



LEGAL ASSISTANCE ON THE APPLICATION OF PUBLIC PROCUREMENT RULES IN THE WASTE SECTOR

FINAL REPORT

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FINAL REPORT

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Executive Summary

The report presents the results of a **study investigating the application of public procurement rules in the municipal waste sector** across the European Union conducted by Ramboll Management Consulting for the European Commission (DG GROW). The study is part of a process launched by the European Commission to analyse the application of public procurement rules in different market sectors.

The **scope** of the study was set by the definition of **municipal [solid] waste** as presented in the Waste Framework Directive.¹ The geographical scope of data collection was focused on seven Member States: **Germany, Italy, Poland, Romania, Spain, Sweden, and the United Kingdom**, with EU-wide data analysed where available.

The report was based on an **analytical framework** composed of seven research questions, which were addressed through a combination of methodological tools for data collection and analysis, including **desk research, explorative interviews**, seven **country reports** and three **case studies**.

Organisation of municipal waste management

The organisation of the municipal waste services is generally under the responsibility of **local public authorities** (municipalities). Local authorities have the possibility to perform the provision of services themselves (**direct public management**) or to delegate it to other public or private entities (**delegated public** or **private management**). Delegated public management is mainly organised through direct contract awards to a separate public entity under the control of the authority (under the exclusions provided by the EU Public Procurement Directive for in-house provision or public-public cooperation). Delegated private management is organised by outsourcing the public task to a private operator through public contracts and concession contracts, whereby the contract is awarded as a result of public procurement procedures.

In all of the studied Member States, municipal waste services are performed by both public and private (or mixed) operators, but different models or combinations of models of management are applied to the different stages of the municipal waste management sector (i.e. collection, transport, disposal and treatment) and the share of private sector participation varies widely.

In the *collection and transport* phase of the municipal waste sector, outsourcing is predominant in Poland, Romania, Spain, Sweden and the United Kingdom, while in Italy and Germany direct or delegated public management are more common.

In the *treatment and disposal* phase of the sector, *outsourcing* was found to be utilised predominantly in Poland, Romania, Spain, and the United Kingdom. In contrast, in Italy, Germany, and Sweden delegated public management has an equal

¹ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, OJ L 312/3, 22.11.2008

or slightly higher share of the delivery of disposal and treatment services compared to outsourcing to the private sector.

Delegated private management is usually organised through **public service contracts** and the vast majority of contracts in the sector are awarded as a result of **open public procurement procedures**. Negotiated procedures without prior publication constituted only about 2% of all procedures for the period of 2011-2013 and were usually used on the grounds of extreme urgency, lack of satisfactory offers received during an open procedure, technical reasons or need for complementary/supplementary services to those provided under an existing contract.

Concession contracts for the provision of municipal waste services are also used, but to a lower degree - mainly in Romania, Spain and (to a limited extent) Sweden. In the cases of Spain and Romania, it appears that concession contracts did not always entail a transfer of operational risk to the concessionaire, which is a requirement to qualify as a concession contract. Some of the concession contracts in Spain have therefore been annulled by administrative tribunals.

Trends and developments in municipal waste management

The current state of the sector is the result of rather dynamic developments brought about by contextual factors and the requirements of European and national legislation aimed at reducing the environmental burden of waste by promoting re-use, recycling and discouraging disposal. During the 1980s and 1990s almost all Member States underwent (to varying degrees) a process of **outsourcing** of waste management services to the private sector (via public procurement or concession procedures) due to political, legal and fiscal factors. Analysis of the developments in recent years indicates that there has been an increase in the outsourcing of certain phases of the organisation of the sector to the private sector (e.g. in the waste collection and transport sector in Sweden). In contrast, a process of **re-municipalisation** of municipal waste services (changing from private providers to direct provision by the municipality or provision on the basis of in-house arrangements or public-public cooperation) has gained momentum in Germany.

A number of factors influence the authorities' **choice between public and private provision of the services**. The collected evidence suggests that the in-sourcing of municipal waste services is usually influenced by local authorities' political preferences (Germany, Poland, Spain, United Kingdom), the need for flexibility (Germany, the United Kingdom) and the need for control over the delivery of services (Germany, the United Kingdom, Romania). On the other hand, the main incentives for out-sourcing of the services are considered to be the potential cost savings (Romania, Spain) and legal requirements mandating the use of public procurement procedures (Poland, Sweden).

When comparing the results of public and private management of municipal waste management services, several different aspects can be assessed. Evidence collected from Germany and Sweden indicates that the **costs and prices** of waste services are lower when there is open competition between private providers in the context of procurement procedures. However, studies for the same two countries indicate that the provision of services by public entities is conducive to higher **quality** services.

The evidence collected did not indicate a clear pattern or correlation concerning the extent of public and/or private participation in the waste sector and its **performance**. Member States identified as top performers (in terms of the degree of decoupling of waste from consumption, the amount of waste recycled, recovered, disposed, etc.) have varied systems that rely both on private and public participation.

It should be noted that as a consequence of the EU and national environmental legislation which require the phasing out of landfilling and the move towards more advanced treatment techniques for waste and towards waste prevention and minimisation, there is a trend across all Member States for increasing the number of incineration capacity and recovery facilities and reducing the number of landfilling facilities or deposits onto or into land. While across the EU there is a downward trend in the amounts of municipal waste generated on an annual basis, the move towards more sophisticated methods of treatment can be linked to the increase in government expenditure for waste management services (on average 2% per year for the period 2007-2013).

