Pre- Procurement Planning for Major Waste Management Projects: Guidance for Local Authority Waste Management Officers

(The guidance is supplemental to the 4ps Waste Management Procurement Pack)

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Glossary of Terms

BPEO	Best Practicable Environmental Option
BMW	Biodegradable Municipal Waste
DBO	Design, Build, Operate (a form of contract whereby the contract is responsible for all aspects of delivery other than financing)
DEFRA	Department of Environment, Food and Rural Affairs
EA	Environment Agency
EfW	Energy from Waste
HWRC	Household Waste Recycling Centre
LASU	DEFRA's Local Authority Support Unit
LATS	Landfill Allowance Trading Scheme
MBT	Mechanical and Biological Treatment
MRF	Materials Recycling Facilities or Materials Recovery Facility
MWMS	Municipal Waste Management Strategy
NWTF	New Waste Treatment Facility
ODPM	Office of the Deputy Prime Minister
PFI	Private Finance Initiative
PPP	Public Private Partnership
RDF	Refuse-Derived Fuel
ROC	Renewable Obligation Certificate
SEA	Strategic Environmental Assessment
TUPE	Transfer of Undertakings (Protection of Employment) Regulations
WCA	Waste Collection Authority
WDA	Waste Disposal Authority
WID	Waste Incineration Directive
WMLR	Waste Management Licensing Regulations
WRAP	Waste and Resources Action Programme

1. Context

The 4ps Waste Management Procurement Pack was published in July 2004 after extensive consultation with public and private sector interests. The pack contains guidance and model documentation for procuring long term waste projects, principally but not exclusively through PFI or PPP. A deal flow of waste projects is now established and an updated pack including a sector specific contract will be released in March 2006. 4ps strongly advocate the need for effective long term Waste Strategies and a Procurement Strategy that may cover a number of procurements and time periods but put together will deliver the overall strategy and Value for Money.

Waste authorities are increasingly engaging in procurement of long term projects, usually output based. The sector faces many challenges from both a public and private sector viewpoint. 4ps role is to support local government deliver effective projects and work with all other interests to develop this sector and reduce the time and costs of procurement. This additional guidance addresses a number of current issues in waste sector procurement and provides good practice advice on key factors to be considered in the delivery of successful projects. The guidance should be read in conjunction with the 4ps Waste Management Procurement Pack, which for example provides detailed guidance on Options Appraisal and production of Business Cases.

The Landfill Directive has defined the need for local authorities to change the way they manage waste, with economic instruments such as landfill tax and the Landfill Allowance Trading Scheme (LATS) progressively increasing the relative cost of the “do nothing” option. In particular, waste management solutions are evolving from the relatively straightforward management of recyclate/compost and landfilling of residual waste to multifaceted projects involving the development and operation of more complex waste treatment facilities and the management of a number of discrete waste streams. In many instances, this also necessitates a cultural change from short-term thinking, for example to meet recycling best value performance indicators, to the long-term planning required to support the investment decisions in developing major waste treatment facilities. There is a clear need to think beyond the immediate implications of LATS in planning for procurement.

The intricacies and scale of these new projects means that considerable effort is required to develop the key project foundations, ensuring that key issues and risks are identified and appropriately managed throughout the procurement process. In particular, the Municipal Waste Management Strategy (MWMS), and its associated emphasis on partnering between authorities and stakeholder consultation, becomes of increasing importance in defining the scope of the project to be delivered.

As confirmed in the opening paragraph Authorities need to develop procurement strategies, converting the concepts and policies within the MWMS into a tangible implementation plan for a project or projects, defining how the MWMS will be delivered. Experience on other projects has shown that, where comprehensive project planning is not carried out, this can result in procurement delays and/or cost overruns, or contracts may be entered into which do not satisfactorily manage the various risks, which the procuring authority is seeking to mitigate.

The 4Ps procurement pack already provides guidance on project development and delivery and, whilst often associated specifically with PFI projects, it provides

wider generic guidance on some of the key implementation issues. This document expands that guidance, and provides additional information to local authority waste management officers who are considering the procurement of new waste contracts, specifically focussed at the project planning stage. In particular, it identifies the key foundations which are required to underpin a successful waste management project, and discusses the approaches which can be used during project planning to enhance value for money and minimise key project risks.

This guidance may be useful to authorities procuring contracts as public private partnerships (PPP) as well as through the private finance initiative (PFI).

2. Structure of Guidance

This document provides guidance on the following key foundations required for the successful implementation of a waste management project:

2.1 Municipal Waste Management Strategy – reinforcing the linkage between the MWMS and project delivery, and discussing how the work undertaken during strategy development should be appropriately captured and embedded into the procurement process.

2.2 Sites and Planning – identifying the options available to a procuring authority regarding the provision and planning status of sites on which to develop waste treatment facilities. A critique is also provided on the interface between sites and the waste local plan (and subsequent planning applications).

2.3 Partnering – discussing the mutual interdependence of Waste Collection Authorities (WCAs) and Waste Disposal Authorities (WDAs) in delivering waste management projects in two tier areas. Partnering issues between WDAs and Unitary Authorities where joint working is being considered are also identified.

2.4 Market Appetite – addressing how competition during the procurement process can be maximised in order to ensure that the price paid for the services represents value for money.

2.5 Affordability – considering the process authorities should go through to understand and forecast project costs, ensuring that appropriate budget provision is made.

2.6 Project Management Arrangements – identifying appropriate project management and governance arrangements, linking democratic requirements with the need for rapid and often commercially-confidential decision making. Likely levels of staff and adviser resource required to support a procurement process are also discussed.

Each of these foundations is discussed separately below. Where appropriate, the guidance references other guidance included in the 4Ps waste procurement pack or developed by Government (particularly DEFRA). Such references are not duplicated in this guidance, although key aspects are summarised.

3. Municipal Waste Management Strategy

Local authority waste management projects are essentially implementing part or all of a municipal waste management strategy (MWMS). It is thus essential that a waste management strategy has been developed, demonstrating consultation and agreement by all of the relevant stakeholders whose input will be required in the implementation of a successful project. It is also important that there is a clear linkage between the strategy and the project which is being procured.

DEFRA provides comprehensive guidance on the development of a MWMS. The previous 2001 guidance has been updated in a recent "Consultation on Draft Guidance on Waste Management Strategies", available on:
http://www.defra.gov.uk/corporate/consult/wasteman-strat/docd.pdf
This document provides guidance in a number of areas which reinforce the link between the MWMS and the procurement process, for example:

- **Action and Delivery**: the consultation includes a new emphasis on demonstrating how the strategy will be delivered;
- **Timescales**: a long-term (at least 15-20 year) strategic vision is advocated, consistent with the timeframe over which major projects are likely to run;
- **Risk Management**: identification and management of key risks to delivery is advocated.

Other relevant aspects of this new strategy guidance are referenced in the relevant sections below:

3.1 Project Scope

The MWMS should be the key document defining the scope of the project or projects to be delivered. Given the greater scale, complexity and risks associated with implementation, this places significant emphasis on ensuring that the MWMS is a robust document which has been properly considered and accepted by all of the parties who will involved in its implementation.

The MWMS also needs to elucidate clearly the work which will be required to implement it, including identification of:

- any changes required in waste collection services to support the development of kerbside source segregation schemes;
- new infrastructure required to support kerbside recycling;
- waste treatment requirements;
- new site requirements (to feed into the waste local planning process).

It can also be helpful for the MWMS to define a range of options for waste treatment (rather than a single technology) in order to provide flexibility to address various market responses which may arise during the procurement process.

