Guidelines for Public Procurement in Municipal Waste Management

Part-financed by the European Union (European Regional Development Fund and European Neighbourhood and Partnership Instrument)

This report has been produced with the assistance of the European Union. The content of this publication is the sole responsibility of the RECO Baltic 21 Tech project consortium and can in no way be taken to reflect the views of the European Union.
Foreword

RECO Baltic 21 Tech, a flagship project in the European Union Baltic Strategy, has the objective to improve the waste management situation in the Baltic Sea Region (BSR). This can be done by fostering sustainable investments and by ensuring that public tenders attract bidding companies and lead to a competitive market where quality and innovative ideas are accounted for.

RECO arranged a workshop; “The art of public procurement in municipal waste management” in Riga, January 2013. The objective of the event was to get stakeholders together and to raise the capacity of municipalities, regions and other forms public bodies in the BSR to make high quality procurements in municipal waste management. RECO would like to thank the participants of the workshop and especially those that joined to present their work in public procurement and waste management; Daniel Sköld and Peter Nohrstedt from the Swedish Environmental Management Council, David Hall from the Public Services International Research Unit, University of Greenwich, Līga Nielande from Ltd NK Konsultants, Edgars Pārpucis from Ogre municipality, Jan-Olof Åström from UMEVA and Rūta Bendere from the Latvian Waste Management Association.

Following the workshop, this document has been produced for municipalities responsible in BSR region for the coordination and organisation of municipal waste management systems. By presenting important considerations and actions in the procurement process this document is a first step to orientate the municipalities in their search for the right tools in public procurement and to raise awareness of the importance of conscious procurements.

The author would like to acknowledge Harri Moora, Mathias W. Alisch, Robert W. Dahlström, Kertu Tiitso, Edgars Pārpucis, Andrius Jučas and Jan-Olof Åström for valuable insights and contributions to this document.

Malin Stare

IVL Swedish Environmental Research Institute
Stockholm October 2013
# Table of Contents

**Introduction** ......................................................................................................................... 2  
**Step 1: Have a clear starting point** ..................................................................................... 8  
  - Make sure the problem owner is properly clarified................................................................. 8  
  - The municipality needs to be empowered.............................................................................. 11  
  - Consider the economic framework.......................................................................................... 11  
  - See the system as a whole......................................................................................................... 11  
  - Choosing procurement expertise ............................................................................................ 12  
  - Considering green and sustainable objectives ........................................................................ 13  
**Step 2: Put enough effort into the preparation phase** .......................................................... 15  
  - Define the needs........................................................................................................................................ 15  
  - Investigate the market .................................................................................................................. 15  
  - Consider using a package-solution ............................................................................................... 16  
  - Collaborate with other municipalities ......................................................................................... 16  
  - Set up requirements and criteria to enable analysis of the proposals ................................ 16  
  - Choose evaluation model or decision support tool ............................................................... 17  
  - Estimate value and time frames ............................................................................................... 18  
**Step 3: Write a good tender document** ............................................................................. 19  
  - Use templates ............................................................................................................................ 19  
  - Work careful to formulate specifications and terms of reference ........................................ 19  
  - Use incentives for the contractor ............................................................................................... 20  
  - State the evaluation criteria and the evaluation model clearly ............................................. 20  
**Step 4: Get the best supplier** ............................................................................................... 21  
  - Publish call for tender and advertise your procurement ...................................................... 21  
  - Receive offers from potential contractors ............................................................................ 21  
  - Exclude and qualify proposals ................................................................................................. 21  
  - Evaluate the proposals ............................................................................................................ 22  
  - Award the contract .................................................................................................................. 22  
**Step 5: Do not forget the important and long-lasting phase of monitoring** ....................... 23  
  - Procurement in Tallinn City, Estonia ....................................................................................... 24  
  - Procurement in Ogre Municipality, Latvia ............................................................................. 28  
  - Procurement at Alytus Regional Waste Management Center (ARWMC), Lithuania ............. 32  
  - Procurement at Umeå Water and Waste Ltd (UMEVA), Sweden ............................................ 36  
**Summary and recommendations** .................................................................................... 40  
  - Useful websites ....................................................................................................................... 41  
**References** ......................................................................................................................... 42
Target group of the guidelines

Municipal waste is primarily a local public sector responsibility and this document is addressed to public agents responsible for municipal waste management in the Baltic Sea Region. The responsible agents in the region differ from local authorities to other public bodies such as inter-municipal cooperative organisations and municipal, inter-municipal or regional companies.

The municipality is the main term chosen in this document to address all the agents that have a role of responsibility for the municipal waste and that are obliged to carry out public procurements, as opposed to the private agents involved in waste management through business contracts.

How to read the guidelines

This document is giving an overview of the public procurement process in order to give municipalities inspiration to continue to evaluate and develop their skills in procurement.

The introduction gives a brief description of the work with public contracts and the statutory framework.

The core-chapters present the practical steps of public procurement. These steps are identified by RECO as important to highlight in this context. While reading the recommended steps and advices it is wise to keep in mind that the document does not intend to be all-embracing as procurement in the waste management sector is a broad issue including different types of investments, services and products as well as different local situations and country-specific legislations.

Local examples of the use of public procurement are found at the end of the document. The examples from Estonia, Latvia, Lithuania and Sweden are included in the document to illustrate how different municipalities choose to organise and work with their waste management system.

The example from Tallinn City illustrates how a municipality has introduced a new administrative system to get control of the local waste management system. Besides working with procurements, Tallinn collects fees and manages the collection of customer data. Their way of embracing and organising the system is not common in the rest of Estonia. The Tallinn case is similar to the Swedish situation where the municipalities have a good control over the system. The Swedish municipal company UMEVA is interesting as it engages actively in collaboration with municipalities in their region. Furthermore, UMEVA is part of the Procurement Group of The Swedish Waste Management Association and is also participating internationally to teach others about waste management and procurement.

The example from Alytus Regional Waste management centre illustrates the typical Lithuanian situation where the regional waste management center administrates the system, invests in and owns treatment facilities but outsources the operation of these facilities. The example from Ogre municipality illustrates a more liberal system, where most of the services (administration including maintaining waste generators register, collection of fees, collection, treatment and investment into facilities) are outsourced to the private sector with long term concession contract. The example shows that concession and new forms of collaboration can be used in small and/or rural municipalities to achieve the goals of waste management.

In the last chapter of summary and recommendations RECO presents recommendations for future work in the field of public procurement in waste management in the Baltic Sea Region.
Introduction

Municipal waste is primarily a local public sector responsibility and includes first of all organizational but also the practical aspects of transport, treatment and disposal. The European Commission’s Roadmap on a resource efficient Europe (European Commission, 2011) and the EU’s Waste Framework Directive (European Parliament and Council, 2008) address the issue of improved waste management as an essential element to make Europe more resource efficient. To strive towards an increased resource efficiency waste management needs to be shifted up the waste hierarchy by reducing landfilling and focusing on waste prevention, reuse, recycling and recovery (Figure 1). Although the majority of countries still landfilled more than half of their municipal waste in 2010 there is a trend of a shift away from landfilling and an increase in the proportion of recycled municipal waste. Nevertheless, the majority of countries in Europe will need to make an extraordinary effort in order to achieve the Waste Framework Directive’s target of 50 % municipal waste recycling by 2020 (European Environmental Agency, 2013).

Figure 1: EU’s Waste Hierarchy as presented in Being Wise with waste (European Commission, 2010)

Today there is no obvious solution how to develop an economically affordable, environmentally effective and socially acceptable municipal solid waste management system. Large amounts of public money, from the European Union are spent for waste management in the Baltic Sea Region-countries. This spending should be done the best possible way to cover the short-term, local needs and objectives as well as reaching long-term goals aiming for a more sustainable future. The European Environmental Agency states that the current economic situation in many EU Member States demands an added focus on how to achieve policy goals most cost-effectively (European Environmental Agency, 2013). The context will influence the ability for a local municipal to operate freely to create perfect waste management solutions. The RECO-project has uncovered that resources in the BSR might be scarce to make lasting and sustainable investments. The lack of well-functioning organisations and clear divisions of responsibilities make it more difficult to carry out successful procurements.

However, the key issue is that local politicians and officials, in any political or economic context, have the opportunity to make a change when they use purchasing power to gain better waste management and a more sustainable development. By doing this, they can set good examples and influence and increase the awareness of the business community and the public. The European Environmental Agency has found that there is substantial variation between the municipal waste recycling rates of different regions, indicating that regional and local policies have a significant influence on municipal waste recycling rates.
This shows the importance of regional and local implementation for achieving a better municipal waste management, based on the overall drivers consisting of EU targets and national targets (European Environmental Agency, 2013).

The waste management market

In all countries we find two competing institutional regimes; the public service and the market. The boundary between the regimes is changing from one country to the other but usually the public service regime is responsible for household waste and a fraction of commercial waste, varying from country to country. Most countries have also made steps to extend public service obligations to treatment facilities. The public service tasks are often appointed to the municipalities and they can be carried out in-house or by outsourcing to contractors. Besides the task under responsibility of the municipality there is the market regime, taking care of the rest of the commercial and business waste. Figure 2 shows how Antonioli and Massarutto (2011) picture the waste management system into three different markets. The municipality (called responsible entity in the figure) is usually not a responsible agent in the recycling market.

Antonioli and Massarutto (2011) explain that municipal waste management has evolved from a simple blue-collar service dominated by collection, to a complex industrial activity involving significant investments and divisions of labour, focusing on the post-collection phases of processing, recycling and disposal. As the complexity of the waste management sector has evolved the interest from the private sector to participate has been rapidly growing. A trend seen in the private sector is a change from small contractors (SMEs) to large integrated companies increasingly acting together with municipalities in Private-Public Partnerships (PPP).
1 million workers are employed in the EU waste sector. 200 000 of these employees work in the public sector and 200 000 in multi-national companies (Hall, 2013). Today public management is more often getting organised through corporate structures, under public or more frequently under private law establishments. Delegation to the private sector is diffused everywhere, but with higher market shares in Spain and in France (Antonioli & Massarutto, 2011).

The internal market

The European Union Strategy for the Baltic Sea Region has an Action Plan that states that the Baltic Sea region has a great potential to be a model region for green economy and to be world leading when it comes to the development of knowledge-intensive products and services, eco-innovations, as well as environmental technology. This would increase competitiveness and create new business opportunities that at the same time reduce negative environmental impacts. The Action Plan also claims that many Baltic Sea region countries have acquired considerable experience in the development of sustainable energy solutions and environmentally friendly technologies in waste management. However, the countries show great differences with respect to socio-economic developments and the implementation of sustainable practices.

The make use of the knowledge in the region it is desirable with cross-border procurement and also of raising the capacity of the local municipalities to better manage their business opportunities. Today most of the markets in the Baltic Sea Region are small, isolated and dependent on trade in the region to maintain their competitiveness, but the level of trade between the countries is not increasing as expected, according to the Action Plan of the European Union for the Baltic Sea Region (European Commission, 2013). Only a small proportion of contracts are awarded cross-border in competitions where the EU procurements rules apply. Between 2007 and 2009 1.6 percent of contracts were awarded to companies from other countries, accounting for a value of 3.5 percent of the total value of contracts. The direct cross-border procurement seems to be influenced by geography, history and common language. An Estonian example shows that as much as 35 percent of the contracts were awarded to companies abroad, and the country getting the contracts were Finland. This may indicate that these countries have similarities to ease the business opportunities (European Commission, 2011:4).

The European Union Strategy for the Baltic Sea Region has an Action Plan that proposes that opening up the public sector to competition will secure full access to the markets in the Baltic Sea Region and increase productivity in municipal services, such as waste management. If contracting authorities reach more potential bidders in larger market competitiveness is strengthened and job opportunities are likely to increase. The Action Plan contains an example of how establishing a BSR-network on green public procurement could be used to exchange good practice and experience in making Baltic Sea an Eco-efficient region. (European Commission, 2013).