When it comes to trends in the **investments** made in the municipal waste sector, according to stakeholders across Europe, constrained public budgets have contributed to a trend towards shorter interim contracts (2-3 years), which inhibits investments in new infrastructure and creates reliance on existing assets. Furthermore, it appears that in the municipal waste sector private suppliers tend to invest in light infrastructure, whereas investments in heavy infrastructure are made by the public entities.

Openness of the municipal waste management sector

The study provided an assessment of the extent to which public procurement contributes to effective competition through the openness of the municipal waste management sector.

The size of the sector that is open to competition through public procurement depends on the extent to which the public sector has decided to outsource municipal waste management services. Data on procurement available from the EU tender portal TED indicates that on average for 2009-2013, the value of procured contracts corresponds to around 10% of the government expenditure for waste management in the EU.

Within the share of the municipal solid waste sector that is open to private sector participation through public procurement procedures, the degree of openness can be assessed by investigating the trends in terms of **cross-regional** and **cross-border participation**. The use of direct cross-border procurement in the waste sector is relatively low - on average, just 1,3% of the contract awards in the municipal solid waste sector in the EU in 2009-2013 were cross-border in nature. In comparison, indirect cross-border procurement, whereby the local subsidiaries of foreign-owned parent companies participate in procurement procedures, is more regular. In Poland, Romania and the United Kingdom, multinational municipal solid waste corporations provide a substantial share of the municipal waste services, while in Italy, Spain, Germany and Sweden, the presence of non-domestic providers is limited.

One of the obstacles to the cross-border and cross-regional openness of the sector is the narrow interpretation and application of the **principles of proximity and self-sufficiency**. These principles, as stipulated in the Waste Framework Directive, require that waste is treated as close as possible to the source and that Member States take appropriate measures to establish a network of waste disposal installations in line with EU legislation. In Germany, Spain, Italy, Poland, and UK, several cases were identified where tender specifications include geographic distance requirements related to the waste plant or transit station that limit the possibility of companies outside of a particular geographical area to take part in public procurement procedures. Evidence from Germany suggests that there are rare cases where contracting authorities tailor calls for tenders to favour incumbents by requiring a location within a specific area. As for the United Kingdom, it is noteworthy that according to past research, more than 70% of all tendered contracts for waste management services were awarded to the incumbent provider.

Other potential barriers to cross-border or cross-regional participation that were identified relate to non-compliance with the **transparency (publication) of procurement procedures** (Spain), and burdensome **administrative requirements for registration** (Poland). Additionally, certain **practices and requirements**, such as not dividing contracts into several lots or requiring disproportionately high proof of solvency, were reported to **put SMEs at a disadvantage** and create obstacles to participation on the market (Spain).

The **misuse of in-house exclusions** is also an issue. There have been cases of direct contract awards under the in-house exclusions that were not in compliance with the requirements in relation to the share of private ownership of the provider (cases in Germany and Italy) and the limits to the share of services provided on the private market (cases in Sweden and Denmark). Such cases of non-compliance with the rules can be expected to have a negative effect on competition and the openness of the sector.

Several **competition-related factors** were identified in relation to the ways in which public sector entities choose to conduct their activities in the waste management sector. When publically owned waste operators operate on open household waste and industrial waste markets and in parallel perform MSW service under directly awarded contract, there is potential scope for **cross-subsidisation** between their activities and there have been investigations into such practices in Sweden. Furthermore, such publically owned companies can enjoy an advantage in that they may be able to qualify parts of the sector as service of general economic interest and take advantage of the associated no-VAT regime in order to propose a more competitive offer for the treatment of commercial and industrial waste.

Irregularities in the sector related to public procurement

The study also reviewed the presence of irregularities treated by national courts or regulatory authorities in relation to compliance with public procurement rules within the waste management sector. There have been several cases at both EU and national level concerning the use of in-house arrangements and public-public cooperation in the waste management sector. The Court of Justice of the European Union has heard several cases in recent years concerning **horizontal cooperation** and concerning the

scope for **in-house contracting**, primarily in Germany and Italy. Such irregularities have also been considered by the national courts of Sweden, Denmark, Italy and Germany, especially concerning the interpretation of the requirement that an in-house entity must perform the essential part of its activities for its controlling entity and thus activities on the private market must be limited.

Irregularities related to the **set-up of public contracts** have also arisen, in particular, as regards the misuse of negotiated procedures without prior publication in situations of alleged "extreme urgency" (Romania, Italy), the excessive duration of public contracts (Romania); the misuse of the legal requirements for a valid award procedure (Romania), irregular changes to the initial public procurement procedure (the United Kingdom), abnormally low pricing (Poland), incorrect set up of procedures for the award and labelling of "service concession contracts" (Spain).

Irregularities related to the **abuse of a dominant market position** were identified in Spain and Poland. In Sweden, investigations into anti-competitive practices between companies and concerning potential bid rigging on the waste markets were conducted but the Swedish Competition Authority did not confirm any major infringements of the rules. In addition, cases of corruption, bribery and criminal behaviour were identified in Spain and Italy.

