any upturn in market conditions.</li><li>• The procurement exercise would evaluate the impact of travelling to all the tipping locations proposed by the bidders.</li><li>• Bins have less manual handling implications than the use of bags.</li><li>• The additional bin would keep the paper/card dry which reduces the risk of rejection by the re processor.</li><li>• The bin is more stable in windy weather conditions which reduces the risk of materials escaping into the</li></ul>
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	<p>environment.</p> <ul style="list-style-type: none"> <li>• Bins have a long life and therefore the replacement rate is relatively low.</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• Significant cost of purchasing and delivering the additional bin. The estimated cost is £1.8 million.</li> <li>• The sorting of waste into two different streams may cause some public dissatisfaction.</li> <li>• Accommodating another bin particularly at smaller properties is likely to be impractical and unpopular.</li> <li>• A full scale communication campaign would be required because of the service change.</li> <li>• The Districts would still be responsible for the gate fee.</li> <li>• The District has to pay for the cost of rejected loads.</li> <li>• The proposed service methodology does not provide any additional recycling capacity which is particularly useful at peak times such as Christmas. One bin collected fortnightly provides the same capacity as two bins collected every four weeks.</li> <li>• Time and expense occurred in monitoring and procuring the contract</li> <li>• The maximum level of permitted contamination in the paper/card is likely to be approximately 2% which would be tight to achieve.</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• The Extended Producer Responsibility scheme proposed in the National Waste Strategy may financially incentivise dual stream collections by rewarding Districts for achieving higher quality levels.</li> <li>• The Districts may gain greater support from both the Extended Producer Responsibility scheme and the County Council if it retains responsibility for disposal.</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• The Districts may not get many bids which would limit competition. This because of a lack of local processors and the Districts do not have the benefit of a transfer station.</li> <li>• The tipping location may be further than the current facility being used which would increase operational costs, despite the procurement exercise evaluating the impact of travelling distance.</li> <li>• The income received from the sale of materials is vulnerable to market volatility.</li> <li>• The proposed deposit return scheme could have an impact on infrastructure requirements, tonnage levels and the income from the sale of materials</li> <li>• Risk of contractual disputes with the provider.</li> <li>• The National Waste Strategy may limit the gap between collections for each material stream to two weeks.</li> </ul>

**Option 4 – Introduce dual stream collections using an additional bin for paper/card and transfer responsibility for disposal to the County Council.**

Description– Residents would present glass/cans/plastic in the existing blue bin every four weeks and card/paper in an additional bin every four weeks. The bins would be collected separately on alternate fortnights using standard refuse trucks. The County Council would take on responsibility for procuring the disposal contract including the monitoring of its performance.

Strengths	<ul style="list-style-type: none"><li>• The Districts are likely to receive bids because the recycling would be collected as two separate streams.</li><li>• Separating the dry recyclate into two streams improves quality and also decreases levels of contamination. In particular it helps to keep the paper and card clean which is a requirement of the re- processors. In a single bin the card and paper gets contaminated by leakage from the other materials and shards of broken glass.</li><li>• All gate fees would be paid by the County Council.</li><li>• High collection productivity because only a single type of container is being emptied on each visit. There is no requirement for additional crews for this methodology.</li><li>• No increase in vehicle lease costs because the collections can be undertaken with single bodied trucks. Split bodied trucks which are needed when two different waste streams have to be collected at the same time are more expensive to purchase and maintain. These trucks also have a lower payload and need to be tipped off more often.</li><li>• Single bodied trucks use less fuel than split bodied trucks.</li><li>• Greater budget stability as the District would not be exposed to market volatility from the sale of materials.</li><li>• The proposed deposit return scheme would not have an impact on income levels from the sale of dry recyclate because this benefit would have already been transferred to the County Council.</li><li>• Time and expense saving as the District would not be involved in monitoring the contract or future procurements.</li><li>• The Extended Producer Responsibility scheme proposed in the National Waste Strategy may financially incentivise dual stream collections by rewarding Districts for achieving higher quality levels.</li><li>• The service refresh should improve participation and compliance with service rules.</li><li>• The number of rejected loads should be lower.</li><li>• Bins have less manual handling implications than the use of bags.</li></ul>
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	<ul style="list-style-type: none"> <li>• The additional bin would keep the paper/card dry which reduces the risk of rejection by the re processor.</li> <li>• The bin is more stable in windy weather conditions which reduces the risk of materials escaping into the environment.</li> <li>• Bins have a long life and therefore the replacement rate is relatively low.</li> <li>• Contractual disputes with the provider would be dealt with by the County Council.</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• The Districts would not receive either Recycling Credits from the County Council nor income from the sale of materials.</li> <li>• The Districts would not benefit from any upturn in market conditions.</li> <li>• The County Council procurement exercise may not evaluate the impact of travelling to all the tipping locations proposed by the bidders.</li> <li>• Significant cost of purchasing and delivering the additional bin. The estimated cost is £1.8 million.</li> <li>• The sorting of waste into two different streams may cause some public dissatisfaction.</li> <li>• Accommodating another bin particularly at smaller properties is likely to be impractical and unpopular.</li> <li>• A full scale communication campaign would be required because of the service change.</li> <li>• The discussions with the County Council have not yet ascertained whether Districts would retain responsibility for rejected loads.</li> <li>• The proposed service methodology does not provide any additional recycling capacity which is particularly useful at peak times such as Christmas. One bin collected fortnightly provides the same capacity as two bins collected every four weeks.</li> <li>• The maximum level of permitted contamination in the paper/card is likely to be approximately 2% which would be tight to achieve.</li> <li>• The Districts would miss out on any incentives provided by the County Council to retain disposal responsibility.</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• The Extended Producer Responsibility scheme proposed in the National Waste Strategy may financially incentivise dual stream collections by rewarding Districts for achieving higher quality levels</li> <li>• The County Council may take on responsibility for rejected loads.</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• The Districts may not get many bids which would limit competition. This because of a lack of local processors and the Districts do not have the benefit of a transfer station.</li> <li>• There is a significant risk of increased operational costs if the tipping locations are not provided in a convenient location.</li> <li>• The Districts may still have to retain responsibility for rejected loads which is a potential cost pressure.</li> </ul>