The various aspects of the MWMS then need to be converted into the scope of the project or projects which are to be procured. This process should address interfaces and synergies between various aspects of the MWMS, leading to appropriate packaging of services to facilitate their management and optimise risk transfer. Existing contractual commitments will also need to be considered.

3.2 Procurement Strategy

Good practice involves the drafting of a procurement strategy, identifying how elements of the MWMS will be delivered, either individually or holistically.

Parts 2 and 3 of the 4Ps waste procurement pack provide guidance on the options appraisal and project development processes which convert an MWMS into a deliverable project or projects, and identifies some of the key issues which need to be addressed. For example, there is already a body of guidance on the options appraisal process out of which procurement routes are confirmed, project risk evaluation, procurement timescales, project management arrangements and key commercial issues which will need to be addressed in developing contract documentation. This document develops existing guidance through providing additional information to support the decision making required through the various stages of the process discussed in converting an MWMS into a deliverable project.

DEFRA's Local Authority Support Unit (LASU) has produced a waste procurement toolkit which is principally aimed at supporting local authorities seeking to draft contract documents for waste management projects. The toolkit also includes guidance on the development of procurement plans, providing a linkage between a local authority's Municipal Waste Management Strategy and the contract toolkit. The toolkit is available for downloading from LASU's website: http://lasupport.defra.gov.uk/Default.aspx?Menu=Menu&Module=ViewArticle&ArticleID=152

Overall, in developing a procurement strategy, the key drivers should be Best Value and the need to deliver value for money over the duration of the project. Key areas which should be covered by the procurement strategy include the following. Further guidance on the key issues is provided in subsequent sections of this document:

- **Timescales** – a realistic timescale should be set for the procurement process itself. The project duration should then be consistent with delivering the MWMS affordably, through being of sufficient duration to make capital repayments affordable without compromising flexibility and delivery of long-term value for money in operating expenditure (refer to section 8).

- **Facilities and Sites** – consideration should be given as to what facilities are likely to be required to deliver the MWMS and what new sites are available to offer a new contractor. If appropriate, consideration should be given to the authority obtaining rights over suitable sites and offering these to the market in order to ensure the delivery of the project (refer to section 4).

- **Planning** – the MWMS should align with the waste local plan which should provide a framework to support the delivery of the project (refer to section 4).

- **Funding and Contract Type** – the authority needs to ensure that it understands the likely cost of the project, including the likely capital expenditure. In general terms, financing of capital expenditure will either

come from the Authority (either through existing budgets or prudential borrowing) or the private sector (with capital repayments reimbursed by the Authority through revenue-derived service payments). Funding to deliver the project should then be secured either from existing resources (including Council Tax), additional prudential borrowing and/or grants. Depending on the funding solution, a number of contract types could then be considered, combining design/build, operate and financing requirements. This is a relatively complex area, and if appropriate support from internal or external advisers should be sought. Further waste-specific guidance in this regard has been developed by the Greater London Authority ("Capital Solutions"), available for download from their website:
http://www.london.gov.uk/gla/publications/environment/capital_solutions.pdf

- **Staff** – at an early stage, staff likely to be affected by the project should be identified and a staff consultation and communication plan developed. Guidance is available from the ODPM at:
http://www.odpm.gov.uk/stellent/groups/odpm_localgov/documents/page/odpm_locgov_030730.hcsp

- **Partnering** – considering whether procurement of elements of the strategy will be undertaken in partnership with other authorities (WCAs and/or WDAs), and identifying the issues which need to be managed to ensure effective partnership working throughout and after the procurement process (refer to section 5).

- **Market Consultation** – addressing how and when representatives of the market will be consulted to ensure that the proposed procurement plan will deliver a competitive procurement process (refer to section 6).

- **Project Management** – identifying the staff resources and management arrangements required for the procurement process (refer to section 8).

3.3 Waste Input Data

The clear linkage between the MWMS and the procurement process will be reinforced if both are based on robust, complete and consistent waste data and assumptions. Experience from some projects procured to date suggests that this has not always been the case, with shortcomings in data and assumptions on which a MWMS is based being identified (often by bidders) during the procurement process. This can cause delays or obstacles, as unplanned time and effort is required to clarify the fundamental input parameters. In other instances, inaccurate waste data has come to light once the new project has commenced when an enhanced robustness of measurement has resulted in actual waste quantities being significantly different to forecast; for projects where much of the payment is tonnage-related, this can have a material impact on the project's affordability.

The robustness of any project plan is thus only as good as its input data and assumptions. Given the substantial capital and operating costs associated with waste processing and treatment, the financial risks associated with inappropriate input data are high. Accordingly, time and effort should be spent ensuring that the following baseline waste data are as accurate as possible:

3.3.1 Baseline Waste Quantities

Baseline waste data should be complete, accurate and, where appropriate, reconciled between various sources (eg WDAs and WCAs). The use of DEFRA's WasteDataFlow model is now mandatory and provides a useful framework for collating waste data in a consistent format. In two tier authorities, it is normally appropriate for overall waste data management to be undertaken by the WDA.

Where projects involve more than one WDA, the respective authorities should mutually audit each other's data to ensure consistency of measurement and classification.

Given procurement timescales, it is also vital that data are regularly and timeously updated to ensure that decisions by all parties are based on the most up to date information.

The use of the WasteDataFlow model is now mandatory in reporting waste data to DEFRA in a consistent manner. It is thus sensible for authorities to align the way they collect and collate data to these common requirements.

3.3.2 Baseline Waste Composition

The design of waste processing and treatment facilities will be dependent on the composition of waste being handled. Waste composition analyses therefore have an important role in facilitating design risk transfer. Where waste composition analyses have been undertaken, careful consideration should be given to their use taking into account the age and quality of data. For example, if data are only a "one off" measurement, these are unlikely to be statistically significant, and if analyses were undertaken before or during a period of significant change in the collection system they may no longer be accurate. Guidance on obtaining appropriate waste composition analyses is available on the LASU website:
http://lasupport.defra.gov.uk/Default.aspx?Menu=Menu&Module=ViewArticle&ArticleID=153

Many composition analyses only consider particular elements of the waste stream (eg residual household waste). The quantity and composition of other wastes should thus be taken into account in assessing the composition of the whole waste stream which will feed into the project.

For the purpose of LATS, a baseline Biodegradable Municipal Waste Composition (as a total for all BMW) of 68% will be assumed by DEFRA and the Environment Agency for calculation purposes; however, this does not obviate the benefit of robust waste composition data to support the design of suitable facilities.

Authorities which do not have suitable statistically-significant waste composition analyses may not have sufficient time to obtain the data (for example, a full seasonal analysis could take up to 18 months to finalise). Appropriate proxy data should thus be used, adjusted as appropriate for local circumstances. Useful data is summarised in an "Analysis of Household Waste Composition and Factors Driving Waste Increases" prepared by Dr Julian Parfitt of WRAP and appended to the Strategy Unit report "Waste Not, Want Not":
http://www.number-10.gov.uk/su/waste/report/downloads/composition.pdf

3.3.3 Existing Waste Flows

Waste flows need to be understood and analysed. In particular, waste inputs and outputs should be reconciled to ensure consistency. This can be a particular issue in two tier authorities where measurement systems may not be consistent.

Where waste flow modelling is undertaken, existing waste flows (including any pilot schemes) should be used to calibrate the model and develop assumptions regarding the efficiency of source segregation.