The action aims at supporting the transition of the Baltic Sea region into a green region that results in ‘improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities’

Public Procurement in municipal waste management

Municipalities are the main institutions organising the municipal waste management in their territories. The responsibility of municipalities is to create effective municipal waste management systems including collection, disposal and treatment. This can be done either by the municipalities themselves through in-house arrangements or by procuring the services and involving the private sector. The local arrangements differ but in all cases the public agents are involved in public procurements of some kind. The responsibility includes a range of operations with different considerations regarding tendering.
Procurement is the complete process of acquiring goods, services and works. The process consists of considerations regarding formal regulations but also of expectations and needs of the municipality regarding the waste management services or products. The legislative part is considered a burden by many municipalities and public bodies, but the part of specifying the requirements in order to get the correct outcome of the acquisition or investment is usually more difficult. Competence in putting together the right requirements to get good deals comes with experience and it is difficult to formulate the perfect tender document, as you cannot foresee the future. The procurement includes a range of steps presented in figure 2.

Figure 2: The process of Public Procurement as presented in this document. Step 1 is the basic starting point and formally not a part of the procurement. The preparation phase or the pre-procurement work is explained in step 2, the implementation phase or the actual procurement is described in step 3 and 4 and the administrative phase in step 5.

Procurement is considered public when carried out by a public body or a contracting authority. A public procurement is governed by national legislation and EU-Directives.

Examples of procurements in the municipal waste management sector:
- Waste collection contracts
- Waste treatment services
- Transfer, transport and/or sorting of waste
- Consulting services (technical, economic, environmental, jurisdictional)
- Construction contracts
- Operation contracts
- Customer service and billing of customers
- Marketing and communication
- IT systems for planning and monitoring and support of them
- Purchase of containers, bins, bags, vehicles, scales, working clothes, chemicals and fuel
The EU Public Procurement Directives

Among the EU-Directives regarding procurement (2004/17/EC, 2004/18/EC and 2007/66/EC) the Directive 2004/18/EC is the most relevant for the municipal waste management sector. The intention of the Directives is to enable “good business” and to minimize corruption and favoritism. An objective is also to give companies possibilities to work in the European market regardless of national borders. To ensure fair competition and good deals large public contracts have to be run through an open competitive procurement.

The Directive concerns only contracts above a certain financial value, which are most likely to affect trade between member states. The reason for this is that companies working across national borders in the EU shall get information about business opportunities when high values are at stake. According to the commission’s evaluation report of the EU Public Procurement Legislation the EU Directives covers only 1/5 of total public expenditure on goods and services, which means that most of the contracts are below the value of the EU threshold. However, the general principles of the Directives have to be taken into account for all types of contracts, above or below the EU thresholds. The Internal Market and Services Directorate General is responsible for the application and general enforcement of the public procurement Directives (European Commission, 2011:2).

The common rules of the Directives that should be followed for all public procurement, regardless of economic value:

- The principle of equality (All suppliers must be treated equally)
- The principle of non-discrimination (No supplier should be discriminated)
- The principle of transparency (The procurement process should be predictable and transparent)
- The principle of proportionality (The requirements must be in proportion to what is purchased)
- The principle of mutual recognition (Certificates of member states must be accepted in other EU states)

The procurement Directives, like all Directives, need to be implemented into national law as they are not directly and automatically applicable to the member states. The National legislations should be formulated to reach the same objectives as the EU-directive. As long as the legislations are not in conflict with the Directives or with Treaty provisions the member states can apply national procedures. The Directives are binding only in terms of the result to be achieved (European Commission, 2012).

The national waste legislations include specific requirements related to waste management procurements and there are national thresholds when national laws require the full process of actions for Public Procurement. The economic value of the service, product or work to be purchased decides the extent of the process and a competitive dialogue or an open, restricted or negotiated procedure may be chosen. Information about national authorities and national legislations of the BSR countries are found in

Modernizing the rules of Public Procurement

The evaluation report of the EU Public Procurement Legislation concludes that the performance in procurement differs widely between Member states (European Commission, 2011:2). This suggests that there is considerable scope for improving the efficiency of the procurement administration in some Member States.

Carrying out a public procurement process successfully and effective is not easy and there are cases where authorities try to buy products and services with illegal direct award and there are cases where
formal steps are missed unintentionally. Even though public procurement is used to ensure good governance there might be risks of market distortions such as corruption, oligopolies and cartels. The administrative burdens provide an incentive to find loopholes, according to the Berlin-based Transparency International. Transparency International found that three out of five managers of small companies in the Czech Republic believe they have to resort to bribery and kickbacks to win a public contract (The EU Observer, 2013).

Suppliers that are not chosen for a contract have the right to appeal against the municipality. This is time-consuming but important to make sure the contracting authorities do not neglect the rules. The use of appeals should not be misused as a mean to delay the process. When national courts review cases between contracting entities and economic operators and the outcome shows that the member state has failed to fulfill its obligations, the contracting entity may be challenged directly by the Commission before the European Court of Justice (The Swedish Competition Authority, 2011). The Authority for the Supervision of Public Contracts was established with the aim of supervising public contracts to ensure compliance with principles of transparency, rightfulness and competition among operators in the public procurement market.

In December 2011 the European Commission produced a draft of revised directives on Public Procurement with the objective to simplify the process. (European Commission, 2011:3). The proposed changes aim at modernization of public procurement in the European Union and include the adoption of a directive on concessions, which has not been fully regulated at European level. New Directives are expected to come into force in June 2014 and this in turn will affect the national legislations.
Step 1: Have a clear starting point

A municipality needs clear visions of how to organize a sustainable municipal waste management system. This is usually defined in national, regional and local waste plans to help clarify the intended path of development. The frames for the waste management system are also defined in legal documents (waste management and procurement legislation). The municipality needs a stable organisation to enable putting waste management in a larger perspective; to gain benefits from energy recovery and source-separation. Different public and private set-ups of the municipal waste management are presented in this section to get an understanding of the basic choices of provisional structures.

Make sure the problem owner is properly clarified

At the Workshop held by RECO in Riga in the beginning of 2013 the issue of defining the problem owner was discussed and it seems that in some municipalities it may be unclear who owns the task of managing the municipal waste management. If this is not clear it is difficult to implement changes and start up development projects, as no institution feels the responsibility for the operations.

Defining and agreeing upon the share of public and private involvement is important to know who does what in the waste management system. Different solutions for set-up can be considered when trying to serve and fulfill local needs and improving the waste management.

Choosing outsourcing

The idea of Public procurement is to involve the private market in the public business to get healthy concurrence; a prosperous market and lower prices for services and products. The positive aspect of outsourcing and choosing to rely on private companies for supply of services is that the competence as a client is streamlined in the municipality, while the hired entrepreneur specializes in the performance of the procured service (European Commission, 2011:2). Although contrary to the objective, studies carried out by PSIRU show a tendency of outsourced operations being more expensive than in-house solutions because of the costs of tendering, monitoring and renegotiating incomplete contract (Hall, David 2013-01-24). If the procurement is done by professionals and the market-situation is favorable the risk of costly procedures and problems with contract is minimized.

When outsourcing is practiced the idea is to trust in the ability of the market to come up with innovative solutions and to respond to the new needs and specifications formulated by the authorities. Depending on the level of dedication and enforcement from the authorities outsourcing will lead to different outcomes, with a stronger emphasis on environmental or economic concerns.

Collaborative solutions can be used to make the process of procurement more effective and in cases where the contracting authorities are in favour of the market they may search to form Public Private Partnerships (PPP) instead of using standard outsourcing-contracts. These extended contracts include more than just provision of a service, as construction or financing of a capital investment are included as well.

Choosing Public Private Partnership (PPP) and concessions

Public Private Partnership (PPP) is a form of public procurement where a contract is awarded to a private company or consortium and their assignment is to design, build, finance and operate a public utility. The company invests capital at risk in the project and is reimbursed during the operational period when the service will be available to use. The purpose is to achieve better value for money between public and private sectors in which each party is responsible for what it does best. The public sector is responsible for defining investment priorities, the benefits to be delivered and the overall need for
investment in the community. The private sector chooses design, materials and construction methods. They also have to operate and maintain the systems.

Concession (for works and services) is the oldest and most common form of Public Private Partnership. When using the concession model the supplier will be paid completely or in the majority by the user of the service instead of by the municipality. The supplier takes a chance to derive income through the efficiency with which it is able to deliver the contract and the charges are passed on to the public. Service concessions fall outside the rules of the procurement Directives until the new proposal of Directives will come into force. This means that many contracts of concessions are awarded without proper tendering procedures. A PPP can either be excluded from the scope of the Directive or it can be a public contract or a concession contract, depending on the set-up of the partnership and agreements (SIGMA, 2011).

When public authorities are thinking of using a PPP to get a public service they have two central questions to consider:
- Is the PPP a better way of financing the capital investment involved than alternatives?
- Is the PPP a better way of operating the service than alternatives?

The estimated cost of a traditional implementation of a project can be used to assess whether the PPP project implementation is expected to provide more value for money than a traditional design. David Hall points to the importance that states making PPPs too easy or attractive for the companies distort a fair evaluation between a PPP and a public sector provision. David Hall, the Director of the Public Service International Research Unit in the UK, recognizes that the European Commission favours PPPs and private solutions even though EU claims to be neutral to public or private ownership. Hall points at the lack of systematic evidence that the private sector is more efficient than the public sector and that new and unknown conditions will arise in the future, which will lead to incomplete contracts. PPP’s and long-term contracts reduce the municipality’s power to control and to respond to future changes. On the other hand PPP’s enables better lifecycle focus as involved consortium has a long-term incentive for efficient resource utilization (Hall, Public-Private Partnerships (PPPs), 2008).

Choosing In-house management

The public-private share varies over countries and over time. Hall (2013) shows that 50 percent of the refuse collection in in France is carried out by the public sector and 24 percent in Spain. 10 percent of the disposal and treatment in France is managed in the public sector and 21 percent in Spain. In Sweden 29 percent of the municipalities carry out their waste collection in-house. 25 (78 percent) of the 32 incineration plants of Sweden are owned by municipalities through municipal companies. Four plants (12.5 percent) are entirely privately owned, two have shared ownership between the private and public sector and one is state-owned. 20 percent of the municipalities incinerate their waste in-house while 80 percent hire public or private contractors to manage this (Swedish Waste Association, 2012). The reason for the rather small percentage of in-house treatment in incinerators is probably the large-scale character of the disposal method, which means that many smaller municipalities are obliged to send their waste to large plats in other municipalities.

Hall (2013) claims that the average net total cost of waste collection is slightly lower (about 3 percent) for municipalities in the UK which operate an in-house service. Furthermore, empirical evidence from different parts of Europe does not support the assumption that private sector is more efficient. Hall states that after pressure to privatize and outsource public services since the 1980s there is a trend in several EU-countries towards increased service provision by the public sector. The PSIRU-report on re-munipalisation found that reductions of costs and greater efficiency were the most important factors to bringing the service back in-house in the UK, Germany and Finland. Insourcing also cuts costs and problems when tendering and monitoring of contracts are avoided. The security and well-being of the employees in the public sector seem to be better than in the private sector, according to the study of Hall. Bringing back the services to the public sphere is preferably done when a contract or concession
expires when the private sector shows low interest to participate or when the contractors fail to perform (Hall, 2012).

When contracting authorities start to investigate possibilities to form companies to provide the services from within the public realm they have to consider the Teckal-criteria (European Commission, 2011:1)

The public procurement rules may be set aside or be diminished if the control and function tests of the Teckal-criteria are fulfilled; the municipality should exercise control over the new in-house company which is similar to the control it exercises over its own departments and the activity of the company should not be larger than the public assignment at scope (the company has to undertake at least 90% of its activities for the owner public authorities). A public body that fulfills the criteria is still governed by public law and will have to comply with public procurement law when letting contracts on behalf of its owner authorities, but the owner authority does not have to carry out a public procurement procedure to let their company manage their public services. Even though the Teckal-criteria are helpful in determining if a company can pass as an in-house company there are diversions and exemptions from the standard case. Many inter-municipal companies and similar public sector bodies have a broader scope and do not pass the Teckal criteria, which may reduce the ability for public authorities to choose the best option for public services (Hall, PPPs: a critique of the Green Paper, 2004).