	<ul style="list-style-type: none"> <li>• The proposed deposit return scheme could have an impact on infrastructure requirements and tonnage levels.</li> <li>• The Districts may miss out on greater financial support from the Extended Producer Responsibility scheme if they transfer responsibility for disposal to the County Council.</li> <li>• The National Waste Strategy may limit the gap between collections for each material stream to two weeks.</li> </ul>
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**Option 5 – Introduce dual stream collections using a bag for paper/card and retain responsibility for disposal**

Description– Residents would present glass/cans/plastic in the existing blue bin and card/paper in a 70 litre hessian bag. The bin and bag would be collected together every fortnight using a split bodied refuse truck. This is except for the hard to reach properties and they would be provided with an additional bin for card/paper with collections taking place on alternate fortnights using a small refuse truck. The Districts would retain responsibility for the disposal of the dry recycle.

Strengths	<ul style="list-style-type: none"> <li>• The Districts are likely to receive bids because the recycling would be collected as two separate streams.</li> <li>• Separating the dry recycle into two streams improves quality and also decreases levels of contamination. In particular it helps to keep the paper and card clean which is a requirement of the re-processors. In a single bin the card and paper gets contaminated by leakage from the other materials and shards of broken glass.</li> <li>• Significantly lower gate fees than commingled collections.</li> <li>• The cost of buying bags is considerably lower than for bins.</li> <li>• The bag would be more popular than a bin especially for those residents living in smaller properties.</li> <li>• The bag would provide residents with extra recycling capacity (70 litres) which can be particularly useful at peak periods such as Christmas.</li> <li>• The Districts would continue to receive both Recycling Credits from the County Council and income from the sale of materials.</li> <li>• The service refresh should improve participation and compliance with service rules.</li> <li>• The number of rejected loads should be lower.</li> <li>• Higher income from the sale of materials because of improvements in quality and contamination levels.</li> <li>• Benefit from any upturn in market conditions.</li> <li>• The procurement exercise would evaluate the impact of travelling to all the tipping locations proposed by the bidders.</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• Lower collection productivity because the crews would have to empty both a bin and a bag at each property. As a consequence extra crews would be required to provide the recycling service resulting in</li> </ul>

	<p>higher operational costs.</p> <ul style="list-style-type: none"> <li>• Increase in vehicle lease costs because split bodied trucks are needed to undertake the collection of both waste streams at the same time. Split bodied trucks are more expensive to purchase and maintain than single bodied trucks. They also have a lower payload and need to be tipped off more often.</li> <li>• Split bodied trucks use more fuel than single bodied trucks.</li> <li>• Cost of purchasing and delivering the hessian bag bin. The estimated cost is £180k.</li> <li>• The bags have a much shorter life than bins and tend to go missing because they can be blown away after emptying and may be taken by residents when they move house. Therefore the replacement rate is much higher than for bins and there will additional delivery costs.</li> <li>• The bag is not completely waterproof causing the paper and card to get wet.</li> <li>• The use of the bag is more likely to cause litter.</li> <li>• The maximum level of permitted contamination in the paper/card is likely to be approximately 2% which would be tight to achieve.</li> <li>• The sorting of waste into two waste streams may cause some public dissatisfaction.</li> <li>• The use of bags has manual handling implications.</li> <li>• A full scale communication campaign would be required because of the service change.</li> <li>• The Districts would still be responsible for the gate fee.</li> <li>• The District has to pay for the cost of rejected loads.</li> <li>• Time and expense occurred in monitoring and procuring the contract</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• The Extended Producer Responsibility scheme proposed in the National Waste Strategy may financially incentivise dual stream collections by rewarding Districts for achieving higher quality levels.</li> <li>• The Districts may gain greater support from both the Extended Producer Responsibility scheme and the County Council if it retains responsibility for disposal.</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• The Districts may not get many bids which would limit competition. This because of a lack of local processors and the Districts do not have the benefit of a transfer station.</li> <li>• The tipping location may be further than the current facility being used which would increase operational costs, despite the procurement exercise evaluating the impact of travelling distance.</li> <li>• The income received from the sale of materials is vulnerable to market volatility.</li> <li>• The proposed deposit return scheme could have an impact on infrastructure requirements, tonnage levels and the income from the sale of materials</li> <li>• Risk of contractual disputes with the provider.</li> </ul>