Outstanding issues

Analysis of the established irregularities in relation to the interpretation of the in-house and public-public cooperation rules and consultation with experts and stakeholders in the sector suggest that there are a number of questions which have not yet been fully answered by case law or the provisions of the EU Public Procurement Directives. In particular, legal questions arise in relation to the methodology for calculating the "essential part" of the activities for cases where a contracting authority controls several separate legal entities, and in relation to the financial figures that should be used in specific cases for the calculation of the share of activities provided by a publicly controlled entity. Additionally, questions arise in relation to the transfer of rights in cases where a private or mixed company acquires a public company that already holds an in-house contract. It is expected that these issues may give rise to questions on the interpretation of the provisions of the Directive in front of the Court of Justice of the European Union.

1. Introduction

The present document constitutes the final report on the project “Legal assistance on the application of public procurement rules in the waste sector”. The objective of the project was to examine how public procurement rules are applied in the municipal (solid) waste management (MSW) sector across Europe, with a focus on developments between 2010 and 2015. The report has specifically looked into the following seven Member States: Germany, Italy, Sweden, Poland, Spain, United Kingdom and Romania.

The report reflects the findings from the exploratory interviews, desk research, country reports and case studies conducted and drafted in the framework of the study.

2. Analytical approach

The following chapter presents the overall approach to the study, including the analytical framework, an overview of the methodology employed and the key challenges and limitations to the work undertaken.

2.1 Objectives, scope and overall approach

2.1.1 Objectives

In 2014, the Directorate-General Internal Market, Industry, Entrepreneurship and SMEs (GROW) of the European Commission endeavoured in conducting an analysis of the manner in which public procurement rules are applied in different sectors, including the waste management sector. In this context, the European Commission contracted Ramboll Management Consulting A/S to carry out the present study which has the overarching **objective** of examining the application of the legal provisions on public procurement in the waste management sector across Europe.

The work undertaken was intended to lead to a better understanding of the sector, detecting best practices as well as deficiencies and obstacles. This should allow the European Commission services to develop public procurement policy initiatives for the waste management sector.

2.1.2 Scope

The **scope** of the study was set by defining the boundaries of the municipal solid waste sector and the geographical scope for data collection.

The **definition of municipal waste** used for the study is based on the latest proposal for the revision of the Waste Framework Directive, where the term understood to encompass:²

- (a) mixed waste and separately collected waste from households including:
 - paper and cardboard, glass metals, plastics, bio-waste, wood, textiles, waste electrical and electronic equipment, waste batteries and accumulators;
 - bulky waste, including white goods, mattresses, furniture;

² Proposal for a Directive of the European Parliament and of the Council amending Directive 2008/98/EC on waste, COM(2015) 595 final.

- garden waste, including leaves, grass clipping;
- (b) mixed waste and separately collected waste from other sources that is comparable to household waste in nature, composition and quantity;
- (c) market cleansing waste and waste from street cleaning services, including street sweepings, the content of litter containers, waste from park and garden maintenance.

Municipal solid waste does not include waste from the sewage network and treatment, including sewage sludge, or construction and demolition waste. Additionally, commercial waste, which falls under the market regime, is also precluded from the scope of the study. For the purpose of this study, certain waste types covered by the “extended producer responsibility” (EPR) are excluded, such as batteries and accumulators, oils, electric and electronic waste. However, as the scope of the EPR schemes differs between Member States, relevant information has been reported where appropriate.

Concerning the geographical scope of the study, the research focused on investigating the municipal solid waste sector in seven Member States, namely: Germany (DE), Italy (IT), Poland (PL), Romania (RO), Spain (ES), Sweden (SE), and the United Kingdom (UK). Where feasible, the information collected for these Member States is presented and analysed in a broader EU context. These Member States have been selected by DG GROW in order to capitalise on the diversity of waste management systems and geographical location and gain a better understanding of the application of public procurement rules in the waste management sector across Europe, while keeping the analysis of manageable proportion.

2.1.3 Approach

The European Commission provided a clear outline of seven questions that the study investigated. In order to perform a thorough analysis of the questions, the study team developed an analytical framework (research matrix) for the operationalization of the provided research tasks. The framework (included in Appendix 3) served as the backbone of the study and guided the data collection and data analysis processes.

The approach of the study is also summarised in the following table which presents the different phases, activities and outputs of the project.

Table 1: Overview of the study phases, activities and outputs

Phase	Activities	Outputs
Inception	▪ Desk research: Literature review ▪ Desk research: TED and industry data ▪ Explorative interviews	▪ Inception note
Data collection	▪ Data collection at MS level ▪ Data analysis at MS level ▪ Country report preparation	▪ Interim report ▪ Country reports
Synthesis	▪ Case studies preparation ▪ Cross cutting analysis and development of typologies	▪ Case studies ▪ Draft final report ▪ Final report

The key activities of the project were the data collection and analysis performed at country level and consolidated within the seven country reports – one for each of the Member States selected for the geographical coverage of the assignments. The **country reports** (included in Appendix 4) addressed the research questions at national level on the basis of desk research and consultation with national stakeholders (representatives of industry associations, public and private sector providers, regulatory authorities, experts) and included the legal analysis of national public procurement experts.

Additional insight was obtained from interviews with EU level stakeholders, such as the European Federation representing the European waste management industry (FEAD) and Municipal Waste Europe.

The assignment included the development of **case studies** for in-depth investigation of the issue of in-house provision of municipal solid waste services and public-public cooperation. While the study as a whole focuses on the use of public procurement under the rules of Directive 2004/18/EC,³ the case studies had a forward looking perspective as they investigated also the rules introduced by Directive 2014/24/EC⁴ which was to be transposed by all Member States by 18 April 2016. The case studies on this topic covered **Denmark, Germany and Romania** and are available in Appendix 5.