Choosing joint procurements and inter-municipal arrangements

Municipalities or other contracting authorities may benefit to cooperate in joint procurements as their administrative burden and cost is minimized and the price of the procured services or products may be lower as the tender is more attractive having a higher economic value. Skills and expertise is gathered to form the best possible tender. This is especially relevant in those member states where municipalities are small. Municipalities in rural areas could also benefit from exploring inter-municipal arrangements as this is found to reduce costs for waste management (Hall, 2013).

The definition of joint procurement is that only one tender is published on behalf of all participant authorities. There are different forms of collaboration to explore and consider and these alternatives is good for smaller authorities. Joint purchasing could be done in the name of each of the municipalities or by one single municipality acting on behalf of the others. If municipalities act jointly without nominating one of them as agent for the others, they will be acting as an association of contracting authorities. Another form of collaboration is when a central purchasing body is established to function as a “contracting authority” for supplies and/or services intended for other contracting entities (European Commission, 2008).

Letting the free market decide the path to a sustainable waste management system

The Joint Baltic Sea Region Strategy for Municipal Waste Management (RECO Baltic 21 Tech, 2013) claims that private households should not be allowed to make individual contracts with private waste collection companies, as this is not considered a good solution in an environmental view. In developed countries, the municipal waste management sector is rarely run by the private sector alone based on a totally free market principle. However, in less developed countries where the governance is weak, the management may totally be relying on the private or informal sector. Although this situation with a totally free market is not seen in Europe, changes toward that direction may arise in the future and is seen in Estonia today. Such situation actually in a long run limits the competition on the waste management market since the bigger companies who own and control the whole waste management chain (from collection to final treatment) dominate the market. It also leads to the situation where the waste collection service is concentrating in bigger cities as it is most profitable to collect waste from larger cities. Consequently the waste collection service is not affordable in rural areas even though the fees for households in rural areas might be higher in some local contexts. This situation with a few dominating companies don’t allow municipalities to plan and coordinate the development on the municipal waste management system since they don’t have any means to steer it.
The municipality needs to be empowered

The politicians and the authorities should make sure the municipality or any other responsible public body has enough power in terms of capacity and legal basis to plan and coordinate waste management system as well as to run the procurement and the following contract as a professional client. This is one aspect included in the Joint Baltic Sea Region Strategy for Municipal Waste Management (2013) that RECO has produced to help the continue towards sustainable waste management systems in the region. Strong problem owners will more likely include environmental concerns and long-term objectives.

According to voices heard in the network of RECO, municipalities in Estonia, Latvia and Lithuania waste seem to have less power and knowledge than the companies that bid for contracts. In practice this means that the authorities accept that the private sector leads the development and set the rules. David Hall acknowledges that private companies with greater knowledge and legal expertise than their client will get contracts that are favourable for them than for the contractors and the public interest. A French report analysed the system of concession and observed that councilors were left “on their own, without support, to deal with conglomerations wielding immense political, economic and financial power” (Hall, PPPs: a critique of the Green Paper, 2004, p. 21).

Besides being led by the private sector, municipalities may also be in the hands of the higher authorities. This is common in countries in BSR countries outside of EU, such us Russia and Belarus. When Martusevich (2008) analysed the local self-governance utility services in Russia he found that the local authorities are depending totally on upper level budgets and upper level officials, which leads to an unhealthy willingness to please the upper level to get subsidies and a lack of initiative regarding strategic planning. Martusevich claims that municipalities without resources and capacities to negotiate contracts and defend public interest often consider private sector participation as the solution to everything. Other municipalities delegate the management of public services to in-house companies, also with the intention to escape from their responsibilities. Efficiency gains are seldom gained when responsibilities are transferred to third parties, according to the study of Martusevich.

Consider the economic framework

The economic resources put into the waste management sector differ in the region. Steve Davies has treated the activities of the waste management multi-nationals in central and Eastern Europe and claims that the households’ willingness to pay for the waste management is low in several countries. He writes that the politicians are afraid to set fees that actually cover the costs of the collection and treatment. This has implications onto modernization possibilities. Furthermore, the business model for the national system of waste management should be set to enable necessary investments in waste management. In some BSR countries the money for investments originate from EU and thus from the taxpayers in the European Community. The banks’ ability to trust the local public authorities and give them bank loans is important to enable large and long-term investments (Davies, 2000). If there are no economic resources available it will be difficult to implement changes and to climb the waste hierarchy. Regardless of the origin of the invested and spent money the purchases are important for the regions’ ability to create a more sustainable future.

See the system as a whole

Today’s municipal waste management systems often are complex and highly integrated systems that might include material collection, material recycling, composting, anaerobic digestion, incineration with energy recovery and other processing steps. Municipalities now must make complex decisions involving tradeoffs between environmental performance and cost which must be carefully analysed for these integrated systems. For instance, the change of cost and environmental performance of a MSW
management system if specific fractions are included or excluded of the local system of source-separation needs to be calculated. Another consideration may regard setting the local ambition of source-separation and recycling depending on the chosen treatment method, a waste-to-energy solution may imply different considerations than landfilling.

To get all the relations to work in the system there is a need for periodic updates of procurement plans; to make sure the time-schedules are kept. Delays and problems in one service or in the process of acquiring one investment may affect other parts of the system. The Swedish municipal company UMEVA views their complex task as presented in figure 3. The illustration shows that the choice of waste treatment methods affects processes outside the waste management system, such as generation of district heating, electricity and vehicle fuel. Recovered and recycled material and fertilizers from treatment are other outputs in the complex system (Åström, 2013). The Swedish Waste Plan recommends that waste management should be seen as a part of the infrastructure and that it should be coordinated with the waste planning with other municipal energy- and physical planning (Swedish Environmental Protection Agency, 2012).

Figure 4: The waste management system of UMEVA, Sweden (Åström, 2013)

Choosing procurement expertise

Some municipalities find it difficult and time-consuming to follow the rules of public procurement. To ease the administrative burden of the official appointed for establishing the contract the responsibility for the legislative part of the process can be appointed to a central department, while the practical considerations are left at the technical department. If the competence of procurement is missing totally consultants can be hired.

If the responsibilities are separated between different departments or with help of consultants, the collaboration and communication is of utmost importance to reach a successful deal. Even though external expertise is used the procurement still needs dedication, resources and time at the local level. The officials with expertise in waste formulate the specifications while the expert in the area of procurement is responsible for the formal parts. It is important to decide who will be the contact person for the bidders as all interested parties need to get the same information.
Considering green and sustainable objectives

There is an increasing attention in the EU to include environmental and social considerations in public procurement. Including criteria regarding promotion of gender equality, combating unemployment and protecting the environment in public procurement is not an absolute requirement yet. If the procurement strategy of the municipality does not promote green and sustainable criteria it will be more difficult to demand and choose contractors upon this kind of criteria.

When Li and Geiser (2005) describes the idea behind GPP they state that authorities should be responsible for identifying the products and services that are greener than others and thus prefer these in a contract situation. The vision is to authorities in their role as large purchasers shall stimulate and influence the market so that the provide products that do not have as much impact over the life of the product life cycle, production and waste included. The requirements would, for example, relate to the content of hazardous substances, or that the product contains some recycled materials.

There seems to be a consensus that procurement decisions should take into account environmental and climate costs throughout the life cycle of products and services. The objective of adding green criteria in the tender is to promote innovations, to open up the market for new solutions and new enterprises. The businesses active in the environmental market will gain from increased demand for green products and services. (European Commission, 2011:3)

The Swedish Environmental Management Council (SEMCo) is promoting GPP in Sweden and they are lead partners in the EU-project Baltic GPP, which has developed a web-training programme for GPP. The guide can be found at www.balticgpp.eu. According to SEMCo procurement by the public sector does not stimulate innovation as much as it could and the use of GPP is still more common for acquisitions of products than for services. Ways to reduce risks and ways to create innovative solutions for services in the public sector need to be further investigated to increase the use of GPP in all sectors. SEMCo claims that life cycle cost is proved to be lower when buying green products and services, as the sustainable aspect means higher quality in the long run (Nohrstedt, 2013).

The level of green contract in Europe was assessed on behalf of the European Commission (Bouwer, et al., 2006) and one conclusion was that lack of information and lack of tools were important barriers. Therefore, communication, information dissemination and practical training can be very important if a country is to increase the proportion of contracts with the environmental specifications. The study also showed that management and political leadership are important for GPP to make real impact.

A business periodical in Sweden with stakeholders in public business as target group claims that the business organisations are critical to letting public procurement serve as an instrument to pursue a more general social policy (Offentliga Affärer, 2013).

“Green Public Procurement (GPP) means that public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life-cycle compared to goods, services and works with the same primary function that would otherwise be procured”.

“Sustainable Public Procurement (SPP) means that public authorities seek to achieve the appropriate balance between the three pillars of sustainable development – economic, social and environmental – when procuring goods, services or works at all stages of the project”.
Environmental concerns in public procurement are spreading, but few countries have been active in defining policies for socially responsible procurement. Regarding the new Procurement Directive in EU there have been different opinions whether the criteria for social responsibility should be included or not.

The EU is in favour of promoting the industry by making sure that Small and Medium Enterprises (SMEs) get business opportunities and that cross-border business is taking place. For goods and supplies the international cooperation is higher than for services. Surveys from the Commission show that discrimination against foreigners is still present in public procurement markets. Local companies seem to be favoured as small geographic distance and the same language facilitate the cooperation between the buyer and the seller. Administrative barriers to market access are another reason that keeps foreign bidders away (European Commission, 2011:2).
Step 2: Put enough effort into the preparation phase

There should be enough knowledge, time and resource to work strategically with the preparation phase of the procurement. The pre-procurement work before setting the specifications in the tender document is important to the success of the procurement. In order to know where to put the attention and what to prioritize, guiding document such as directives, laws, acts and local waste plans should be used as a starting point. The first thing to do is to analyse the present situation. What is working well today and what could be better? How can the goals of the local authorities be better met by the choices we make for a new procurement? What are the current costs for the service or products?

Define the needs

Be sure to define the need as these will help to identify the requirements that will form the basis for the specifications of the desired service or product. A basic need of waste management is to keep the city clean and thus one of the requirements is to pick up all the waste in the city and to transfer it to an adapted place. To determine the best mode to keep the city clean an adapted analysis should be used to determine the best solution between alternatives. Failing to define the needs properly will lead to problems, when new aspects are discovered and cannot be taken into consideration during the period of contract. Besides making sure the needs are covered for the waste management targets (such us recovery and recycling targets) set by legislation should be taken into account when formulating the specifications.

Investigate the market

Scan the market and search for information from various government agencies and organisations to learn about different types of supplies and technical solutions. Ask other contracting authorities for details about their recent contracts to benefit from their experience of procurement. It is wise to keep the local politicians informed of the intentions of the technical department.

A market analysis should provide answers to these questions:

- What does the market offer to cover the needs of the contracting authority?
- What are the suppliers?
- Are the planned requirements reasonable?
- Can suppliers on the market comply with the requirements?
- Is the market competition built on price or quality?
- What is the estimated cost to cover the need?

The analysis should include an assessment of how the need can be satisfied the best way; by an in-house company, by outsourcing or by a PPP. If private involvement is preferred it is important to ensure that as many bids as possible can be submitted when the request goes out. It is allowed to have contact with individual companies as long as a specific potential bidder is not favoured and that no requirements in the upcoming tender are revealed. Therefore, interact with suppliers to get a feeling if there is an interest to bid and how the criteria in the specifications should be put in order to attract as many bidders as possible. If the criteria are too demanding there might be fewer bids and this will not gain the client, at the same time the criteria should be used to develop the sector and thus make the suppliers invest in new technology. The private sector needs hints of what will come in order to prepare for this in time. This is where waste plans and other policy documents are useful, as well as a clear and outspoken agenda.
from the municipality and the politicians. Positive interaction can stimulate the market to move in the desired direction.