The Environment Agency has developed the "MBEAM" aimed at supporting WDAs to predict municipal waste arisings, and look at various waste management options and trading opportunities to decide how best to achieve their targets. The use of MBEAM is also supported by DEFRA.

3.4 Key Assumptions

Projects involving the development of facilities will generally be long-term, and thus necessitate assumptions regarding future waste management parameters. These assumptions should, so far as possible, be based on robust forecasts with sensitivity analyses undertaken to understand the associated uncertainty.

3.4.1 Waste Growth Rates

Assumptions regarding future waste quantities can have a substantial impact on the design of waste management systems. For example, if too high a growth rate is assumed, facilities could be oversized, and thus the Authority will have paid for something it will never use; if too low a growth rate is assumed, facilities may not have sufficient capacity and may need to be extended or alternatives procured in the future.

The starting point for most waste forecasting would be existing waste growth, based on the recent past. However, there can be complexities associated with, for example, data not always having been obtained in a consistent manner, recent population growth, changes in collection systems, and even weather patterns with their impact on green waste arisings, all of which need to be taken into account in establishing a baseline position.

Future waste quantities will be a facet of the number of households within the catchment area of the project and the amount of waste produced per household, and it is helpful to consider forecasting in these terms. Most authorities have long-term population and household forecasts which should form the starting point for modelling assumptions. An assumed waste growth per household should then be superimposed on this.

Through various initiatives, Government is encouraging waste minimisation and it would be reasonable for Local Authorities to assume that this will have some effect through a temporal reduction in the waste growth rate per household. It is also reasonable to assume that waste minimisation will have the highest impact in authorities who currently produce above-average amounts of waste per household, or where authorities have particularly effective waste minimisation policies.

There is some evidence that the roll out of garden waste collection results in an increase in the quantity of collected household waste, both from displacement of wastes previously disposed of at Household Waste Recycling Centres and from

generation of new wastes (presumably previously composted or incinerated within the curtilage of households). This can result in waste growth rates of between 0% (in areas where garden waste was essentially being already captured in the residual waste stream) up to 20% in areas which migrate from a bagged collection (residual only) to twin bins (garden and residual). If increased roll out of garden waste collections is planned during the life of the project, potential for such an increase should be taken into account in forecasting. It remains unclear as to whether these increased waste quantities will be sustained.

The assumed growth rate can be a key driver in defining the project to be delivered and the scale of facilities required to divert waste from landfill to meet absolute landfill allowance targets. This is thus a key issue for authorities to consider in sensitivity modelling. In particular, the risks associated with developing a facility which could prove to be undersized if waste growth exceeds assumed levels need to be balanced against the value for money delivered by a facility which could be oversized if waste minimisation drivers result in lower rates of waste growth.

3.4.2 Efficiency of Source Segregation

Source segregation of wastes in the UK is still relatively immature, and there remains considerable uncertainty regarding the magnitude of future performance. There is currently significant investment at both national and local government levels aimed at improving capture rates as a result of which overall improvement can be reasonable forecast.

Many authorities break down this calculation into:

- **Availability** – the percentage of properties in a particular collection area who have access to a particular scheme;
- **Participation** – the percentage of those properties who have access to a scheme who actually use it;
- **Recovery** – the percentage of materials which could be recovered from participating households which are actually captured;
- **Contamination** – the percentage of captured materials which are contaminated and thus not recyclable/compostable.

Any modelling assumptions should be calibrated against existing levels of performance, including where appropriate any experience from pilot projects.

LASU has produced a useful tool aimed at assisting authorities in forecasting future capture rates for kerbside collection of wastes:
http://lasupport.defra.gov.uk/Default.aspx?Menu=Menu&Module=ViewArticle&ArticleID=153

3.4.3 Waste Composition

There are two key areas which could impact on the composition of waste over the life of the project:

- General changes in waste composition; for example, there may be changes in the quantity and type of packaging;

- Changes in the composition of input wastes due to increasing or changing source-segregation.

The former is very difficult to forecast, although (within bounds) is generally a risk the private sector is prepared to take. The latter is likely to remain a public sector risk (except in projects which integrate collection and disposal) and should be forecast using a simple mass balance approach based on source-segregation assumptions. This should include sensitivity analysis to ensure that facilities are designed with sufficient flexibility to address reasonable variances in future waste composition.

3.5 Technology Selection

Diversion of BMW from landfill is likely to involve the development and operation of new waste treatment facilities (NWTFs). With the exception of Energy from Waste, the development of many NWTFs is still embryonic in the UK, and there is thus no local track record on which to forecast performance reliably, although there are a number of international reference facilities. Such facilities are likely to be capital intensive, often costing tens of millions of pounds, and thus represent a significant investment for an authority. It is thus vital that the authority understands the issues and risks associated with such facilities which can broadly be summarised as:

- **Technology Risk** – will the facility work with the wastes which are intended to form the feedstock?

- **Performance Risk** – how effective will the facility be at diverting waste from landfill?

- **Secondary Product Risk** – many technologies provide intermediate treatment as opposed to final disposal, and produce a number of products which require onward management.

- **Consent Risk** - is the facility likely to obtain the necessary consents?

There are a substantial number of facility types currently being marketed in the UK, detailed discussion of which is beyond the scope of this guidance note. There is a significant amount of literature available in order to assist understanding of available technologies. A useful starting point is:
http://www.defra.gov.uk/environment/waste/wip/newtech/Introductoryguide_bmw.pdf

This note provides generic guidance on some of the key risks associated with NWTFs, and how these should be addressed before and during the procurement process.

3.5.1 Technology Risk

Given the level of investment involved, most authorities will want to procure a technology which is proven. Similarly, if capital expenditure is to be privately financed, the funding party (whether it be a bank or a corporate body) will want to satisfy itself through a due diligence process that the facility will work, supported by performance guarantees backed up by collateral, and that there are secure end markets for any treatment products. At the present time the UK market is still embryonic, although a number of different types of facilities are currently under construction or going through their commissioning phase, with only a relatively small number of technologies currently passing this “bankability” test.

In order to understand and obtain information about various technologies, authorities thus need to rely on networks, particularly with those authorities who have already procured NWTFs which are under construction or are being commissioned, augmented by international experience. Targeted visits to reference facilities can provide useful background information, although these should be carefully arranged to ensure that balanced information is obtained. Further independent information about various waste technologies is available at: http://www.environment-agency.gov.uk/wtd/

In reality, unless an authority is funding the development of a facility itself and taking the risk for its performance, procurement is likely to progress on the basis of an output specification, setting out the input wastes required to be treated and the associated output performance requirements. The selection of the particular technology is then undertaken by bidders, thus ensuring risk transfer, although some authorities seek to apply constraints to this selection process, for example prohibiting solutions based on mass-burn incineration, either explicitly or implicitly in the drafting of its specification.

The authority's role in technology selection thus becomes one of evaluating various solutions being offered by the market. Development of an appropriate evaluation model thus becomes critical as this will ultimately dictate the successful solution. Authorities may have undertaken a similar evaluation exercise (eg BPEO or SEA) as part of strategy development; in order to align the procurement process with the MWMS, similar evaluation criteria should be applied to a procurement process, although this may need to be refined, for example by considering the relative importance of financial and non-financial criteria.

A planning application for a new waste treatment facility will need to demonstrate how it is consistent with the authority's MWMS, including any associated BPEO/SEA process. This again emphasizes the need for the MWMS, the waste local plan and the criteria against which a preferred technology is ultimately selected to all be aligned (see section 3.5.4).