The results of all data collection and country-level analytical activities are synthesised in the present report. The following table gives an overview of how the report addresses each of the research questions set by the European Commission for this assignment.

Table 2: Correspondence table between research questions and the present report

Research question	Section(s) in the report where this is addressed
1. How is the waste management system organised in Member States? (public vs. private, delegate vs. direct management) (a) What is the share of public (making a distinction between services provided by the authorities themselves or by public undertakings or Stadtwerke), private and mixed service providers? (b) In cases of delegated private management, are the contracts organised through public service contracts or concession service contracts? ▪ For public service contracts: what type of procedures have been used (open procedure, restricted procedure, negotiated procedure, direct award, etc.) and for which reasons? ▪ How have the concessions been awarded (which procedures have been used, etc.)? Have there been any judicial review procedures regarding the award of waste management service contracts or waste management service concessions?	Section 3 Organisation of the municipal waste management sector in the EU Section 6 Review procedures and irregularities

³ Directive 2004/18/EC of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts, OJ L 134, 30.4.2004.

⁴ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC, OJ L 94/65, 28.3.2014.

Research question	Section(s) in the report where this is addressed
2. What are the trends regarding privatisations or municipalisation in the municipal solid waste sector? - Where and when does it take place? - What are the decisive factors to change the management of waste management services?	Section 4.1 Public and private sector participation in the municipal waste management sector Section 4.2 Trends regarding privatisations or municipalisation Section 4.3 Decisive factors for the change in management of municipal solid waste services
3. Did the changes in management - lead to any price modifications towards the consumer or the costs borne by the contracting authorities? - have repercussions on the infrastructure?	Section 4.4 Consequences of change in management
4. To what extent private providers are domestic/local ones and to what extent they originate from third countries, other Member States or other regions? Thereby, it should be looked at to what extent the market is opened for competition by the tendering of public service contracts or of service concessions.	Section 5 Openness of the municipal waste management sector
5. What is the pattern of investments by private vs. public operators if at all different (scope of services, scope of maintenance, upgrade, new technologies).	Section 4.4 Patterns of investment and infrastructure
6. Case studies on the application of in-house public procurement and public-public cooperation provisions under the legal regime instituted by the Directive 2004/18/EC, respectively under the legal regime under the Directive 2014/24/EC)	Appendix 5
7. Cases of irregularities detected by national/European instances related to the provision of waste services (corruption, direct award, unjustified discrimination of local operators, lock-in, etc.)	Section 6 Review procedures and irregularities

2.2 Limitations

The key limitations and challenges in relation to the delivery of robust and accurate analysis of the research questions raised in the framework of the study were identified in the early structuring stage of the study and fine-tuned during the implementation phase. Some of the main limitations and challenges identified are presented in the following.

Politically sensitive issue

The economic interests in the municipal solid waste sector are substantial and in many Member States the market and political power of certain stakeholders can have an influence on the process of policy setting. With the aim of mitigating the possible politicisation of the issue and any bias in the presentation and analysis of the data, the data collection undertaken in the Member States was organised so as to be balanced between the different types of stakeholders and the analysis was based on the triangulation of data. These measures are considered to have increased the validity of the findings and conclusions of study, but in some Member States the scope for triangulation was limited by the reluctance or refusal of certain stakeholders to engage in the process of data collection by participating in interviews (e.g. in both Italy and Romania private sector providers contacted declined or did not respond to invitations to participate).

Data availability and quality

The level of availability and quality of data was not consistent across the selected Member States which had a certain negative impact on the comparability and validity of findings and has been indicated as such in the report. Where possible, the lack of quantitative data was compensated through the collection of qualitative assessments, which the study team made efforts to obtain and analyse in a transparent and unbiased manner.

Representativeness of the sample of Member States

The sample of selected Member States represents different governance models in the municipal solid waste sector, but the extrapolation of the study findings to the EU level should be undertaken with care. Where possible, the findings among the sample of Member States have been presented in relation to broader patterns at the EU level.

3. Organisation of the municipal waste management sector in the EU

The following section presents an analysis of the main models of organisation of the municipal waste management sector in the EU, starting with an outline of the legislative framework set by the EU (Section 3.1) and the overall environmental performance of the sector (Section 3.2). Sections 3.3 and 3.4 describe how the sector is organised in practice and the regulatory mechanisms for monitoring and control that ensure compliance with the legal framework and attainment of the environmental performance objectives in the seven Member States selected for the analysis.

3.1 Legislative framework

The following sections present the legal framework related to the waste sector at two tiers: environmental legislation and public procurement legislation.

3.1.1 Environmental legislation

The waste management sector is highly regulated at EU level. Article 191 TFEU is the primary legal basis as it defines the objectives and principles of EU environmental policy. According to Article 4(2) TFEU waste management is a shared competence between the EU and the Member States.

The overarching policy framework within which the waste management policy is developed is set by the objectives of the **7th Environment Action Programme (EAP)** (2014) which established the long term goals of the EU's environmental policy and will guide the policy until 2020 and beyond (until 2050).⁵ The priorities related to waste policy include: reduction of the amount of waste generated; maximization of recycling and re-use; limitation of incineration to non-recyclable materials; phasing out of landfilling for other than non-recyclable and non-recoverable waste; and ensuring the full implementation of the waste policy targets in all Member States.