	<ul style="list-style-type: none"> <li>• The paper and card is at risk of rejection if it gets too wet in the bag.</li> </ul>
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**Option 6 – Introduce dual stream collections using a bag for paper/card and transfer responsibility for disposal to the County Council.**

Description– Residents would present glass/cans/plastic in the existing blue bin and card/paper in a 70 litre hessian bag. The bin and bag would be collected together every fortnight using a split bodied refuse truck. This is except for the hard to reach properties and they would be provided with an additional bin for card/paper with collections taking place on alternate fortnights using a small refuse truck. The County Council would take on responsibility for procuring the disposal contract including the monitoring of its performance.

Strengths	<ul style="list-style-type: none"> <li>• The Districts are likely to receive bids because the recycling would be collected as two separate streams.</li> <li>• Separating the dry recyclate into two streams improves quality and also decreases levels of contamination. In particular it helps to keep the paper and card clean which is a requirement of the processors. In a single bin the card and paper gets contaminated by leakage from the other materials and shards of broken glass.</li> <li>• Significantly lower gate fees than commingled collections.</li> <li>• The cost of buying bags is considerably lower than for bins.</li> <li>• The bag would be more popular than a bin especially for those residents living in smaller properties.</li> <li>• The bag would provide residents with extra recycling capacity (70 litres) which can be particularly useful at peak periods such as Christmas.</li> <li>• All gate fees would be paid by the County Council.</li> <li>• Greater budget stability as the District would not be exposed to market volatility from the sale of materials.</li> <li>• The proposed deposit return scheme won't have an impact on income levels from the sale of dry recyclate because this benefit would have already been transferred to the County Council.</li> <li>• Time and expense saving as the District would not be involved in monitoring the contract or future procurements.</li> <li>• The service refresh should improve participation and compliance with service rules.</li> <li>• The number of rejected loads should be lower.</li> </ul>
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	<ul style="list-style-type: none"> <li>• The procurement exercise would evaluate the impact of travelling to all the tipping locations proposed by the bidders.</li> <li>• Contractual disputes with the provider would be dealt with by the County Council.</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• The Districts would not receive either Recycling Credits from the County Council nor income from the sale of materials.</li> <li>• Lower collection productivity because the crews would have to empty both a bin and a bag at each property. As a consequence extra crews would be required to provide the recycling service resulting in higher operational costs.</li> <li>• Increase in vehicle lease costs because split bodied trucks are needed to undertake the collection of both waste streams at the same time. Split bodied trucks are more expensive to purchase and maintain than single bodied trucks. They also have a lower payload and need to be tipped off more often.</li> <li>• Split bodied trucks use more fuel than single bodied trucks.</li> <li>• Cost of purchasing and delivering the hessian bag bin. The estimated cost is £180k.</li> <li>• The bags have a much shorter life than bins and tend to go missing because they can be blown away after emptying and may be taken by residents when they move house. Therefore the replacement rate is much higher than for bins and there will additional delivery costs.</li> <li>• The bag is not completely waterproof causing the paper and card to get wet.</li> <li>• The use of the bag is more likely to cause litter.</li> <li>• The maximum level of permitted contamination in the paper/card is likely to be approximately 2% which would be tight to achieve.</li> <li>• The sorting of waste into two waste streams may cause some public dissatisfaction.</li> <li>• The use of bags has manual handling implications.</li> <li>• A full scale communication campaign would be required because of the service change.</li> <li>• The Districts would not benefit from any upturn in market conditions.</li> <li>• The County Council procurement exercise may not evaluate the impact of travelling to all the tipping locations proposed by the bidders.</li> <li>• The discussions with the County Council have not yet ascertained whether Districts would retain responsibility for rejected loads.</li> <li>• The Districts would miss out on any incentives provided by the County Council to retain disposal responsibility</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>• The Extended Producer Responsibility scheme proposed in the National Waste Strategy may financially</li> </ul>

	<p>incentivise dual stream collections by rewarding Districts for achieving higher quality levels</p> <ul style="list-style-type: none"> <li>• The County Council may take on responsibility for rejected loads.</li> </ul>
Threats	<ul style="list-style-type: none"> <li>• The Districts may not get many bids which would limit competition. This because of a lack of local processors and the Districts do not have the benefit of a transfer station.</li> <li>• There is a significant risk of increased operational costs if the tipping locations are not provided in a convenient location.</li> <li>• The Districts may still have to retain responsibility for rejected loads which is a potential cost pressure.</li> <li>• The proposed deposit return scheme could have an impact on infrastructure requirements and tonnage levels.</li> <li>• The Districts may miss out on greater financial support from the Extended Producer Responsibility scheme if they transfer responsibility for disposal to the County Council.</li> <li>• The paper and card is at risk of rejection if it gets too wet in the bag.</li> </ul>