**Consider using a package-solution**

The package of the services should be carefully considered. Regarding treatment of waste the goal should be to enable for contractors to leave proposals of one or a group of fractions, rather than on all of the fractions. This will make more companies interested, depending on their possibilities to take care of the different types of waste. This grouping or division can also be used when procuring collection, as a company may only be interested to pick up waste from one part of the town and not from the whole town. Parts of the operations could be kept in-house if no contractor can offer that service. The choice of packaging has a critical significance for how the bidders should leave their prices and also for how the award criteria and evaluation model can affect or steer the development in the direction the municipality wish for.

The trend is shifting towards procuring functions rather than separate services and supplies. Grouping services and products will be a driving force to get the private sector to come up with new ideas and innovations and this use is referred to in relation to GPP. One example being when a contract includes the service of taking care of the food waste as well as to treat it biologically. This may include buying bins, collecting the food waste, transporting it and treating it. The solution with one larger contract than with several smaller implies that the contractor gets more responsibility and freedom to choose how to carry out the service asked for and this is considered to spur innovations and allow new enterprises into the market. The options to choose to leave tenders on the whole deal or just parts of it could still be available, as discussed above.

Another positive aspect of packaging activities in the same contract is that it gets more interesting for the contractor to buy and act environmentally fair when considering the whole chain of the procured service.

**Collaborate with other municipalities**

The public sector is looking more closely at the opportunities presented by shared services. Besides the option of creating different forms of companies a group of municipalities can carry out joint procurements, form a joint board or a central purchasing body. The contract opportunities for the private sector will increase when the municipalities collaborate and the authorities will gain as the prices get lower and the skills from different authorities are used to form the best possible tender.

**Set up requirements and criteria to enable analysis of the proposals**

A municipality always has to base the award of contract upon either:

- The most economically advantageous tender (MEAT), or
- The tender with the lowest price

Tendering based on the lowest price tend to decrease the working conditions of the employees and decrease the quality of service (Hall, Public-Private Partnerships (PPPs), 2008). Using the most economically advantageous tender (MEAT) criterion instead of the lowest price enables taking account of criteria that reflect qualitative, technical and sustainable aspects of the tender submission as well as price when reaching an award decision. The contract notice must indicate that the MEAT criterion will be used otherwise the implication is that lowest price will be applied. To assess which proposal that is most
economically advantageous a range of criteria regarding the object of the contract have to be taken into account. According to the Swedish Waste Association’s report the Evaluation Models for Procurement (Swedish Waste Association, 2009) it is important to distinguish the requirements on the qualifications of companies from the criteria regarding the object of the procurement. Many times criteria should instead be used as a minimum requirement. The reasons not to do so may be uncertainty of the number of potential bidders and thus not wanting to delimitate the interest by putting too demanding requirements, or uncertainty of the price to fulfill the requirement or the market’s availability to fulfill the requirement in time.

Each criterion must be measurable, in the sense that it must be possible to assess, at least in a qualitative sense. To enable fair comparison between alternatives each criterion used to assess the submissions must be weighted. If it is not possible the criterion should be stated in descending order of importance. The weightings of the award criteria should be stated in the contract notice and in the tender documentation. The Directives or national legislations do not give guidance for which methods to use in the following processes of weighting of criteria and evaluation of proposals (Swedish Waste Association, 2009).

Choose evaluation model or decision support tool

The model for evaluating the criteria of the qualified tenders has to be carefully explained in the tender document and in the contract notice. Thinking about this model and the weighting of criteria before starting writing the tender document is a good idea, as the coming step of evaluation is complicated and the methods often criticized. The Swedish Waste Association has made a report concerning models for scoring and counting award points where the emphasis is on price or quality. Different methods are described and analyzed (Swedish Waste Association, 2009).

RECO has studied the use of decision support tools for more transparent and easier evaluation of proposals. Dedicating time for making a decision matrix and finding a suitable decision support tool will make it easier to carry out the award process. Studies in the RECO-project have resulted in a preference for the Analytic Hierarchy Process (AHP). The AHP is a structured technique for dealing with complex decisions, used to sum up “apples and pears” in a final grade or score. The problem should be modeled as a hierarchy containing the decision goal, in this case – sustainable waste management, and the criteria for evaluating the alternatives. The elements of the hierarchy can relate to any aspect of the decision problem - tangible or intangible, carefully measured or roughly estimated, well- or poorly-understood. Once the hierarchy is built, the decision makers systematically evaluate its various elements by comparing them to one another two at a time. In making the comparisons, the decision makers can use concrete data about the elements, like environmental input from WAMPS (Waste Management Planning Systems produced in the RECO-project), or they can use their judgments about the elements'
relative meaning and importance. It is the essence of the AHP that human judgments, and not just the underlying information, can be used in performing the evaluations.

**Estimate value and time frames**

When research of the market is done and the outline of the tender is getting clear it is possible to estimate the value of the upcoming contract. The value decides which procurement procedure to use and if it has to be published at EU-level. It is the total value of all direct procurement in a particular field that counts and therefore it is not allowed to make repeated direct procurements for the same service, if the total amount exceeds the threshold.

The time for the process between the tender procedure and the startup has to be estimated. The calculation of the time required can start from behind. When should a new agreement enter into force? The start of the new contract will be significantly better if there is plenty of time for preparation. Expect to need at least six months for the contractor to prepare for a new mission, after the agreement is signed. The delivery time of vehicles for waste collection or the time for construction work should be indicative of how far in advance you need to sign contracts. If the time between signing and start of the contract is too short, it can lead to the municipality are without a functioning waste collection or a treatment plant. The more demanding requirements the longer it will take for the contractor to prepare the tender and also to get ready for the start of the contract after signing. It often takes at least three months to complete a tender document. The time required depends on the human resources available, how easy it is to get the amount of data and if the specifications must be approved by a board, etc. It’s important to keep delays to a minimum, because such delays can have an impact on contract award and completion, which directly affects service delivery.

Before starting the procurement the possibility of extension of existing contract should be explored. If terminated at an inappropriate time, such as in the middle of the holiday season, it may be extended a few months for the new agreement to take effect at a more convenient time. It may be more appropriate to shift during a period without any special holidays or events.

The Joint Baltic Sea Region Strategy for Municipal Waste Management (2013) states that municipalities should not rely on too long-term contracts with the private sector. On the other hand, the time has to be sufficient for the companies to enable needed, larger investments during the contract period. A contract for waste collection is usually 3-7 years and a concession agreement can be up to 20 years.
Step 3: Write a good tender document

This step is about formulating and putting demands and requirements into the tender document. The specifications are critical to reach a good deal. When the tender procedure starts the pre-procurement period is finished. The needs and the valuation of criteria should already be decided and specified and the requirements from the analysis of the pre-procurement work should preferable have been put into a decision matrix to enable the coming award process. The tender document shall include all documents applicable to the contract in question. No information about the tender may be submitted to anyone. This stage of the process is very important. Documents are not public until published and advertised.

Remember that, if possible, give the tenderer freedom to come up with suggestions.

Use templates

A template facilitates the procurement, but should be altered according to local conditions. If the last tender is used as a template when making a new procurement, keep in mind that a lot has happened since the last contract was made. The Swedish Waste Association has produced detailed templates and guidelines for procurement that are used by Swedish municipalities. The template for public procurement of waste collection from December 2011 is an extensive document (Swedish Waste Association, Sveriges Kommuner och Landsting and Sveriges Åkeriföretag, 2011). The document with guidelines for procurement of waste disposal services was also produced in 2011 and contains recommendations on how to formulate and structure the tender document (Swedish Waste Association, 2011). The structure of tender document should be easy to read as to give the potential tenderer an understanding if the contract is of interest or not. One issue should only be treated once and if it appears in more than one section it should be phrased exactly the same to avoid misunderstandings.

This example of a structure of tender document is suggested by the Swedish Waste Association in their guidance for procurement of waste treatment services (Swedish Waste Association, 2011):

1. Orientation of the Procurement
2. Procurement regulations
3. Requirements regarding the contractor
4. Technical specifications regarding the object of procurement
5. Contractual terms
6. Evaluation criteria and model
   Attachments: Tender form etc.

Work careful to formulate specifications and terms of reference

Ideally, the beginning should be with the preparation of the technical specifications (for goods and works) and terms of reference (for services). This phase of defining requirements is based upon the assessment of the needs made in the pre-procurement phase. It is important to use a clear and unambiguous language. There must be sufficient detail in the description of the requirement to ensure that all prospective bidders or service providers have essentially the same understanding of the requirements. The certificates and document that need to be enclosed with the tender has to be specified.

The requirements or the selection criteria aim at making sure that the contractor has economic and professional capacity. These criteria do not regard the service or object asked for in the tender.

Referring to standards will simplify the procedure and will ensure all parties that the agreements are formally set. The European standards facilitate trade between countries they are important role in the
development and consolidation of the European Single Market. European Standards are more common for products than for services and the increased need for creating new standards is heard by the European Committee for Standardization: “Service standards can be used to promote best practices and to spread knowledge throughout the market. Standards can also set benchmarks against which businesses can measure the quality and performance of their own services or the services they are purchasing, thus improving competitiveness and increasing efficiency” (The European Committee for Standardization, 2013).

The technical specifications shall not favour or eliminate tenderers and trademarks and demands aiming at a specific supplier or source of purchase are not allowed. The basic principle should be to describe the technical requirements as detailed as possible in the technical specification and not include these requirements as criteria when evaluating and weighting the tenders. The reason for putting aspects as criteria to evaluate can be lack of time for preparation and investigation before starting to form the tender (Swedish Waste Association, 2009).

A clear and simple tender document does not require extensive appendixes and thus minimize transactional costs. It will also make it easier for the client and the contractor to use the document as a tool during the monitoring and evaluation-phase. It should be clearly stated in the tender documents how the client intends to follow up requirements. The more requirements that are puts on the contractor, the more important to be prepared to put in time to make sure they are fulfilled. Requirements that are not followed up should not be included in the specifications.

Use incentives for the contractor

Whatever service levels are agreed, the contract should build in a mechanism for making improvements to those service levels over the term of the contract. A reason for a non-working contract may be lack of incentives for the contractor to carry out the service according to contract. It is wise to include mechanism in the contract that creates incentives for providing high quality. To minimize this risk it is wise to add economical bonuses, possibilities to extend contracts if performed well etc.

State the evaluation criteria and the evaluation model clearly

The rules for evaluating bids must be clear. The criteria for assessing the bids should be decided before starting to write the tender and they should be included in the document so that all bidders get access to them. Judging quality is always difficult, but even this aspect should be measured and awarded accordingly. More information about this aspect is found in step 2.
Step 4: Get the best supplier

To achieve the aim of the public procurement there must be efficient competition. There has to be enough companies interested in the contract and the bidders must limit the competition by forming cartels. Getting the word out to as many companies and suppliers as possible is important to get many bids. The steps are described in detailed in the manuals from the Swedish Waste Management Association.

Publish call for tender and advertise your procurement

Invitations to tender for public works, services and supply contracts meeting the European threshold criteria must be advertised throughout the European Union in the Official Journal of EU (OJ) and in the online edition of the Official Journal; the database Tenders Electronic Daily (TED). A European standard Common Procurement Vocabulary (CPV) helps to classify goods and services to enable bidders to search tenders that match their skills. A CPV-code has nine digits and more than one code may be used to indicate the correct theme of a tender. EU has a Public Procurement portal called SIMAP to provide information and links to legislation, CPV codes and procedures. The call has to be published in the OJ and in TED for at least 40 days. The national-specific use of advertisement and time-frames for the open calls vary with the value of the contract and with national legislations.

Receive offers from potential contractors

The interested tenderers will have to be given a fair chance to submit proposals and dynamic purchasing systems and electronic auctions will easy this process for all parties. Some municipalities rely on computerized tools for the tendering process, others have not yet invested in this kind of tool or they are not comfortable using it. There are several advantages with managing the tenders electronically; tender specifications can be reused, shared with other authorities, they become more structured and the award-work with the criteria can be managed in the system. Procurement managers do not need to be as highly trained or paid because such systems are standardized and easy to learn. The tenderers cannot miss to fill in important information in the computerized template. This saves time for all involved partners.