The commercial interests of the authority and a party providing private financing should be aligned. Although the procuring authority should not rely on this, the authority can take advantage of the funder's interest in a number of ways depending on the particular circumstances:

- The authority should substantially transfer performance risk to the private sector partner in order to incentivise performance. If elements of the payment are performance-related this will quickly test the confidence of the private sector partner (provided the contract is backed up by appropriate guarantees);

- If a facility is being funded by a bank, the funder will want to undertake due diligence – the authority should ensure that the funder has taken into account any concerns the authority may have;

- If a facility is being corporately funded, the authority should ensure that the board of the funding entity (and/or any parent company) has satisfied itself with the efficacy of the particular technology in the context of the planned performance regime.

3.5.2 Performance Risk

Some technology providers and interest groups have made extravagant claims regarding the performance of particular technologies or waste management systems. It is important that decisions are made on the basis of realistic assessments of the extent to which various technology options will produce the desired results, usually achieving specified levels of recycling and diversion of BMW from landfill. This is exacerbated by the limited number of reference facilities, although again emphasizes the benefit of using proven technologies.

A number of technologies are more efficient than others in delivering various outcomes. For example, energy from waste (EfW) is very efficient at reducing BMW going to landfill (if ash is landfilled, it will generally be assumed to have a BMW composition of zero) whereas treatment technologies such as Mechanical Biological Treatment (MBT) do have a residue with a BMW composition which goes to landfill and thus counts towards LATS targets. Conversely, EfW does not generally achieve significant levels of recycling. How an authority specifies its required targets will thus play a key role in influencing technology selection.

Government and Environment Agency (EA) policies regarding the measurement of new technology recycling and landfill diversion performance are still emerging, and there is thus a lack of clarity regarding how performance will be determined in practice. In particular, there is currently an Environment Agency consultation focussing on the measurement of the BMW composition of any residues from waste treatment processes (eg MBT) which are disposed to landfill. This is fundamental for an authority seeking to understand the extent to which a particular technology will contribute to the attainment of its LATS targets.

The rapid pace of change in the measurement of recycling and landfill diversion performance from waste treatment technologies again emphasizes the benefit of a comprehensive waste flow and cost model which can be easily adapted to reflect policy or market changes as and when they occur.

3.5.3 Secondary Product Risk

Many technologies produce secondary projects for which markets are currently embryonic. Furthermore, the Environment Agency has concluded that all products and residues generated by a waste treatment technology are still classified as waste (until such time as they are beneficially used), and are thus subject to the requirements of the Waste Management Licensing Regulations (WMLR).

The following products may be produced by various treatment technologies:

- **Recyclate** – dry wastes (eg metals, plastics, wood) which are mechanically sorted from waste and sent for recycling are classified under BV82a unless they are segregated from ash resulting from the thermal treatment of waste. If ash is reused, this would be classified as recovery (under BV82c) rather than recycling;

- **Refuse Derived Fuel** (RDF) – a number of NWTF technologies produce an RDF. Since this material continues to be categorised as waste, its combustion is subject to the requirements of the Waste Incineration Directive (WID). At present, there is only a limited market for such materials, principally in the cement industry. Although there is a far larger market in the power industry, the extent to which conventional power stations will be amenable to upgrade

plant to comply with WID is questionable at the current time. Given this considerable market uncertainty, it is prudent for authorities to plan on the basis that a new facility will need to be developed to thermally treat RDF, probably also involving the generation of electricity. The economics of such a facility is looking increasingly attractive given the DTI's recent consultation on the extension of Renewable Obligation Certificates (ROCs) for facilities which generate energy from RDF;

- **Compost** - if technologies produce a compost material, an exemption from the WMLR will be required before such compost can be used. The EA are currently expressing a number of concerns regarding the ability of compost derived from mixed (as opposed to source-segregated) waste to meet its requirement for granting such an exemption. Current DEFRA guidance is also unclear regarding the extent to which compost derived from mixed waste, if consented by the Environment Agency, will count towards composting performance under BV82b. If an authority wishes to progress a NWTF technology which produces a mixed-waste derived compost, it should seek guidance (either directly or via the relevant bidder) from DEFRA or the EA regarding the extent (if any) to which the planned activity will be permitted and count towards relevant targets. In addition to these current issues, there may be future regulatory uncertainty regarding land spreading of mixed-waste derived compost from the forthcoming Soils and Bio-wastes Directives;

- **Waste Residues** – many technologies produce a residue which ends up going to landfill, either because it is not suitable by virtue of its nature or size to go into the facility, or as a process residue. For technologies other than thermal treatment, this material is likely to have a BMW composition which will count towards an authority's LATS targets. This should be taken into account in facility sizing (see also comments above related to measurement of performance). With a number of technologies, there may be scope to reduce the BMW content of waste residues through additional or extended composting;

- **Floc** – residues from Autoclave processes (known as 'floc' or 'fluff') may be suitable for a number of uses, although markets are still embryonic. Depending on the use, these will be subject to the same requirements as for recyclate, RDF, compost and waste residues, as appropriate, as described above.

3.5.4 Consent Risk

The planning process has historically required an assessment of the Best Practicable Environmental Option (BPEO). Although BPEO is being replaced as a concept by a Strategic Environment Assessment (SEA), key environmental considerations will still form part of the required process to underpin a successful planning application.

Where a BPEO or SEA is undertaken as part of strategy development, it is advisable to use such a process as a tool to inform future decision-making rather than as a means to selecting the technology which will be procured. In particular, it is useful for a BPEO/SEA process to develop and weight the criteria which are important to the procuring authority and undertake an initial appraisal of options against these criteria.

This would then result in a range of "high-scoring" options although it could also lead to certain technologies not being considered further. Making the initial

appraisal available to bidders then allows the market to respond flexibly within the BPEO/SEA framework provided by the authority, leading to finalisation of technology selection as part of the bid evaluation process.

If an authority is too prescriptive about its technology preferences through its BPEO/SEA process, this can significantly constrain a subsequent procurement process. In particular, if the market does not wish to offer the particular technology preferred by the authority then the number of bids could be very low, or bids offering technologies which go against the authority's clear preferences could be detrimentally affected through the planning process (since the authority has already determined that they do not represent BPEO).

Further information about minimising the risk associated with the planning process itself is provided in section 4.

3.5.5 Evaluation Criteria

Ultimately, the decision regarding technology selection will need to be undertaken against evaluation criteria, likely to include cost, deliverability risk and sustainability indicators. It is preferable for this to be undertaken at an early stage of the project such that MWMS development, options appraisal and bid evaluation are all undertaken against a common framework.

Included in these evaluation criteria are likely to be some issues which represent "showstoppers" for the authority, for example:

- The authority does not believe that the robustness and performance of the technology are sufficiently proven;
- The perceived risks associated with end markets on which overall project performance is reliant are too high;
- The project is not affordable;
- The perceived risks of planning failure are too high;
- The technology is fundamentally inconsistent with the authority's MWMS.

Acceptable technology proposals then need to be evaluated against weighted criteria. The development of the appropriate weighting can be a key issue for authorities, for example balancing cost and sustainability issues, and often necessitate member involvement.

3.6 Baseline Information

As part of the procurement process, there will be a need to disseminate background information to bidders (eg waste data, asset registers, property information, TUPE information, existing contracts). As part of pre-procurement planning, it is thus helpful to undertake "vendor due diligence", essentially asking the questions which a bidder will ask, in order to verify baseline information as complete and accurate, and to compile data in a useful format to give bidders confidence regarding its robustness.