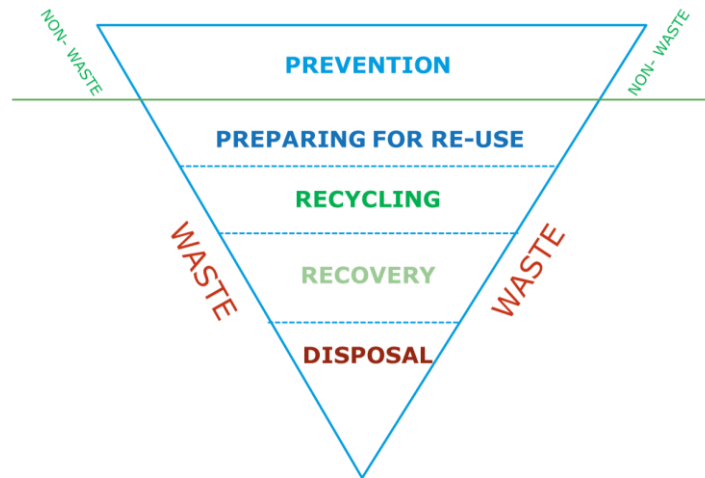
At the level of secondary legislation, the **Waste Framework Directive**⁶ adopted in its present form in 2008 stipulates the requirements and definitions⁷ necessary to protect the environment and human health through the prevention of harmful effects of waste generation and waste management.

The Waste Framework Directive established the EU's approach towards waste management as being based on the 'waste hierarchy' principle (see Figure 1). This principle obliges Member States and waste generators to respect an order of priority when shaping waste management legislation and policy.

⁵ Decision No. 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet', OJ L 354, 28.12.2013.

⁶ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, OJ L 312/3, 22.11.2008.

⁷ The Directive excludes a number of types of waste from its scope, namely: gaseous effluents, decommissioned explosives, radioactive waste, faecal matter, animal by-products, carcasses of animals that have died, waste resulting from prospecting, extraction and treatment or storage of mineral resources.

Figure 1: The waste management hierarchy

Source: European Commission, DG Environment

The 'ladder of prioritisation' emphasises the need to design materials, goods and services in such a way that their manufacturing, use, reuse, recycling and end-of-life disposal results in the least possible environmental burden of waste. Prevention is thereby the preferred option, whereas waste disposal (to landfills or through incineration) is the least preferred option.

In addition to the 'waste-hierarchy' principle, waste management solutions at EU level are to be designed in line with the **principles of 'self-sufficiency'**⁸ and **'proximity'** and the **'polluter-pays'** principle. The **'polluter pays' principle** (Article 14 of the Waste Framework Directive), including 'extended producer responsibility' (EPR), represents a fundamental pillar governing the EU's economic approach towards waste management. This entails that waste generators, manufacturers and distributors are responsible for the end-of-life stage of their products and for the costs incurred in connection with the treatment and/or disposal of the waste produced (e.g. batteries, electronic waste, and packaging).⁹

Apart from the Waste Framework Directive, a set of other legislative documents shape the manner in which the waste sector is managed. The core legislative documents are presented in Figure 2. They can be grouped based on their specific focus, namely: (1) obligations towards reporting and accounting, (2) rules on the shipping of waste, (3) operations emission limits and technical guidelines and standards, and (4) management obligations addressing specific waste streams.¹⁰

⁸ According to the principles of 'self-sufficiency' and 'proximity' laid down by the Directive (Article 16), Member States should also take appropriate measures to establish a network of waste disposal installations so that the EU becomes self-sufficient in waste disposal. The Member States may do this in cooperation with other Member States and the Member States are not obliged to possess the full range of final recovery facilities to dispose of waste.

⁹ European Commission, Waste legislation: <http://ec.europa.eu/environment/waste/legislation>. See also: European Commission (2014), Development of Guidance on Extended Producer Responsibility (EPR).

¹⁰ European Commission, Waste legislation: <http://ec.europa.eu/environment/waste/legislation/>.

Figure 2: Waste management legislation

Waste Framework Directive (2008/98/EC)			
Waste documentation	Waste shipment	Waste treatment operations	Waste streams
Commission Decision 2000/532/EC on establishing a list of waste (LoW)	Regulation EC No 1013/2006 on shipments of waste	Directive 1999/31/EC on landfill of waste	Directive 96/59/EC on the disposal of PCB/PCT
Regulation (EC) No 2150/2002 on waste statistics		Directive 2010/75/EU on industrial emissions (IPPC)	Directive 75/439/EEC on the disposal of waste oils
		IPPC BREF for Waste Treatments Industries	Directive 94/62/EC on packaging and packaging waste
		IPPC BREF for Waste Incineration	Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators
			Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)
			Directive 2000/53/EC on end-of-life vehicles

Source: Based on European Commission data

The EU waste management legislation defines a set of targets to be achieved in the waste sector in the EU in order to achieve the objective of EU waste policy. The targets are primarily stipulated in the Waste Framework Directive, the Landfill Directive and the Packaging Directive (see Table 3).