Exclude and qualify proposals

The first thing to check is to see that the tender proposal was submitted in time and that the required documents were enclosed. If the offer came in too late or is missing important parts it can be rejected. If the required information is there it is time to determine whether the requirements are fulfilled. It is recommended to control the solidity and records of the companies.

If there are questions regarding the qualifications it is important to be careful in approaching the companies to ask for additions, as all tenderers have to be treated equally. Therefore, the best advice is to wait until all proposals are examined and then sum up all the uncertainties and contact all the tenderers with the same questions. This procedure should be in written form, with a deadline for replies of a couple of days. The result of the examination should be noted in a report. The reasons for rejecting tenderers should be stated.

The proposals that have passed (regarding the qualification of the company) can be evaluated in the next phase with examination to see if the requirements of the service or the product are met. The offers passing qualifications will be evaluated according to price and other criteria.
Evaluate the proposals

The rules for evaluating bids must be clear. Tender submissions shall be evaluated according to the criteria specified in the contract documents or in the proposal to submit the tender. The municipality may not use information other than what is submitted in the tenders.

In the supplier selection process the capacity of the potential tenderers must be confirmed. Tenders who do not fulfill all the requirements are excluded from further evaluation. The supplier needs to show evidence that demonstrates the capability to perform the requirements and it has to present how the requirements will be fulfilled. Sometimes it is not possible to check whether the requirements imposed are met when the tender is submitted. An example is that the vehicles to be used in the work may not be bought yet. Nor is it possible to check whether staff has the right training because all the staff has not been employed for the assignment in question. To come around this the company can ensure that the requirements will be met on the date the agreement enters into force. Then it's up to the contractor to follow up on the agreement once it is in force.

A month can be a reasonable time for consideration and decision. All work has to be under absolute secrecy until the municipality decides to award the contract to a particular supplier. The absolute confidentiality of the data in the offers ends when the award decision has been taken and the information becomes public. When the award decision is sent out to bidders the contract lock begins, with a minimum of 10 days. If no appeal is in progress as a result of the non-chosen bids the contract may be terminated by contract signing. Advertising must be made within 48 days after award.

This is the final stage of the decision making process and the actual choice of option and it is time to use the decision support tool chosen during before or in the beginning of the procurement process. The technique chosen for this decision-making step may incorporate into the formal analysis every type of judgment. Besides the economical and directly practical aspects, future changes in the state of the world, income distribution and political impact may be included and taken into account in the analysis. Judging quality is always difficult but the method chosen will enable an ultimate decision based on a fair amount of aspects. The final decision may sometimes be taken by officials and sometimes by Ministers, depending on the political content.

Award the contract

When the evaluation is finished it is time to award the contract. All tenderers have to be notified and they need to know the reasons for the result. Before sending any documents they should be checked to see if parts need to be put under secrecy. The notice can be sent by post, fax or e-mail. E-mail has the benefit that a receipt that the message has been delivered and opened can be obtained. Usually there is a regulation about the minimum of days between the notice has been sent out until the contract can be signed, to make sure no appellate is coming. If the original contracts are not signed at the same time the contractor should be the first one to sign.

Appeals

Many contracts are over-tested and they are reviewed in court. The large number of trials disturbs the procurement process as contracts can be delayed for months. Keep a margin for this in the schedule.
Step 5: Do not forget the important and long-lasting phase of monitoring

According to some practitioners the public procurement process ends with the contract award, and thereafter the contract administration starts. Others include this stage and consider it as a part of the procurement process. Both way, the importance of contract administration is significant and here we include it in the process and call it step 5.

Experience shows that monitoring of the contract has to be taken seriously to get the contractor to deliver good quality. It is very important that the contractor finds the client to be professional and competent and that the contractor feels the presence, support and interest from the client. Personal contacts make the work between client and contractor easier. During the contract it is important to have operational meetings regularly to deal with practical day-to-day topics and meetings for reconciliations where issues such as health and safety are covered. When the contract and the service carried out are not consistent there might be necessary with meetings to discuss fines, and perhaps bonuses. Meetings and personal contacts are usually less frequent when concessions and PPP: s is used. In regular outsourcing alternative the whole department needs knowledge in procurement and they need to have the contracts available to be able to use them daily to monitor the contractor.

If a contract is not functioning well it is difficult to terminate it as the contractor will most likely claim for compensation in a court case, which will be costly for the municipality and diminish the economic gain of changing contractor A more effective way to change the situation is to follow the contract closely and take remarks of the details and specifications that should be altered for the next period of contract.

The process of procurement should also be evaluated and reviewed. Eventual mistakes can be corrected to the next tender.
Procurement in Tallinn City, Estonia

Surface 45 100 km²
Number of municipalities 227
Population 1.34 million

1) Short description of the municipality

Tallinn is the capital and largest city of Estonia. It is situated on the northern coast of the country, on the shore of the Gulf of Finland. It occupies an area of 159.2 km² (61.5 sq. mi) with a population of 427,894 (2013). More than 50% of all municipal waste in Estonia is generated in Tallinn region (Tallinn city and surrounding municipalities). Tallinn city has been the leading municipality in Estonia who has started many initiatives such as separate collection of paper- and biowaste as well as new centrally organised waste collection system.

2) The Estonian waste management system

Municipal waste management was much affected by a rather radical shift towards privatisation when Estonia switched to a market-based economy in the 1990s. The former public waste management sector underwent near-complete privatisation. Therefore, the municipal waste management market in Estonia is to a great extent controlled by the private sector.

Collection

Municipalities are responsible for coordination of municipal waste collection from private households, the commercial and industrial sector. Several regions in Estonia have started to develop centralised collection of organic waste (for example Tallinn City).

Treatment

Landfilling is still the main treatment operation in Estonia. The biodegradable waste diversion targets will be challenging for the country.

The role of the municipalities

Municipalities are obliged to draw up a waste management plan for their administrative territories, though this can also be done on a regional basis in cooperation with other local governments. Municipalities are also in charge to ensure municipal waste collection for which tenders have to be issued (Waste Act) to private companies who collect and treat the waste. This so called “organized waste collections model” has been implemented step by step since 2005 and entails the following tasks for municipalities:

- Set up a list of waste holders (companies, households) according to the register;
- Define service packages (volume of collection) on waste management including terms for source separation
- Define collection(s) area(s) up to 30,000 inhabitants
- Organize a tender and choose the best (cheapest) service offer, within a contract period which can be up to 5 years; then only the contracted waste management company is allowed to collect the municipal waste in this specific area.

Compared to other Baltic States and Poland, the Estonian municipalities are small and therefore they lack capacity and knowledge in planning and organising municipal waste management in their territories. Most municipalities in Estonia have also not joined waste management cooperation structures to plan waste management or to issue joint tenders. Private companies in Estonia tend to sue local authorities during the procurement process. The municipalities have problems to deal with organized waste collection and procurement procedure and this is an obstacle to development. As a result, local
municipalities have very limited ability to steer waste management towards source separation and also to check whether the households are connected to a collection scheme. Municipalities are also not able to plan a reasonable regional waste recovery infrastructure and direct waste to specific waste treatment facilities. This has occasionally caused legal problems regarding ownership of the waste. Basically all bigger waste management companies are developing their own waste management infrastructure. This has led to the situation where there is already overcapacity in certain waste treatment capacity (e.g. MBT) and most of the investments are focusing on larger cities.

The financing of the waste management system

The main funding opportunities for municipal waste recovery projects are provided through the Estonian Environmental Investment Centre (KIK) that provides funding for environmental projects in Estonia. KIK is also the main implementing institution for EU-funded environmental projects. The Environmental Programme of KIK provides state assistance to municipalities for construction of waste management plants, reloading plants, waste collection points and development and implementation of newer waste treatment systems and waste handling technologies. KIK has also several programmes/measure funded by the EU Cohesion Fund, aiming at developing waste collection, sorting and recycling, closure of landfills and expansion of waste treatment centres.

3) Procurement in Tallinn City

The existing system dictates that municipalities should arrange an open tender for every district. The waste holders have contact directly with the private company in charge in their district. The municipality’s only role is supervision, mainly dealing with complaints of residents and providing tenders, which have often caused longtime suits in court from companies, who did not win tender. Competition sets the price for waste collection (empting of waste container). General practice has been also that the winner of tender applies for price correction within the first year of the contract and for extension when the contract expires. Prices for additional waste services and container rent are not regulated, as the regulation does not provide a clear provision delegating authority for it.

Tallinn City is organising their waste management in a different way as the Tallinn Environment Department, as executive authority, run the organised waste collection scheme and related public procurements. In doing so, the city is able to control more than before.

Tallinn is divided into 13 waste collection districts and. According to Tallinn waste management rules any building with more than 10 apartments must have separate containers for paper waste and biodegradable waste, as well as buildings such as restaurants, markets, shops, offices where more than 25 kilos of those waste fractions per week is produced.

a) What – object of the procurements

Estonian Waste Act states that waste collection needs to be procured from private sector and it is prohibited to use in-house public companies for waste management services. Waste collection districts in Tallinn are divided between three different approaches to waste collection: in 3 districts organised municipal waste transport is in place since 2005, 5 districts have so called “free market” since the tenders have failed and in 5 districts city plans to develop a new system with two of them already in pilot phase since March 2013. The third pilot is about to begin on December 2013.

Today, the entire Tallinn municipal waste collection market is divided between 4 waste companies. Waste management companies have contested most of tenders that assured them “free market” for as lengthy period as possible. Therefore Tallinn managed to enforce organised municipal waste collection in all 13 districts as late as in 2011. However, today 5 districts have still “free market”, which means that each waste holder can make an agreement with any waste collection company. The current system has led to the situation where Tallinn Environmental
Department has not enough information and proper control over the waste collection in its territory. Waste collection service providers are compelled to provide city with data for waste holder registry and often this data is insufficient and outdated. Prices for organised municipal waste collection in each district differ as they rely on the outcome of the procurement process. Data on collected waste is gathered solely by waste management companies and reported only on a general level once a year to the state level. Local municipalities get no information on the collected waste streams. The problems related to current organised waste collection system forced Tallinn city to change the system and to move over toward practices that are more common in other European countries (e.g Sweden) by providing waste management service through centrally administrated unit arranged by local municipality.

In 2011 Tallinn City Environment Department began preparations for new system for organised waste collection. As of 1 March 2013, the city started providing waste collection services in a way that all waste holders pay for the service to the municipality instead of paying directly to the waste management company. This model allows the city to calculate all needed costs for one basic fee and then differentiate it to the service packages in a way that it motivates the residents to separate waste. For example the empting of mixed waste container is most expensive and emptying of paper waste container is free of charge. City can also fix prices for basic and additional services including container rent. Containers will be owned and rented out by the city. All additional services are charged based on real expenses, not going for high profit margins.

Contracts can be concluded either through Internet using certificated digital signature or in service halls of Tallinn City Government. It is planned that during next 1-2 year this system will cover all territory of Tallinn. The website E-Waste (www.prugi.ee) in Estonian and Russian was introduced in January 2013. The website provides different groups of customer (residents, companies, dwelling houses associations) with necessary information concerning waste management, sorting and selective collection and recycling, gives advises and supplies with links on respected legislation acts. Also there is a link to the list and locations of waste yards in Tallinn.

b) Who is doing the work

Tallinn Environment Department is the executive authority to run the organised waste collection scheme as well as related public procurements. Tallinn Environment Department also develops the procurement scheme and customer service model, investigates market and communicates with contactors.

c) How – short description of the process

According to the new system the city organises separate tenders for the waste collection and treatment. First the tender for waste treatment was organised for treatment of mixed waste and separately collected biowaste, paper waste and bulky waste. The price is set for treatment of 1 tonne of waste. Then the tenders for collection in specific districts were organised. Collection fees were defined based on empting of one container (80 l – 1100 l). The contracted waste collection company collects waste only in accordance with the order/journey form the Environmental Department and will take the waste to the location defined by the city (selected based on the treatment tender). In addition city demanded in tender call that waste collection companies must use trucks with on-line GPS monitoring system that allows city to monitor the service quality and delivery on-line.