3.6.1 Waste Data

Information about waste quantities and composition, covering a reasonable historic period (say 3 to 5 years) should be compiled and made available to bidders. So far as possible, waste input data should be broken down geographically (eg by WCA) and existing waste flows should be broken down by facility (eg individual HWRCs, MRFs, composters etc). Where waste composition data are being made available, the providence of the data should be carefully explained to enable bidders to assess its relevance (see section 3.3 above).

3.6.2 Asset Registers

It is likely that a number of assets will be transferred to a new private sector provider (either through their ownership being transferred, lease or licensing arrangements). It is thus important that the authority itself has a good understanding of transferring assets, verifying existing ownership arrangements, and makes asset information available to bidders:

- **Plant** – the authority should compile a list of all fixed plant it intends making available to bidders, including details of the age, original purchase price, current value along with information regarding any maintenance arrangements;

- **Vehicles** – where an authority has vehicles which have a useful remaining life, these can be made available to bidders. If vehicles are leased, the authority should ensure that any leasehold arrangement is transferable.

3.6.3 Property Information

First and foremost, the authority should ensure that it has an appropriate interest in all sites it is making available to bidders to deliver the project, for the full duration of the project. Freehold and/or leasehold arrangements should be checked as appropriate, and it necessary leases extended to cover any new contract period. As part of this exercise, the authority should also ensure that it has any necessary rights (eg access) on land around any sites.

Expert internal or external legal support should be used to support this exercise.

3.6.4 TUPE Information

The first stage of the process is to identify those staff that may be affected by the procurement of a new contract:

- **Authority Staff** – the authority should identify any services which it currently delivers itself, responsibility for which will transfer to the new private sector provider.

- **Existing Service Provider** – the authority should write to all existing service providers requesting a list of those staff who the existing provider considers may be impacted by the new contract.

For all staff that could be potentially affected, summary TUPE information regarding terms and conditions of employment should be collected, collated and made available to bidders.

If staff members are being outsourced, the authority will need to make strategic decisions regarding future pension provision.

3.6.5 Existing Contracts

It is possible that a new project may not represent a clean break from existing services, and that they may by necessity be some overlap of certain aspects of the contracts. Real examples include landfill and operation of certain HWRCs.

The authority should maintain a register of all its existing contracts which should include information about the scope of the services, any contractual obligations (eg exclusivity, potential to extend), and expiry dates. This register should then be interrogated in order to identify any relevant contracts where there may be overlaps.

It is also possible that the procurement process could take longer than planned, resulting in a need to either extend existing contracts or put in place short-term interim contracts. A contingency plan should be development to cover this scenario, such that the authority knows when and how to act should this be required.

4. Sites and Planning

Ultimately, the delivery of any project involving the development of new waste treatment facilities will require planning consent to be granted for a particular site. Planning failure can have a major impact on the procuring authority, either because it can hinder a procurement process or can frustrate the fundamental delivery of the project. It is thus vital that procuring authorities understand and have minimised, so far as possible, the associated risks which can broadly be summarised as:

- **Waste Local Plan** - Ensuring that there is a suitable waste local plan in place;

- **Sites** - Ensuring that proposed facilities are developed on suitable sites, consistent with the waste local plan;

- **Planning Application** - Ensuring that any planning application is based on sound input data and a robust options appraisal process (eg BPEO/SEA – see section 3.5.4).

Overall, planning and procurement risks are likely to be minimised if suitable sites are made available to bidders, which have been allocated in an approved site-specific waste local plan, supported by an initial BPEO/SEA appraisal which has identified a number of high-scoring options which could be delivered at the site, all backed up by robust baseline environmental data about the site to support any planning application.

It is acknowledged that most authorities will not be able to meet this ideal; guidance is therefore provided in respect of each component of this overall strategy below.

Waste Disposal Authorities are generally also the Waste Planning Authority which can give rise to actual or perceived conflicts of interest. This can thus be the subject of scrutiny, particularly if planning officers are recommending approval of a planning application for a NWTF which is part of a WDA's project. Once a procurement process has started, it is important that the WDA treats the planning authority as a separate body (eg as if it was another Council) with whom it will consult and engage, but ultimately forms its own independent view about planning issues and risks. This again emphasises the need for the MWMS and the waste local plan processes to be aligned in advance of the initiation of the planning process to minimise the risks of downstream planning delays or a refusal.

4.1 Waste Local Plan

There is significant variance in the status and content of waste local plans. Plans are typically either "criteria-based" or "site specific", with recent planning guidance advocating the latter. The currency of existing waste local plans also varies, and a number of authorities may be at some stage of the process of developing a new waste local plan.

It is important for any authority's existing waste local plan to be aligned with its existing MWMS, since both form important foundations to support the procurement process. If the two documents are inconsistent, careful

consideration should be given to updating the Waste Local Plan in advance of the procurement process if unacceptable planning risks are to be prevented.

If the authority is some way off developing a site-specific waste local plan, it is likely to have to rely on an existing plan, although other planning frameworks may be in place. Under these circumstances, the authority is likely to have little option other than to accept the resulting planning risk.

If the authority is close to finalising a site-specific waste local plan, for example it may be going through a public inquiry, there may be some merit in delaying the procurement process until the waste local plan process has substantially run its course. This will enable the procuring authority to proceed with confidence that the selected sites will not fall out of the waste local plan.

4.2 Sites

The location and acquisition of suitable sites on which to develop waste management facilities has been problematic in a number of projects. Furthermore, in some parts of the country, suitable sites are under the control of a single waste management company which can suppress competition.

In order to provide a level playing field and thus promote the project to the market, it is good practice for the procuring authority to secure rights to one or more suitable sites. These should preferably be sites specifically identified in the waste local plan, or sites consistent with the waste local plan criteria. The sites should also be located in areas consistent with the delivery of the strategy, which generally means that they should be located close to the waste which will be delivered to them.

The interest which the authority may secure could involve site acquisition, a leasehold agreement, although both of these will require a substantial investment and the authority will need to be satisfied with the strategic merits of the sites. A lower cost (and risk) option would involve entering into an option to acquire or lease the site which would be entered into as and when the use of the site was confirmed during the procurement process. The term of any lease should be at least the duration of the project with an extended time to allow for project extensions and/or decommissioning of any facilities. However, consideration should be given to even longer lease periods to allow for the ongoing use of sites with established waste management usages well beyond the project duration.

Prior to acquiring an interest in sites, authorities should undertake appropriate property and environmental due diligence. Any reports prepared by third parties should be commissioned with a view to allowing a successful bidder (and funder) to rely on their content.

In some circumstances, the authority may not be able to procure suitable sites due to them not being commercially available. There are two particular circumstances which need to be considered:

- **Multiple ownership of suitable sites** – in some locations, a number of suitable sites may exist with a variety of ownerships. If this can be demonstrated, for example through property searches and soft market testing, then the authority may be able on the market to provide genuine competition whilst delivering its waste management strategic objectives.

- **Sole Provider** – in other areas, the number of suitable sites may be small and they may all be controlled by a single provider who is unwilling to transfer its interest in the site to the authority as this may erode competition. Under these circumstances, the authority may have little option other than to pursue or threaten to use its compulsory purchase powers if it wishes to promote a competitive procurement process. The authority needs to balance the associated cost and risk issues associated with the inherent delays with the potential erosion in value for money associated with the loss of competitiveness.