Table 3: Targets related to waste management relevant for municipal solid waste

Directive	Targets
Waste Framework Directive [Article 11]	By 2020, the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50 % by weight;
Landfill Directive [Article 5]	By 2016, biodegradable waste going to landfills must be reduced to 35% of the total amount (by weight) of biodegradable municipal waste produced in 1995.
Packaging Directive [Article 6]	By 2008 between 55 % as a minimum and 80 % as a maximum by weight of packaging waste will be recycled. ¹¹

Regulation (EC) No 1013/2006 on shipments of waste¹² establishes rules on the import and export shipment of waste in order to improve environmental protection. The Regulation encompasses control procedures for the shipment of non-hazardous waste which are to ensure that waste transports are managed in an environmentally sound manner. Article 11 of the Regulation allows competent authorities in countries of destination to raise objections to shipments of waste destined for *disposal* based on

¹¹ The Article 6 also stipulates also more specific targets per type of material.

¹² Regulation (EC) 1013/2006 of 14 June 2006 on shipments of waste, OJ L 190, 12.7.2006.

a number of grounds, including inter alia: that the planned shipment or disposal is not in accordance with measures taken to implement the principles of proximity, priority for recovery and self-sufficiency at Community level and national levels in accordance with Directive 2006/12/EC; that the waste is mixed municipal waste collected from private households; failure to apply best available techniques. Additionally, Article 12 of the Regulation stipulates the grounds for objection to shipments of waste destined for recovery which include amongst others: lower treatment standards at destination, violation of the EU environmental standards and recycling obligations.

3.1.2 Public procurement legislation

The municipal waste sector is also under the aegis of the public procurement rules, which regulate the award of contracts for the provision of municipal waste management services.

Public procurement rules

Public procurement in waste management services is governed by both European and national procurement rules, which have the objective of ensuring the efficient functioning of the Internal Market and respect for the principle of free movement of services (Article 56 TFEU).

For the period relevant to the present study, the EU public procurement rules applicable to procurement in the waste management sector, and in particular municipal waste, are mainly embedded in Directive 2004/18/EC. Unless otherwise mentioned in this report, data concerns procurements made under this Directive.

The Directive only applies to the award of contracts with values over certain thresholds, which are adjusted every 2 years. For 2014 and 2015, the main thresholds were EUR 207.000 for supplies and services contracts procured by sub-central contracting authorities, EUR 134.000 for supplies and services contracts procured by central government authorities, and EUR 5.186.000 for works contracts.

A set of guiding principles govern the application of procurement rules, i.e. *equal treatment of all economic operators; transparent behaviour; non-discrimination; proportionality and mutual recognition*. For contracts below the aforementioned thresholds, these principles need to be respected where the contracts are of a certain 'cross border interest'.

Contracts between Public Sector Bodies

It is pointed out that EU public procurement rules only apply when a public task is outsourced and for which a public contract is concluded. However, these rules do not require a contracting authority to outsource any of its tasks. A contracting authority is at full liberty to carry out tasks assigned to it internally, which will not require any form of procurement procedure, since this does not involve the conclusion of a public contract.

When a public contract is concluded (following procurement procedures), EU public procurement law will obviously apply, even when the contract is concluded *between* public sector entities, e.g. where a contracting entity receives services from a separate entity, including another contracting entity, against remuneration.

However, there are some forms of co-operations between public sector entities which display some of the characteristics of a public contract, but where a public contract is *not* deemed to be concluded - and as a result, EU public procurement law will not apply:

- 1) Member States can reorganize their public sector and transfer the powers and responsibilities for the performance of certain public tasks from one entity to another. In most cases, such transfers are outside the scope of public procurement rules.¹³ An example could be that a grouping of municipalities permanently transfer all of their powers and responsibilities for the performance of MSW tasks within their geographical area to a new public authority.
- 2) Contracts between entities subject to the control of a contracting entity (or the joint control of several contracting entities) may be exempt from public procurement rules, provided certain conditions are met. This is typically referred to as the 'in house doctrine (or sometimes as the 'quasi' or 'extended' in-house doctrine). The conditions for this exception were originally established in the *Teckal* case¹⁴ in 1999 and have since then been refined in extensive case-law.¹⁵ In brief, they can be summarized as follows:
 - the contracting authority/authorities must exercise over the other legal person(s) concerned a control which is similar to that which it/they exercises over its own departments;
 - the essential part of the activities of the controlled legal person must be carried out in the performance of tasks entrusted to it by the controlling contracting authority(-ies), and
 - there is no direct private capital participation in the legal person performing the activities.
- 3) Contracts between contracting entities may also be exempt from public procurement rules, where these contracts concern a real cooperation between the contracting authorities for the performance of public services, when the cooperation is carried out solely for the public interest and does not involve any significant performance of activities on the open market. This doctrine was originally established in a case concerning the city of Hamburg, which concerned an arrangement for waste disposal between several contracting authorities.¹⁶

The situations described under 2) and 3) above have now been codified and partly fine-tuned in Article 12 of Directive 2014/24/EU; see below.

The new Public Procurement Directive 2014/24/EU

In 2014, Directive 2014/24/EU repealed Directive 2004/18/EC with the purpose of simplifying procurement rules in the public sector. Directive 2014/24/EU adds specific provisions concerning several aspects of public procurement that were not directly

¹³ This is now specifically regulated by Article 1(6) of Directive 2014/24/EU on public procurement, OJ L 94, 28.3.2014, which states that "*Agreements, decisions or other legal instruments that organise the transfer of powers and responsibilities for the performance of public tasks between contracting authorities or groupings of contracting authorities and do not provide for remuneration to be given for contractual performance, are considered to be a matter of internal organisation of the Member State concerned and, as such, are not affected in any way by this Directive*".