In addition the city organised procurement of waste bins. It is planned that the city will provide the bins to waste owners and change the bins if they are broken or if customers like to change the bin to one of another size.

The City is also in charge of running Civic Amenity Sites where the public can bring WEEE, hazardous waste, recyclable materials, green waste, tires, bulky waste etc. Separate tenders for selection of operators for these collection sites have been organised by the city.
d) Positive and negative aspects of the procurement process and recommendations to other procuring authorities

Organising separate tenders for collection and treatment allows bringing more service providers and competition to tender process, especially in the case of collection service. Smaller companies who were not able to participate in the tenders earlier are able to provide their collection service with the new procurement system of Tallinn City.

Furthermore, the new system has made it more convenient for the customers, because they only have to deal with one unit in Tallinn Environment Department. Before they had to pay the to the waste management company in charge but now all the administration is done directly with the city.

Contact
Name: Kertu Tiitso, Head of the Waste Management Department
Organisation: Tallinna Keskkonnaamet
E-mail: kertu.tiitso@tallinnlv.ee
Procurement in Ogre Municipality, Latvia

Surface 64 559 km2
Number of municipalities 110 municipalities and 9 Republican cities
Population 2 207 600

1) Short description of Ogre municipality

Ogre Municipality has 39 117 inhabitants and is situated 37 km southeast of Riga. The municipality was formed in 2002 by merging Ogre town and Ogresgals parish and in 2009 the municipality absorbed some other parishes.

2) The Latvian waste management system

Today Latvia is one of the EU member countries with relatively well developed municipal waste management system with a centralized waste collection network involving more or less 100 percent of the inhabitants in urban areas and around 85 percent in the rural area.

State, regional and local government waste management plans govern the development of the waste management system. The Ministry of Environmental Protection and Regional Development prepares the State Plan and in co-operation with municipalities in the waste management regions they also make the Regional waste management plans. The local waste management plans are prepared by municipalities if necessary.

Collection

There is a need to improve sorting and recycling of municipal waste from households. Separate collection of municipal waste (incl. packaging waste) is better functioning in the commercial sector. One of the main reasons for weak recycling system is the lack of interest from municipalities to organise the separate collection of recyclable materials from households. The functioning of the separate collection and recycling system is approximately two times more costly than the collection and disposal of mixed municipal waste and landfilling is still relatively cheap. The main drivers for separate collection and recycling are identified to be legislative requirements and recycling targets. However, the waste management is not declared as an environment problem in regional development plans, elaborated separately from waste plans, and thus does not get enough focus and attention as it ought to.

Treatment

The territory of the country is divided in ten waste management regions. Each of them has well established sanitary landfill and waste management organisation taking care of municipal waste collection and disposal. The main part of household waste is disposed in sanitary landfills (~ 85-90 percent). Activities regarding landfill infrastructure have had some slight time delays caused by shortage of co-financing. Also remediation of non-compliant dumpsites is still on-going due to problems caused by the lack of co-financing from municipalities. The activities with the landfills and the illegal dumpsites started later that planned due to lack of legal basis. Remediation of non-compliant dumpsites is still on-going, but very large part of them is remediated by funding of EU Cohesion fund and municipalities.

The role of the municipalities

Municipalities in Latvia are not directly involved in development of technologies or infrastructure of waste management, but municipalities according to regulations are obligated to coordinate and organize waste management system and development in their administrative territory. Therefore the main focus of municipalities is on managerial/administrative activities and on investment attraction.

Almost all municipalities in Latvia have established their own organisations to procure waste management services and the usual is to establish contracts running for five years. The law states that a
municipality only can procure waste management for a five years period, but laws and regulations allow public and private partnership or concession procedure to choose waste management companies for contracts up to 20 years. Municipalities may co-operate with other municipalities in carrying out their tasks but the cooperation of municipalities in regional waste management centres is week.

Financing the waste management system
The main problems and obstacles of municipal waste management are connected to the implementation of waste management plans in local level as well as lack of available financing of the recovery infrastructure. The development of WM is realized by implementation of activities where support from EU is possible. Contribution rate from Cohesion Fund does not exceed 50 percent from total eligible costs of the project and therefore the waste management companies have to co-finance the projects, municipalities can’t participate in these EU projects. Two projects funded by the Cohesion Fund is the construction of waste separation areas in Baldone, Ikšķile, Lielvārde and Ogre and the construction of a waste separation station and composting facility in Ogre.

3) Procurement in Ogre municipality

a) What – object of the procurement
Ogre Municipality has had a RECO-pilot project concerning improvement of their waste management system. This is fulfilled partly through a concession agreement with a private company and through investments in the waste management system in five municipalities. The contracted company need to collect mix and sorted waste in project territory and they have to provide waste sorting infrastructure building or using existing waste separation areas and points (it is an advantage if company has their own waste separation station).

One reason for Ogre to choose the concession procedure is that the territory and population of the municipality is not large enough for an effective waste sorting and recycling infrastructure. As Ogre had previous positive experience with collaboration with other municipalities they decided to make a joint concession with four other municipalities in the region of Riga; Ikšķile, Lielvārde, Kegums and Baldone. Together the municipalities have 70 000 inhabitants and the joint concession they formed is innovative in the region and therefore a good example for other small municipalities. The example of Ogre illustrates a quite liberal system, where most of the services are outsourced to private sector with long term concession contracts. Since EU Structural funding for recycling and biological treatment infrastructure is available only to waste management companies and organisations the municipality saw the need for a private partner to provide these services. The municipality decided that the long time span of a PPP would give the companies more incentives to invest resources in development of waste sorting and recycling infrastructure than a regular procurement with a shorter contract.

b) Who is doing the work?
This specific pilot-project and concession involved five municipalities; five city planners, five procurement specialists and five lawyers. They were introduced into qualitative methods to improve their skills in public procurement. Ogre municipality has close relationships with the four involved municipalities and has been the leader of this organization of the joint public procurement. Collaboration between the municipalities is working according to signed agreement.

Ogre municipality has three employees from Public Procurement department who are working with different forms of public procurements according to laws and regulations (open tenders, negotiated procedures, "small" procurement procedures, concession procedures, e-procurement system, etc.). Every year these persons carry out approximately 40 procurements and further examine about 40 procurements from other municipality agencies and institutions. The procurements are related mostly with construction works, services and supplies for municipality purposes. The decision for which service providers to choose is taken by municipal officials at the Commission of concession procedure.
The procurement of this example was mainly carried out by Ogre Municipality Public Procurement Department and the Development Department with help from external experts in waste management, financial and juridical areas. Public Procurement Department with experts have developed the necessary concession procedure documentation package (tender regulations, concession agreement, sub-contracts with every municipality, replies to questions and demands from applicants, etc.), but Development Department with experts has coordinated and provided information and data for applicants about the waste management situation in the project territory. All decisions related with this procurement have been taken in Commission of concession procedure.

c) How – short description of the process
There are still households, especially in rural areas, without centralized waste collection and households without contracts with waste management companies. The registry of the municipal waste generators (households, private sector and other institutions) is the basis for organising the waste collection in the region and therefore improving the waste management system. The focus of the pilot project has therefore been on managerial/administrative activities and investment attraction to WM infrastructure from public and private partnership (PPP) and EU funding. First steps to that was development of Environmental and economic estimation with needed data for making proper tender documents, after that development of concession procedure to transfer rights of waste management in municipality territories was started.

There will be one company who will sign a common contract and this company in addition will sign sub-contracts with every involved municipality. In sub-contracts are stated special needs or demands of every municipality that aren’t binding to other municipalities. Companies haven’t submitted offers yet, but the involved officials know that there will be definitely five offers.

The contract was established for 10 years, which was considered enough time to attract investments for waste collection and sorting. The representatives in committee of concession from the five municipalities had regular meetings during the work of developing the concession. This group will also work together as a monitoring institution when the concession agreement is signed. The main concerns of this collaboration have been lower prices, larger investment opportunities and larger capacity for waste management (better infrastructure, technology and staff) in the region.

According to the Public and private partnership law all municipalities that intends to start a public and private partnership are required to make a financial and economical estimation (FEE) of the intended project. Ogre made environmental and economic assessments of the municipal waste management system including analysis of financial and economical estimation (FEE) in order to find the best terms (conditions) for municipalities concerning the concession agreement. The analysis include forecast of economic development of Latvia till 2033; financial and economic analysis with different data, technical and waste management aspects to choose the best strategies for waste management in municipalities; risk identification, qualification and estimation in project; sensitivity analysis (comparison of project alternative financial indicators - public partner's total cash flow net present value, and end-user cost of changes in total throughout the project life cycle); appropriate values determination of investments; Impact on municipal budgets and cost of public and private partnership, analysis of available EU funding and other funds; entrepreneurial and foreign direct investments. It took Ogre more than a year to develop the FEE and get approval from all institutions. After the approval of FEE there was a second step to develop and get approval of the concession documentation and after that started the actual concession procedure /joint procurement.

The five largest private waste management companies of the Riga region has been showing strong interest for the concession. The companies have had many questions and request of data for development of tenders for concession procedure as well as requirements and complaints to municipality to change regulations and criteria of concession procedure. A few companies have filed complaints to Procurement Bureau about the regulations and available information provided by the
municipalities. One reason for this situation is that the private companies with their knowledge and legal expertise in waste management want to get contracts terms that are favorable to them than in concession agreement. This has slowed down the procedure and the time for submission of tenders was changed from one to five months.

LCA or GPP was not practiced. The entire BSR-region was not utilized, but there are no limits for foreign businesses to participate. The company of interest needs to know the Latvian waste management situation, needs competence in Latvian regulations and in financial and political matters.

d) Positive and negative aspects of the procurement process and recommendations to other procuring authorities

According to Ogre they find several positive aspects of choosing a concession instead of a regular procurement procedure. The longer time span of contracts is the main positive aspect, which will better enable the means to invest in the waste management system. The reason for collaborating with other municipalities in a joint concession is also positive as Ogre municipality is too small to attract private partners. However, developing the concession documents and dealing with waste management companies is only possible through good team work between municipalities’ employees. There is also need for external help of experts from the areas of finance, juridical and waste management as the involved municipalities haven’t enough knowledge, legal expertise and capacity to deal with these issues.

Despite development of detailed FEE and concession procedure documentation the tender lacked of detailed data about situation in waste management to enable a professional development of the applicant’s tenders and fees. Some information was predicted and accounted for by the municipalities and thus included in the concession documents, while need for other missing data was not expected and therefore not included. The range of data and information will be better with time and the advice from Ogre is to put enough effort in the specifications and in provided facts.

Problems are with state institutions Ministry of Environmental Protection and Regional Development, Ministry of Finance, Central Finance and Contracting Agency and Procurement Monitoring Bureau to coordinate and get there approval of Ogre municipality organized Financial and economical estimation (FEE) and concession procedure documentation. With last three institutions municipality have got their comments and approval of necessary steps for public and private partnership, but Ministry of Environmental Protection and Regional Development who is responsible for waste management policy in Latvia have not given their support for municipalities efforts to develop public and private partnership with concession procedure that is slowing down all process of waste management development in region.

Other than that, Ogre Municipality has no negative aspects to share from their experience with a joint concession. They are happy that they have gained new knowledge and that their case may interest other municipalities.

The main weakness is found in the organisation and in the implementation of concession procedure, due to number of involved parties and regulations that makes the processes very slow.

The most positive aspect of organizing and implementing public and private partnership in waste management are experience and lessons that can be used by other municipalities in Latvia and in the region. There are already two Latvian municipalities that have joined to go through the same steps using the example of the Ogre municipality pilot project.