4.3 Planning Application

Whilst the authority can take the planning process a certain way through its waste local plan process, ultimately the private sector provider will need to submit a planning application. In particular, outline planning consent is not available for waste treatment facilities and regulations 3 and 4 of the Town and Country Planning General Regulations 1992 create complexities in a private sector provider benefiting from a planning consent obtained by the authority (in any event, the authority needs to exercise caution in submitting an application before it had a preferred bidder as this could be prejudicial to the procurement process).

Bidders are unlikely to wish to incur the associated costs and risks of a planning application in advance of being defined as preferred bidder; accordingly unless the authority is prepared to accept the cost of submitting at least two planning applications from separate bidders, and the inherent impact of publicly progressing more than one planning consent a the same time, the planning application is unlikely to be progressed before a preferred bidder is assigned. These issues are discussed in detail in the procurement pack.

4.3.1 Environmental Impact Assessment

An Environmental Impact Assessment (EIA) is frequently required as part of the planning process and is a necessity for NWTFs of any scale. The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI No. 293)) can be viewed at
www.legislation.hmso.gov.uk/si/si1995/uksi_19950418_en_1.htm

'Environmental Impact Assessment: A guide to Procedures' can be found at
www.odpm.gov.uk/stellent/groups/odpm_planning/documents/pdf/odpm_plan_pdf_026667.pdf

4.3.2 Baseline Environmental Information

Both the EIA and Pollution Prevention and Control (PPC) Regulations require baseline environmental data for the sites to be obtained. This could include, for example, baseline information about ecology, archaeology, ground conditions, hydrology and hydrogeology, noise etc.

Given the likely programme implications associated with acquiring information (eg annual ecological surveys may be required), if a site is being made available, there may be considerable merit in this information being obtained by the procuring authority and made available to bidders since the basic information requirements for a particular site are likely to be the same for all bidders.

If external reports are prepared, these should be procured in such a way that the preferred bidder can rely upon and use the associated information.

5. Partnering

There are a wide range of potential partnering options available to authorities seeking to procure major waste projects, many of which have existing exemplars:

a) Semi-integrated projects, involving partnering between a WDA and its constituent WCAs where the WCAs act as collection agents and deliver (some or all) collected waste to the WDA. This represents the main type of major project procured to date (eg East Sussex, Hampshire, Gloucestershire);

b) Treatment and disposal contracts jointly procured by unitary authorities, for example Central Berkshire (Reading, Wokingham and Bracknell Forest);

c) A combination of a) and b). For example, Lancashire are currently leading the procurement of a project which also includes the WCAs and two Unitary Authorities (Blackpool and Blackburn with Darwen);

d) Statutory Waste Disposal Authority projects where the collection agents are unitary authorities whose waste disposal functions have been integrated by statute (eg East London, Western Riverside, Greater Manchester);

e) Integrated projects, involving co-procurement of collection, recycling, treatment and disposal services by a WDA and its constituent WCAs. Shropshire Waste Partnership is an example of such a project.

Some of the benefits of partnering between various bodies are summarised in the table below:

WDAs partnering with WCAs	**WCAs partnering with WDAs**	**WDAs partnering with WDAs**
Optimise balance between collection and disposal solutions in landfill diversion Long-term security over feedstock to facilities Management of interface risks	Long-term security in delivery points Long-term security in end markets for compost and recyclate Access to DEFRA grant support (which is increasingly being targeted at partnerships) Input to key decisions and avoidance of direction from WDAs	Larger project should enhance market appetite, particularly for smaller WDAs Economies of scale in the procurement and implementation of a combined project Optimise use of available sites

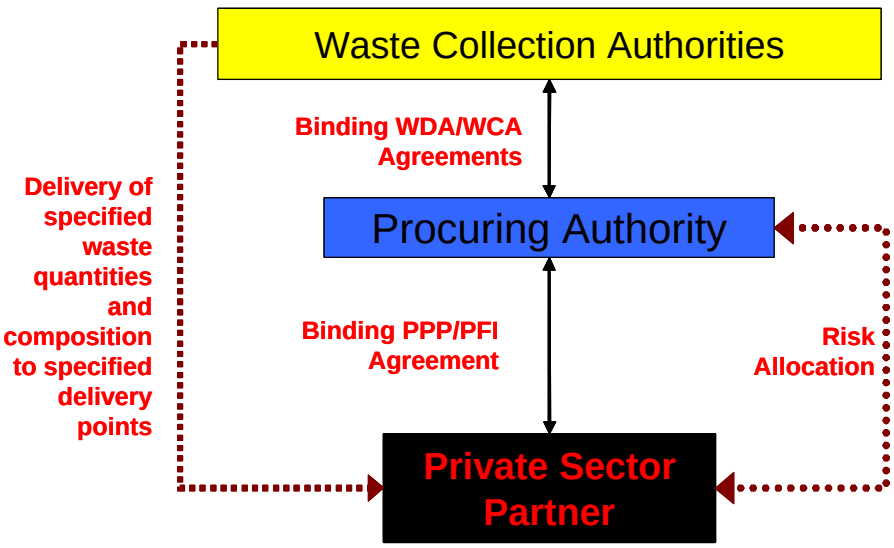
These issues need to be balanced against potential disadvantages of partnering. For example, where authorities are working together, there are likely to be some complexities in cost and risk allocation and a need for streamlined decision making. Some authorities also need to address issues of sovereignty and mutual political risk if the benefits are to be realised.

5.1 WDA – WCA Partnering

In two tier authorities, the action of WCAs can have a direct impact on the deliverability of a contract being procured by a WDA:

- waste delivered to facilities by WCAs is likely to be subject to quantity and composition constraints in the contract between the WDA and the private sector provider;
- the actions of WCAs (through source segregation) is likely to be critical in diverting a considerable amount of BMW from landfill, one of the key requirements a WDA will be seeking to mitigate through a contract.

Clearly, the WCAs will have a key role in determining the material which will be delivered, and in the context of value for money being optimised through risk being borne by the party best able to manage it, there is considerable benefit in the WCAs being made responsible for their actions in terms of what they collect and deliver to facilities. WCAs will thus be key stakeholders to the procurement process. It is also likely that, in order to satisfy all parties that there is some basis for assumptions regarding what wastes will be delivered to what facilities, WCAs will have to enter into some sort of agreement (probably with the WDA) as the procurement process proceeds. This is summarised diagrammatically below:



This end game should be borne in mind at all stages of pre-procurement planning and engagement with WCAs. Nonetheless, it is important that discussions between authorities are based on two premises:

- mutual trust that all authorities will act in a way which is fair and equitable to each other;
- in terms of cost and risk, putting the overall interest of the Council Tax payer ahead of the interests of individual authorities.

If this approach is not followed, WDAs are likely to be left with contractual risks to deliver wastes of a specified form and quantity to facilities, and LATS risks if WCAs do not divert waste from landfill to the planned level. Under these circumstances, WDAs may feel forced to mitigate these risks through the use of

powers of direction, although this is generally perceived to be an undesirable outcome for all parties.

Development of true partnering between authorities is a highly complex area which is beyond the scope of this guidance. However, various stages in the engagement between WDAs and WCAs, representing the minimum requirements for delivering a semi-integrated project in two-tier areas, are summarised below. Some authorities have taken the concepts discussed further to develop integrated project which combine collection, recycling, treatment and disposal into a single project.

5.1.1 MWMS Development

During the development of a MWMS, the various authorities should have been working constructively together to develop waste strategies and action plans. The outcome of this process should be the fundamental basis upon which the procurement progresses. In defining the MWMS, it is thus important that various parties are comfortable about their role in delivering the strategy.