¹⁴ CJEU, 1999, "*Teckal SRL v Comune di Viano*", C-107/93.

¹⁵ This includes cases concerning waste management, including from recent years the cases CJEU, 2008, "*Sea Srl v. Comune di Ponte Nossà*", C-573/07 and Joint Cases CJEU, 2011, "*Econord SpA v Comune di Cagno and Comune di Varese*", C-182-183/11.

¹⁶ CJEU, 2009, "*Commission v Germany*", C-480/06.

regulated in Directive 2004/18/EC, partially in order to codify case law from the Court of Justice of the European Union ("ECJ"). This includes rules concerning contracts between entities within the public sector ("in-house contracts"), modification of contracts during their term and termination, life-cycle costing, etc. The transposition deadline for Directive 2014/24/EU was 18 April 2016.

Concession rules

The EU provisions on concession contracts are to be found in Directive 2004/18/EC and Directive 2014/23/EU on the award of concession contracts as of 18 April 2016. Directive 2004/18/EC defines "public works/services concession" as a contract of the same type as a public works/services contract except for the fact that the consideration for the works/services to be carried out consists either solely of the right to exploit the work/services or in this right together with payment. However, the award of *service concessions* is **exempt** from Directive 2004/18/EC,¹⁷ while the award of *public works concessions* has only been subject to a special "light regime".

The new Concessions Directive 2014/23/EU establishes more explicit EU-level rules on the award of concessions, including requirements for publication of EU-level 'concession notices' regarding the intention to award a contract for works and services concessions with a value equal to or greater than EUR 5 186 000.¹⁸ Directive 2014/23/EU defines concession as a contract for pecuniary interest concluded in writing by means of which one or more contracting authorities or contracting entities entrust the execution of works/services to one or more economic operators the consideration for which consists either solely in the right to exploit the works/services that are the subject of the contract or in that right together with payment. Directive 2014/23/EU further specifies that the award of the contract involves the transfer of the operating risk in exploiting the works or services to the concessionaire.¹⁹

According to information collected on the main models through which public procurement is organised at Member State level, both public service contracts and concession contracts are used, but the share of public service contracts by far exceeds that of concessions contracts (see Section 3.3.4 for more details).

3.2 Environmental performance of the waste management system in the Member States

The amount of **municipal waste generated** at EU Member State level varies widely, reflecting the different levels of economic development and patterns of consumption (see Figure 3). Recent research show that signs of decoupling of economic growth from waste generation can be observed in some European countries such as Denmark,

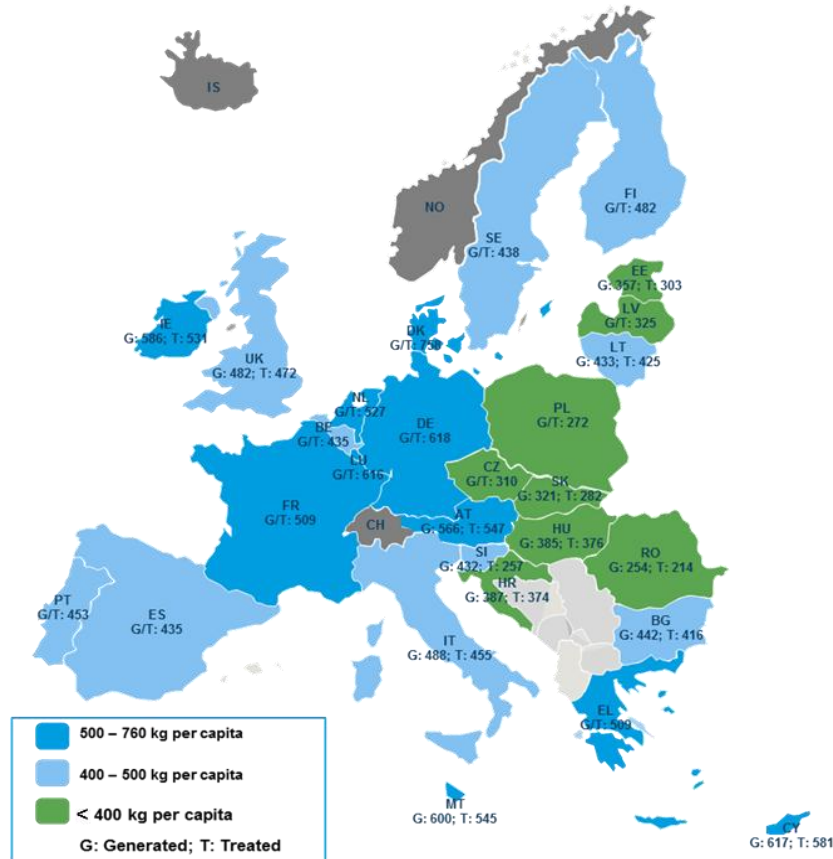
¹⁷ With a minor exception, as Article 3 requires that when a contracting entity grants special or exclusive rights to a non-contracting entity, the grant of special or exclusive rights must require the recipient (concessionaire) to observe the principle of non-discrimination on the basis of nationality in his award of contracts related to the exercise of the special or exclusive rights.

¹⁸ The stated threshold value is the value indicated in the original directive, which would concern 2014-2015.