Contact
Name: Edgars Pārpucis
Organisation: Ogre municipality
E-mail: edgars.parpucis@ogresnovads
Procurement at Alytus Regional Waste Management Center (ARWMC), Lithuania

1) Short description of the Alytus region and ARWMC

Lithuania has ten regions, 60 municipalities and a population of 3.34 million. Alytus region is the southernmost county with 157,766 inhabitants, and its capital is the city of Alytus. The distance from the city of Alytus to Kaunas is 70 km and to Vilnius 105 km. Waste management in Alytus region is one of the priority areas of environmental protection.

The Alytus region waste management center (ARWMC) is based on the cooperation agreement between the Councils of 7 municipalities – Alytus city, Alytus district, Prienai district, Birstonas, Druskininkai, Varena district and Lazdijai district municipalities. ARWMC develops municipal and regional waste management plans and organises the regional waste management system as operator of waste treatment and disposal facilities. ARWMC is the largest waste management company in the region and the as the organiser of the waste management system in the region the center is overtaking responsibilities of the municipalities. ARWMC was established 2002 as a result of a project proposal submission by Alytus County administration, in order to receive international financial support from Cohesion Funds 2000 – 2006 for the creation of regional waste management system in accordance with the EU requirements.

Alytus Region Waste Management Center has been involved in the RECO-project as a partner and has had a pilot project concerning construction and operation of a mechanical-biological treatment in the Alytus Regional Waste Landfill Area.

The Alytus example illustrates the typical Lithuanian situation where the regional waste management center (formed by municipalities) centrally administrates the system, invests in and owns treatment facilities and outsources the operation of these facilities.

2) The Lithuanian waste management system

On the basis of the National Strategic Waste Management Plan, regional and local municipal waste management plans need to be developed. The country relies on regional waste management plans and systems and the implementation requires cooperation of municipalities. All 60 municipalities have their own waste management plans. In order to ensure a practical implementation of waste prevention, a National Programme on Waste Prevention was prepared in 2012.

The state authorities have to follow and implement the directives and regulations from the EU but have not sufficient means and instruments to influence those who have the responsibility to execute the tasks (municipalities)

Collection
The waste collection service increased from 60 percent of total coverage in 2006 to 94 percent coverage in 2011. More companies get involved in collection and recycling and their capacities are increasing. Even though the collected and recycled amounts are increasing every year the public awareness is still rather low.

Treatment
Landfilling is still the main way to dispose of municipal waste in Lithuania. Dumping of waste in old dumpsites not fulfilling requirements was mainly stopped in 2009. Kaunas region have two landfills and the rest of the regions have one each. According to the National Strategic Waste Management Plan, the
following 90.6 percent of the municipal waste went to landfill 2009. According to Eurostat data for 2009, 95 percent of municipal waste went to landfills, 3 percent for recycling, and 1 percent for composting.

The development of the overall waste management system in Lithuania from 2006 was aimed at meeting the targets of diverting biodegradable waste from landfills. Considering the current situation when most of the waste goes to landfills the obligations set out by EU legislation and the National Strategic Waste Management Plan are not reached, mechanical biological treatment (MBT) was considered as a solution with regard to its price and effectiveness to minimize waste going to landfills. It was decided that 9 out of 10 regions were going to have MBT facilities and one region would only have the mechanical sorting equipment. The plan to implement MBT:s are related to the EU structural support for 2007–2013, when investments were channeled into the development of municipal biodegradable waste management infrastructure. Some municipal waste incinerators are being constructed.

Lithuanian market is very small, thus companies providing waste treatment technologies have now a rather short momentum to enter this market, or to stay outside. Thus, mercantile business interests in many cases stop and delay processes by taking procurement procedures to court.

The role of municipalities/regions
Municipalities are responsible for the management of municipal waste but as the National Waste Management Plan from 2002 stated that implementation of strict environmental requirements for waste management is only possible if the units are large enough to provide services to a sufficient amount of economical entities, municipalities were recommended to co-operate in establishing regional waste management systems. Thus, regional waste management centres were established during 2002-2005 and currently management of municipal waste is organised on the regional basis. The regional waste management centres are responsible to their owners – the municipalities. Projects involving development of regional waste management systems benefited from EU Cohesion Fund allocations during the period 2000–2006.

Responsible institutions are not always able to fulfill their duties due to lack of resources and competence, management problems and lack of skills to co-operate with other institutions. There is a need to review the management and role of the waste management centres, Some functions like operating landfills can be assigned to regional centres, while operating MBT facilities cannot and the division of responsibilities between municipalities and regional waste management centers have to be clarified.

Financing of the Waste Management System
Not more than 1 percent of family income can be allocated to waste treatment. Increase of price for waste management is a very sensitive issue in the country, thus it leads to the lack of political will to take decisions.

The Lithuanian Environmental Investment Fund (LEIF) is founded by the Ministry of Environment and supports investments in waste management. The main funding opportunities for municipal waste management are through the Environmental Project Management Agency (APVA), which provides EU structural assistance to Lithuania. The first stage was mainly related to closing of the old dumpsites and opening of new ones. The amount assigned from the EU and the national budget for the period of 2007 – 2013 is used for closing of the remaining old dumpsites, for construction of bulky waste collection sites, composting of green waste and development of municipal biodegradable waste management infrastructure.

The municipalities have had difficulties to build biodegradable waste recycling centers despite the funding earmarked to them and EU has approached Lithuania in this matter. One of the few ways for the central authorities to influence the work of municipalities and to show who is in charge is to decide to withhold funding. However, less funding means less work for the municipalities and, consequently, less development.
3) Procurement at AWMRC

a) What – object of the procurement
ARWMC is doing all types of public procurement regarding construction, goods and services. ARWMC is responsible to organise waste collection services via public procurement and has several smaller procurements to ensure the ongoing activities of the company. Most of open procedures (involving more than 1 million EUR) are funded by EU money related to the projects concerning MBT, Green waste containers, bulky waste sites etc.

Municipal waste from residents and small businesses in Alytus region is collected and delivered to Alytus region landfill, where currently 61,000 t municipal waste is treated. To fulfill the requirements of the EU-Directives the Alytus Region Waste Management Center has been active in planning and building a mechanical and biological waste treatment (MBT) facility. About 10 Million EUR has been unlocked from EU to invest in the MBT facility.

A mechanical biological treatment system is a type of waste processing facility that combines a sorting facility with a form of biological treatment such as composting or anaerobic digestion. The idea of the facility is to get less waste to landfilling and to raise the amount of biological treatment.

b) Who is doing the work
When designing a tender there are several options for ARWMC. If experience is found in-house the work is done by officials at the ARWMC. Sometimes consultants are hired to prepare the documents. Project funded by EU has to be dealt with the Environmental ministry department (www.apva.lt), which are providing approved tender documents and checks the procurement procedures of ARWMC at a later stage.

c) How – short description of the process
The ARWMC started their public procurement procedure with a Mechanical Biological Treatment System after the Lithuanian ministry of Environmental applied for support from EU for regional MBT projects in 2010, which got approved. The Environmental ministry recommended all regional waste management waste centres to do procurement for all MBT parts together (Mechanical and Biological) involving long term operation as well (for 10 or more years). ARWMC assessed this package-solution as a risk and decided to separate the procurements in two parts; construction and operation. The first part was to do MBT procurement considering the construction of the two objects mechanical and biological treatment systems, the second part was to prepare procurement documents and hire the operator for the facilities.

MBT Construction procurement - First of all ARWMC had to make a procurement to hire suppliers to help preparing the feasibility studies and procurement documents. When these documents were prepared the next step was to get approval to implement the project from the seven municipalities involved in ARWMC. The evaluation criterion for the tender documents was economic efficiency and three open procurement procedures were released (once in 2011 and twice in 2012). In December 2012 the first contract for the mechanical part was signed in December 2012. The biological part was signed in May 2013. The reason for having to make calls for tender three times was because was because MBT was a totally new issue for Lithuania’s construction companies. ARWMC was inexperienced, which resulted in the first round of tender documents not being ideal and the suppliers’ proposals were also deficient. On the second round of tendering the specifications and the proposals were better, but the price was too high. The third time procurement tender was released the Mechanical part contract was signed while the Biological part went on court. The money for Biological part was also partly missing and ARWMC appealed to the Ministry of Environmental for an extra funding. While the court examined the case ARWMC got approval for extra money and finally also the contract for the biological part was finalised.
**Operation for MBT facilities** - When the MTB projects was approved and starting up the Lithuania ministry of Environmental released the news that regional waste management centres are not allowed to operate MBT by themselves. The solution was to hire an operator. The procurement procedure is carried out by a contract with 2 lawyers, which are preparing the documents. The tender documents and technical specification are finished and approved by the ARWMC headquarters. When the main contract form is finalised the procurement tender documents will be released, probably in an international open procedure.

d) **Positive and negative aspects of the procurement process and recommendations to other procuring authorities**

The involved officials at ARWMC experience that every public procurement procedure is different from each other but in any case when preparing tender documents you have to be sure that only a minimum is left for suppliers to interpret during the procurement process.

The MBT project was the first one in Lithuania and ARWMC claim to be lucky that they have reached so far. Other regional waste management centres were trapped into suppliers’ claims and court procedures. Today there are only four signed contracts in Lithuania for MBT treatment. This shows a great problem of the procurement process in Lithuania, the use of suppliers to go to court against the regions and municipalities. There is a cultivated culture by the bidders to oppose the municipal public procurement decisions by appealing to courts just to win time or block competitors. Lithuania’s court procedures take long and suppliers sometimes abuse their rights. ARWMC is of the opinion that the court ought to prioritise projects funded by EU. Furthermore, ARWMC would find it helpful if the suppliers were obliged to pay grants if they lose, as the appeal procedures are time consuming and costly.

Generally for the whole Lithuanian waste management system, and especially in some geographical areas, the market is too small to have a sufficient number of bidders in public procurement. This is especially a problem when finding contractors for the operation of the new infrastructures. In the area of management of bio-waste there are no local agents with experience and foreign operators find it complicated to come into the Lithuanian market. The contracts involve a 10 year commitment to operate a facility and when requests for procurement of an operator comes in an ad hoc manner, foreign company will not have enough time to prepare to participate in the public bids.

Officials involved in procurement at the ARWMC would like to see simplifying of the procurement rules to ease the burden of filling out too many reports after the public procurement is done.

On the national level it is said that the expertise of the municipalities is fairly low and therefore they have difficulties in laying out the technical details in the requirements and sometimes the municipalities get no offers when they release public procurements. This is also shown in the ARWMC as the procurement procedure had to be carried out three times in order to reach agreements and sign contracts.

Despite encountered problems the project of MBT and the procurement procedure at ARWMC has given positive experience and more knowledge to all involved agents. Officials at the waste management centre have, within the RECO-project, also taken part in an international educational program of Green Public Procurement, organised by the EU-project Baltic Green Public Procurement.

**Contact**

Name: Andrius Jučas  
Organisation: Alytus Region Waste Management Centre  
E-mail: andrius.jucas@alytausratc.lt
Procurement at Umeå Water and Waste Ltd (UMEVA), Sweden

1) Short description of the Umeå Municipality and UMEVA

Umeå Municipality is situated in Västerbotten County in northern Sweden, 650 km from Stockholm. The municipality has 117,000 inhabitants and is, based on population, the 11th largest municipality in Sweden. Sweden has 290 municipalities and 9,482,855 inhabitants.

Umeå Water and Waste Ltd (UMEVA) is a municipal company owned by Umeå Municipality Company Ltd. UMEVA was formed in 2000 and have 114 employees a turnover of 302 million SEK 2012. The company is responsible for water, sewage and the municipal waste management system in Umeå municipality. The business is financed by taxes and fees.

UMEVA is interesting in the perspective of procurement as it is a municipal company engaging very actively in this area. The company brings together several municipalities in the region to discuss possibilities for collaboration and for development of a more effective waste management system in their region. UMEVA is part of the Procurement Group of The Swedish Waste Management Association and is also participating internationally to teach others about waste management and procurement. UMEVA was participating and holding a presentation at the RECO workshop in Riga, January 2013.

2) The Swedish Waste management system

The parliament and the Ministry of Environment issue laws and ordinances. The Swedish Environmental Protection Agency (EPA) is responsible for guiding the authorities responsible for inspection and enforcement, for the national waste management plan and the programs for waste prevention.