5.1.2 Pre-Procurement Engagement

Prior to any procurement process, WDAs should engage with WCAs in order to:

- Understand the baseline position, in order to ensure that the WCAs' current activities are accurately represented;
- Confirm source segregation plans, defining the quantities of various types of recyclable and organic wastes which are planned to be collected over the contract term;
- Agree policies regarding WDA delivery points for wastes collected by the WCAs. This becomes increasingly difficult as existing facilities (eg landfills) close and future waste management operations become increasingly complex;
- Understand any WCA's constraints, for example identifying whether there are any existing contractual commitments or services which the WCA is responsible for providing which it may want to do differently;
- Identify any services which the WCA is responsible for delivering which it may want to include in the project;
- Confirm principles related to inter-authority cost sharing arrangements.

If WCA services form part of the service, a mechanism to ensure vires in procurement will need to be put in place. This is likely to comprise a lead authority taking responsibility for procuring the contract, with appropriate back-to-back agreements with all other affected authorities, defining responsibilities and confirming cost and risk allocation mechanisms.

Political approval from all authorities is likely to be required at this stage in order to secure key project foundations regarding the role of all the authorities in delivering the project.

5.1.3 The Procurement Process

It is usually helpful for representatives of the WCAs to be involved in the procurement process itself, with a particular role in helping the project team understand WCA issues, and providing information for bidders regarding the interfaces with WCAs delivering wastes. This role is likely to include:

- Assisting in drafting specifications regarding interfaces with WCAs;
- Developing waste acceptance criteria and protocols;
- Evaluating the impacts on WCAs associated with various bid submissions.

5.1.4 WDA – WCA Agreement

Ultimately, there is likely to be a need for inter-authority agreements defining a working framework and identifying cost and risk sharing mechanisms. Such an agreement will need to include the following commercial issues:

- Assumptions regarding source-segregation activities and levels of performance for WCAs;
- Commercial arrangements if collection agents fail to meet specified levels of performance;
- Funding of WCA activities over and above statutory targets;
- Treatment of assets;
- Requirements for WCA delivery points throughout the contract period, including contingency arrangements for planned and unplanned shutdowns;
- Contract change obligations, for example if WCAs wish to change their collection arrangements;
- Apportionment of default liabilities, for example if there are problems with waste acceptance arrangements;
- Allocation of recyclate revenues;
- Any staff management issues.

Whilst such agreements will need to define the circumstances which prevail on the date of its execution, they also need to embed the principle of flexibility in order to respond to evolving circumstances, with change procedures aligning with those in the contract between the WDA and the private sector.

5.2 WDA – WDA Partnering

If two or more WDAs are working together, many of the same issues highlighted above, for example regarding joint working arrangements and development of the MWMS continue to apply; in particular, cost allocation and contractual relationships are likely to be the most significant issues. These issues would also apply in situations where WCA services are being procured along with WDA services in a single procurement process.

5.2.1 Cost Allocation

The partnering WDAs firstly need to be clear about the services they will be procuring. If these are identical then commercial arrangements between authorities are likely to be relatively straightforward; where there are variances, there is likely to be a need for auditable allocation of costs to reflect the actual services which are being provided to each authority. Otherwise, there is a risk that one authority may be perceived to be subsidising another. There are two principle mechanisms by which costs can be disaggregated:

- **Separability in payments to the private sector provider** – this involves the payment mechanism being able to separate those charges which apply to each authority. Depending on the variance in the scope of services, this can result in the payment mechanism being highly separable which, in some circumstances can lead to administrative complexities, inefficiencies within the payment mechanism and, in some circumstances could give rise to accounting treatment difficulties. There is also a risk that the contractor may structure his payments in a way which may not be representative of the true costs involved in managing each authority's wastes.

- **Agreed apportionment of total costs payable to the private sector** – this involves a pre-defined agreement between the parties regarding how the total costs payable to the contractor will be allocated, and thus does not impact on the structure of the payment mechanism. This allocation could typically be defined based on a public sector comparator of costs, linked to a forecast of what each authority believes it will contribute to the project. With this mechanism, there is a risk that the allocation could become inaccurate as the project develops, particular if waste quantities and compositions substantially vary from forecast, although review mechanisms can be included to protect against this eventuality.

5.2.2 Contractual Relationships

Where two or more WDAs are jointly procuring a contract with a single private sector provider, there are a number of potential contractual mechanisms which could apply between the parties:

- **Joint procurement of a single contract** – in this scenario, there would ultimately be one single contract between all of the parties, in which the individual authorities would be jointly and severally liable for each others actions. The authorities are thus likely to require back-to-back agreements providing individual authorities with protection in the event of default of other authorities. This option may lead to complexities in contract administration arrangements between the WDAs.

- **Procurement of a single contract with a lead authority** – in this scenario, a lead authority would act as the procuring authority on behalf of all of the partners. Each authority will need to have formally approved this arrangement and delegated appropriate responsibilities to the procuring authority. Again, there will be a requirement for back-to-back agreements clarifying the roles and responsibilities of all of the authorities. Contract administration arrangements are likely to be more straightforward.

- **Procurement of separate contracts** – this would involve authorities procuring individual contracts through a common procurement process. Each

authority would then be able to protect its position through individual contractual arrangements with the private sector provider. This mechanism takes advantage of economies of scale associated with the development of new facilities but is not efficient in procurement or contract administration terms. There is also potential for the private sector provider to play off one authority against others.

6. Market Appetite

At present, there are a large number of projects coming to market and a limited number of companies with the appetite and capacity to bid. As a result, companies are being highly selective in identifying projects they will bid for, with decisions based upon:

- where they believe the project will be successful, as demonstrated by the procuring authority's:
  - preparedness;
  - quality of documentation;
  - level of resources;
  - experience of the project team.
- where they believe have a strong chance of success, for example:
  - where they are the incumbent;
  - where they own suitable sites.

These issues can severely limit competition for waste management projects.

Furthermore, the companies who are strategically interested in a particular project may have policies related to technology or project scope (eg collection) inconsistent with that of the authority. It is thus imperative that, in advance of initiating a procurement process, the authority has undertaken a soft market testing exercise to confirm the appetite of the market for the project it wishes to procure.

6.1 Soft Market Testing Process

This is the opportunity for the authority to sell the project to the market as well as get feedback from potential bidders. It is thus important that the authority is well prepared for soft market testing, demonstrating commitment and competence to the market.

- **Preparation** – information about the project and issues where the authority is seeking market consultation should be dispatched to attendees in advance of any soft market testing event.
- **Authority participation** – the authority should ensure that there is a welcoming address by a key member or chief officer demonstrating commitment to the project; other potential areas for presentation include waste strategy, partnership, waste local plan/sites as well as key project issues.
- **Consultation process** – it is unusual for potential bidders to raise relevant issues or respond to authority questions in a plenary session. It is thus helpful to organise one-to-one meetings with individual companies to facilitate discussion of key aspects of the project. This is useful to clarify issues before receiving a formal response from consultees.

- **Who to invite** – given the suggested nature of the consultation process, it is not practical to invite everybody. Consultees should thus be targeted, for example based on:

    - Waste management companies who have a particular geographical or other strategic interest;

    - Technology providers who offer solutions consistent with the authority's MWMS;

    - Possible new providers who are known to have a relevant interest.

If a project planning process is delayed for any reason, or if the authority's thinking develops through the project planning stage, there may be a need to revisit the soft market testing to ensure that decisions are based on up to date and relevant information. If this is required, the associated impact on the market needs to be considered, for example by seeking further clarification from previously consulted parties rather than initiating a whole new soft market testing process.