The Swedish waste management has improved over the decades thanks to a number of powerful policy instruments. One of these instruments was the introduction of landfill tax in the year 2000 which gives financial incentives for reducing waste quantities and recycling. A ban on landfilling of sorted combustible waste was introduced in 2002 and a ban on organic waste was introduced in 2005. The producer responsibility was introduced in 1994 and covers packaging, tires, newsprint, vehicles, batteries, pharmaceuticals and waste electrical and electronic equipment (WEEE).

Collection
The household waste is collected either in a mixed fraction intended for Waste-to-Energy or in separate fractions divided into food waste and combustible waste. Various kinds of vacuum systems and underground container systems are on the rise in urban areas. Bulky waste and hazardous waste as well as electrical and electronic equipment deriving from households are being taken care of at the municipalities manned recycling centers.

The collection of municipal waste from households is carried out through the use of contractors in 71 percent of the municipalities. The rest of the municipalities carry out the collection in-house. 2010 there were 49 active contractors on this market. The biggest private waste contractors operating in Sweden is SITA and Ragn-Sells and they worked in less than half of the municipalities using contractors, while 96 percent of the contractors shared the other half of the municipalities. The number of contractors has decreased since 2007. Some municipalities have divided the municipality into different areas and use a combination of in-house service and use of contractors. According to the Swedish Waste Association the average household waste fee 2010 was higher in municipalities where the collection is carried out with contractors (2025 SEK), compared to in-house collection (1940 SEK) (Swedish Waste Association, 2012).
Treatment

Sweden has about 30 household waste incineration plants producing district heating and electricity from 51.6 percent of the collected household waste. The other half of the collected volumes of municipal solid waste was in 2012 sent to material recycling (32.3 percent) or to biological treatment (15.3 percent). 60 percent of the 290 municipalities in Sweden collected source-separated food waste in 2012 and many more are introducing schemes for starting up collection of food waste. The main developments in the waste management infrastructure are the increasing number of local biogas plants. 0.7 percent of the collected municipal solid waste was landfilled, at 78 waste management plants, in 2012. Despite the fact that source-sorting, reuse, biological treatment and material and energy recycling have increased and the amount of waste being landfilled has decreased the volumes of generated municipal solid waste continue to grow (Swedish Waste Association, 2013). Therefore, a future priority is prevention and minimization of waste in order to shift focus towards reducing the volumes. Another challenge is to reduce the hazardous nature of waste and increase the knowledge on toxic pollutants and long-term risks and impacts of diffuse emissions from waste handling.

The waste may be treated in facilities owned by the municipalities, in facilities where the municipalities are engaged in ownership through regional companies or in facilities owned by other public bodies or by the private sector. There are 32 incineration plants in Sweden. 25 of these are wholly owned by municipalities through municipal companies. Four plants are entirely privately owned, while two have shared ownership between the private and public sector. One plant is state-owned. 20 percent of the municipalities incinerate the waste in-house while 80 percent hire contractors (Swedish Waste Association, 2012).

The role of the municipalities

The Swedish municipalities are responsible for collection, handling and treatment of household waste, except waste covered by producer responsibility obligations. The municipality may choose management system and municipal undertakings, separate or jointly with other municipalities. Cooperation is also possible in a joint committee or a local government federation. Some also cooperate on specific matters, such as joint procurements. To many municipalities, collaboration is a natural solution to attain the best possible environmental and social benefits, to achieve cost-efficient waste management and to guarantee the competence required, which benefits both residents and the environment.

Large and long-term infrastructural investments made by municipalities and their in-house companies are considered of great importance to the success of the Swedish waste management system, according to the Swedish Waste Association. The Confederation of Swedish Enterprise is of another opinion and strives to diminish the influence of the municipalities, meaning that the progress of the Swedish waste management system cannot be coupled to expansive municipal companies. They maintain that Sweden since the 1990s has worked the way up the waste hierarchy parallel with a gradual change of the waste market from almost a total monopoly toward an open market and increased concurrence. They claim that the introduction of the producer-responsibility and the instruments of bans and taxes for landfilling as well an increased awareness are the main reasons for the success of the Swedish waste management system (The Confederation of Swedish Enterprise, 2012).

Financing the waste management system

The household waste management is financed by charges paid by the property owner. The waste fees reflect the total costs for the municipal waste management. The costs for administration and service, invoicing and information are included in the fees as well as the service costs for the manned recycling centres for collection of bulky and hazardous waste. According the self-cost principle in the Local Government Act the income from the fees must not exceed the costs for municipal waste management. In average, a Swedish single-family home is charged 200 EUR per year for the waste management. For greater investments the local municipalities have the opportunity to borrow money from the municipality or from the bank. It is not possible to borrow money from the EU or from other international banks.
3) Procurement at UMEVA

a) What – object of the procurements
UMEVA carries out approximately 60 procurements per year. Around five of them are concerning the waste management system, regarding for example:

Collection contracts:
- waste collection in the city center
- waste collection in the surrounding areas
- collection of waste and sludge from islands
- waste collection from underground containers
- sludge removal
- waste collection from grease trap
- acquisition of bins and bags
- washing of bins
- transports from the manned recycling centers
- long distance transports of food waste

Treatment contracts:
- Incineration
- Waste crushing
- Anaerobic digestion of food waste

As UMEVA is a municipal company they are engaged in some practical activities. They manage the bins, which mean they own all the bins and change them if they are broken or if customers like to change the bin to one of another size. UMEVA is also in charge of the staff at the manned recycling centers, they manage the customer service and the billing in-house. The Dåva landfill in Umeå Municipality is another municipal company, www.avfallscenter.se.

b) Who is doing the work – involved institutions/persons
Every department has the responsibility and takes advantage of competence in-house. Competence is also hired from the procurement bureau of the municipality.

c) How – short description of the process
UMEVA starts to prepare a timetable 20 months before the planned start of a contract.

d) Positive and negative aspects of the procurement process and recommendations to other procuring authorities
UMEVA has a number of advices for a successful procurement of collection of household waste:

- put enough time into the preparation phase
- Interact with other municipalities
- Develop a procurement model and make sure to know the municipal waste plan in order to:
  - include specifications regarding important factors in your municipality
  - exclude detailed specifications with less importance or relevancy for your municipality
- The client shall not impose additional requirements on the contractor than he can accept to perform in-house activities
- Investigate the market. Create a dialogue with contractors and other parties who can bring knowledge to the procurement process. UMEVA recommends arranging informal meetings or workshops with potential bidders and stakeholders during the pre-procurement phase. Transport Workers 'Union and employers' organizations may also be invited. All potential
tenderers have to be invited simultaneously so that everyone gets the same information. Be open about the upcoming procurement and discuss the requirements that are reasonable to ask. Ask contractors if there is anything in particular to consider. Entrepreneurs tend to appreciate that they have the opportunity to provide feedback before a contract shall be made. Knowing what to ask for is not easy and it requires research and knowledge of the market as well as the local setting. Even though UMEVA does not purchase the vehicles for collection but only procures the service of waste collection, they specify their needs and define criteria that the contractor has to comply with. When preparing contract for collection UMEVA has also invited the suppliers of trucks, such as Volvo, Scania, Norba, to the workshops. It is good for the municipality to know details on vehicles and their different fuels, their different sizes, the alternatives with one, two or four partitions and the different level of noise. The supply and delivery time for vehicles the availability of and the future of alternative fuels in the municipality/region is also of interest.

- Discuss carefully the contents of the tender, regarding for example:
  - Length of contract
  - Coverage of geographical area
  - Technique for collection

- Make sure to have good relations with the contractors. During the contract it is important that the client and the contractor meet regularly at work meetings, customer meetings, information meetings and special meetings of the protocol. Neither parties should feel compelled to attend these meetings. A high level of trust between the parties creates good conditions for a good result. The municipality should perform audits at intervals of 2 years with external parties. Selected parts of the agreement should be reviewed. If deficiencies are found the control should be expanded. On behalf of the contractor the suggestion is to read the specifications (the Agreement) from time to time and go through the content with their staff in order to meet the conditions, before the municipality discovers deficiencies.

Contact
Name: Jan-Olof Åström
Organisation: Umeå Water and Waste Ltd, UMEVA
E-mail: jan-olof.astrom@umeva.se
Summary and recommendations

To continue to develop the Baltic Sea Region in an economic and environmental sustainable way we need to collaborate and learn from each other. We need to discuss best practices and we need to look for cross-border business to enable implementation of Best Available Techniques. Public procurement is one method to use to take steps ahead in the waste management sector. Every country has its own challenges, both in terms of waste situation and the use of public procurement. The examples of Tallinn, AWMRC, Ogre municipality and UMEVA illustrate some challenges, but they also give perspective how work is done in the region to proceed and improve the waste management situation. RECO suggests continued work to give municipalities in the BSR better tools to act as professional buyers on the market. It is helpful if there are visions and support from above. Therefore, one important objective of the RECO-project is to get decision makers to understand what to aim for in the waste management development. The Joint Baltic Sea Region Strategy for Municipal Waste Management has been produced to facilitate this process (RECO Baltic 21 Tech, 2013).

The public sector is lagging behind in parts of the BSR, following the footsteps of the companies instead of the other way around. The municipalities should have the means to start up development projects if there is no interest from the private sector to participate and invest in such projects. Municipalities that do not want to depend on the private sector have the option to keep operations in-house. This solution can also be considered when a well-prepared professional tender document does not attract the market and the number of offers is too low to ensure competition. Knowledge of tendering is still required as the rules apply for certain acquisitions even for in-house solutions. So, regardless of management the body in charge of the municipal waste system needs to be competent.

It is difficult to write perfect tender documents and to complete contracts without loopholes and interpretation difficulties. The skill comes with time and experience but guidelines and templates will facilitate the process of learning. Most important to keep in mind is that a well-equipped municipality does have the possibility to make changes even though the economic and political context may not be supportive and the possibility to create a perfect waste management system is scarce. Competent public procurers at the local level can spur innovation and new ideas and possibilities in society and they have potential to speed up a sustainable development.

RECO wants to highlight some common causes for a poor procurement process:

- Use of lowest price instead of most economic advantage tender (MEAT)
- The time consuming misuse of appeals
- Poor monitoring of the contracts
- Lack of incentives for the contractor to perform well

.. and some remarks for the future:

- Weak public institutions should be strengthened
- Joint procurement and other forms of collaboration is good for small municipalities
- Consider in-house arrangements if this seems to suit local needs
- Form networks in the region to exchange ideas
- Make specific manuals and templates to ease the procurement process
- Explore the possibilities of including green and sustainable criteria in the tenders

The political agenda of including environmental, social and business concerns in the tenders is getting increasingly important for the problem owners to master when specifying tenders. RECO (2013) recommends that the possible usage of GPP and SPP should be further investigated in the municipal waste management sector of the BSR.
Useful websites

SIMAP: http://simap.europa.eu/
The EU Environment/GPP: http://ec.europa.eu/environment/gpp/index_en.htm
Public Procurement Network: http://www.publicprocurementnetwork.org/
The EU-project Baltic GPP: http://www.balticgpp.eu/
TED/Tenders electronic daily: http://ted.europa.eu
References


European Commission. (2011:1). Commission staff working paper concerning the application of EU public procurement law to relations between contracting authorities (‘public-public cooperation’).


Hall, D. (2012). Re-municipalising municipal services in Europe. Commissioned by the European Federation of Public Service Unions (EPSU) to Public Services International Research Unit (PSIRU).


Martusevich, R. (2008). Regional disparities in the utility sector services in Russia – does the reform of local self-governance help reduce them? Public Services International Research Unit (PSIRU).

Offentliga Affärer. (den 26 March 2013). "Mycket är bra men grundproblemet kvarstår” (A lot is good but the basic problems remains). Offentliga Affärer.


The EU Observer. (den 6 March 2013). €120 billion lost to corruption in EU each year. Hämtat från http://euobserver.com/justice/119300 den 30 July 2013