6.2 Scope of Soft Market Testing

The soft market testing process should seek feedback on general market interest about the project, as well as consulting on key project issues/risks and giving potential bidders an opportunity to express their views about how the project should progress, for example:

- Preferences for the scope of the contract (eg services to be included/ excluded);

- Preferences for technologies;

- Preferences for type of contract (eg PFI, PPP, DBO);

- Preferences for duration of contract;

- Views on risk sharing/transfer (eg Planning, waste quantity and quality, technology, recyclable markets/revenue);

- Views on provision of sites;

- Preferences for recycling and landfill diversion targets.

7. Affordability

It is now widely accepted that the cost of future waste management will be significantly greater than existing costs. There can also be a number of uncertainties and risks in project costings, for example in areas where policy and markets are still developing, which have resulted in the cost of a number of recent waste management projects being underestimated. In order to ensure that the procurement process can progress efficiently, in the absence of surprises regarding costs which could necessitate re-scoping or re-budgeting, it is imperative that the authority has a clear idea of project costs, with appropriate budgetary approvals in place.

The financial modelling and affordability assessment process is described in detail in Part 2, Section 3 of the 4Ps waste procurement pack, and summarised below. The first step of this process is to develop a reference project, based on the MWMS and derived from an appropriate options appraisal exercise, which sets out the scope of the project the authority would procure if doing it itself. This should set out:

- **Waste flows** through various facilities for the life of the project;
- **Capital Expenditure** which should be phased to reflect likely construction periods – this should cover the cost of any new assets (including land costs) as well as any refurbishment of existing assets.
- **Lifecycle** (maintenance) costs, considering replacements over the full contract period;
- **Operating Costs**, consistent with the anticipated waste flows through each facility;
- **Revenues** from the sale of recyclate, energy or the use of facilities by third parties;
- **Collection costs** - impact on collection systems, including the costs of new rounds, replacement vehicles and receptacles (even if the project does not include collection, the WDA may still need to pay monies (eg recycling credits or an alternative) to the WCA and it is often helpful to consider project costs holistically;
- **Transport costs** – costs of waste transportation are increasing as collections become multi-material and waste management facilities become increasingly focussed; as a result transport costs can be significant;
- **Landfill Tax** – based on the forecast tonnages to landfill and the anticipated prevailing rate. This should include any residues from any waste processing or treatment process which go to landfill;
- **Tradable Allowances** – the project may necessitate the authority having to purchase LATS at certain times or may generate LATS to sell. The quantity of LATS should be calculated from the waste flow modelling, in line with the methodology which will be used by the EA.

Overall, it is sensible to use prudent assumptions in advance of the procurement process, allowing a reasonable level of contingency to cater for uncertainties. Cost models should be calculated on at least an annual basis over the life of the project.

Sources of cost data could include:

- Existing costs associated with delivering the service;
- Cost data obtained from other authorities who have recently procured similar services;
- Cost data-bases held by advisers;
- Publicly available information, for example the EA's waste technology data centre: http://www.environment-agency.gov.uk/wtd/
  Caution should be used in the use of such databases, for example ensuring that costs are current and include the full costs of delivering the project (eg civils/building costs as well as technology costs).

Having understood the basic project costs, costs of funding the required capital investment also need to be considered. This could either be the cost of private sector financing, in which case a "shadow private sector" model will need to be developed (probably by a financial adviser) or the internal cost of capital (eg prudential borrowing) if this is the chosen funding route.

Finally, the expected cost of risk associated with the project should be considered in line with recommendations set out in HM Treasury's "Green Book". Further guidance is available at: http://www.hm-treasury.gov.uk./media/D5E/29/96.pdf

If, following this analysis, the Authority has an unacceptable affordability gap, then the scope of the contract (specification, risk transfer) may need to be reconsidered, although the potential for change may be limited. In such analyses, it is important that consideration of the comparative cost of the project and the "do nothing" scenario is considered.

8. Project Management Arrangements

Part 3 of the 4Ps waste management procurement pack provides detailed guidance on good practice in project management arrangements to support the delivery of waste management projects, which are summarised in this section. The scale and complexity of waste management projects requires significant project management resources to be allocated. This can include substantial internal resources as well as targeted external advice. Furthermore, procurement timetables are generally inconsistent with committee and cabinet dates.

8.1 Project Sponsor

In order to facilitate streamlined decision-making, it is good practice to set up a project board in advance of a procurement process, with appropriate delegated powers to make key decisions at various stages (although there is still likely to be a requirement for Executive approval at key stages, eg procurement initiation, preferred bidder).

The Project Board is likely to be led by the Project Sponsor (probably the chief officer responsible for waste management) with other high level representation from financial and legal officers. It should also include member involvement comprising the portfolio holder for waste management, plus others as appropriate. Consideration should also be given to cross party support to ensure that the project is apolitical.

8.2 Project Director and Project Manager

The project director will effectively become the lead negotiator for the authority with delegated authority to “do the deal”. In this role, he should be supported by a dedicated project manager, who should be responsible for coordinating the delivery of the project and reporting to the project board. Given the scale and complexity of major waste projects, this is likely to be a full time position from the pre-procurement planning phase, through the complete procurement process and ideally into the mobilisation phase.

It is now commonplace for major projects to be managed through the Prince2 methodology but this needs to be applied pragmatically given the size and complexity of a waste project.

8.3 Procurement Team

The project manager should be supported by other officers which, as a minimum should comprise:

- Financial support, typically the officer responsible for managing the waste management budget;
- Legal support;
- Procurement support;
- Insurance support;

- Waste management expertise.

Where the authority has experience of delivering major projects in other sectors, it is useful for relevant officers to be represented on the project team to ensure that the authority's past experience is captured.

It is also likely that scrutiny arrangements will result in the internal audit department having an oversee role of the activities of the project team.

8.4 Advisers

It is likely that authorities will need specialist external advice in the following areas:

- **Legal** – to provide support as required on the management of risks associated with the procurement process itself and on the drafting of the contract documentation.

- **Financial** – preparing financial models, developing value for money commercial solutions and ensuring (where appropriate) that accounting treatment requirements are met.

- **Technical** - to provide specialist input on waste specific issues, including technologies, design and construction, waste flow and cost modelling.

- **Insurance** – specialist advice on insurance provisions associated with major waste projects is likely to be required.

8.5 Project Timescales

Local authorities often have unrealistic expectations of project timescales. Lead times associated with preparation, procurement, planning, design and construction mean that it is often several years before a waste management facility can be operational, as follows:

- Pre-procurement planning can take between 6 months and 2 years depending on the status of key project foundations (eg MWMS, Waste Local Plan) and the quality of baseline information;

- If external approvals are required, this can take approximately 6 months;

- The procurement process itself could reasonably be expected to last between 20 and 30 months, depending on the complexity of the project, the preparedness of the authority and the strength and efficiency of project management arrangements;

- Obtaining planning consent will take a minimum of 7 months (including any judicial review period). In a worst case scenario, including a protracted appeal process, this could be in excess of 5 years;

- Facility construction and commissioning is likely to take between 18 months for a relatively straightforward facility up to 42 months for a large complex facility.

The minimum time period up to the time when a new facility is completely operational is thus 4 years, with potential risks that this timeframe could be

significantly extended if the fundamental project foundations are not in place, external funding is sought, the planning process is protracted and/or major facilities are being procured. These timescales all need to be factored into the project plan and timetable.