¹⁹ Directive 2014/24/EU, OJ L 134, 30.4.2014, Article 1: "the award of a works or services concession shall involve the transfer to the concessionaire of an operating risk in exploiting those works or services encompassing demand or supply risk or both. The concessionaire shall be deemed to assume operating risk where, under normal operating conditions, it is not guaranteed to recoup the investments made or the costs incurred in operating the works or the services which are the subject-matter of the concession. The part of the risk transferred to the concessionaire shall involve real exposure to the vagaries of the market, such that any potential estimated loss incurred by the concessionaire shall not be merely nominal or negligible".

the Netherlands, Switzerland and Sweden.²⁰ According to the most recent data on the waste sector from Eurostat, the total municipal waste²¹ generated in the EU-28 in 2014 was 240.862 million tonnes.²²

Figure 3: Municipal waste generation per Member State (kg per capita, 2014)



Source: Ramboll Management Consulting based on Eurostat [env_wasmun]²³

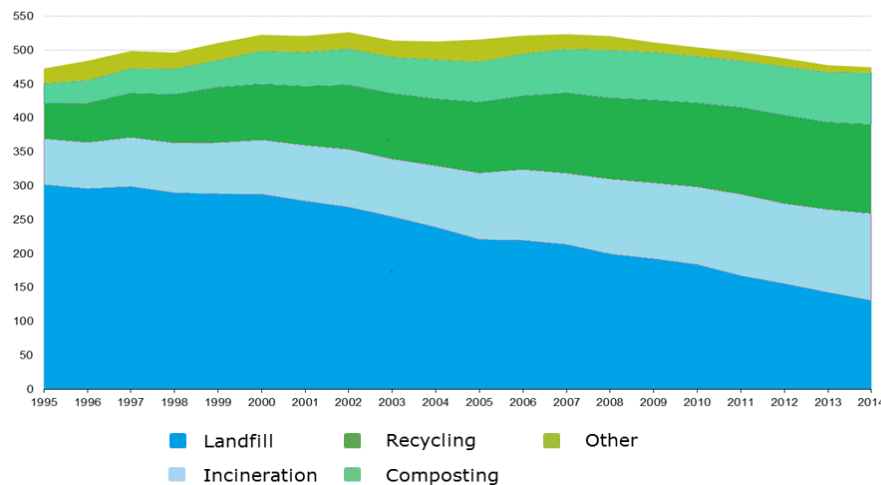
In terms of the **treatment of municipal waste**, the total amount of municipal waste landfilled has diminished by 54% over the past decade, dropping from 302 kg per capita in 1995 to only 131 kg per capita in 2014. As a result, the landfilling rate for municipal waste has dropped from 63,8% in 1995 to 27,5% in 2014 (see Figure 4). In contrast, the rate of recycling of municipal waste has increased from 11% in 1995 (52 kg per capita) to 28% in 2014 (132 kg per capita). The recovery of organic material by composting has increased with an average annual rate of 5,3% from 1995 to 2014, when it accounted for 44% of the treatment of organic material. Incineration has increased by 52% from 67 kg per capita in 1995 to 128 kg per capita in 2014.

²⁰ EEA (2014), Towards a green economy in Europe – EU environmental policy targets and objectives 2010 – 2050, See: <http://www.eea.europa.eu/publications/towards-a-green-economy-in-europe>.

²¹ Throughout the paper we tend to drop the word "solid", and rather refer to "waste" or "municipal waste". However, generally this refers to "municipal solid waste".

²² Eurostat (2015), [env_wasmun].

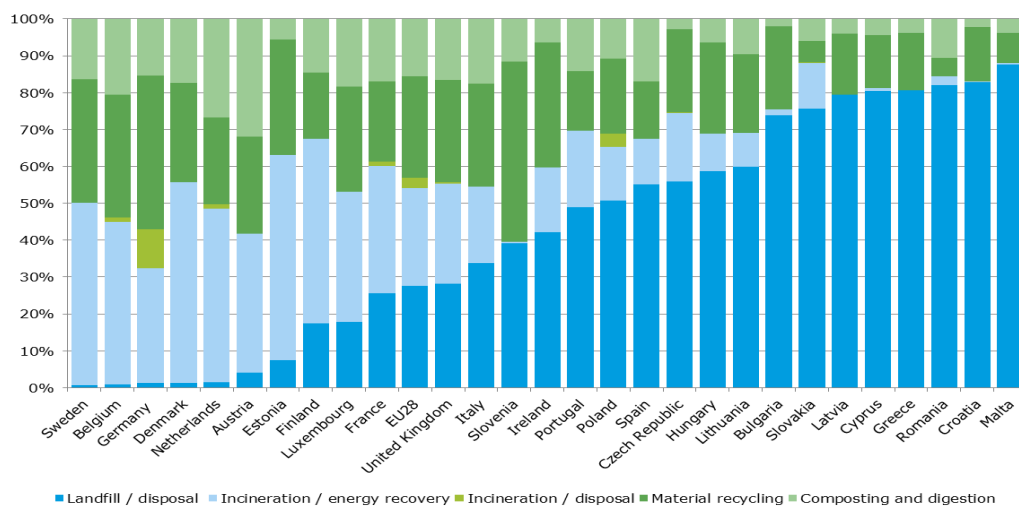
²³ Eurostat (2015), [env_wasmun]. Data for Ireland, Romania and Greece was not available for 2014. The graph for the three countries includes data from 2013.

Figure 4: Municipal waste treatment, EU-28, (kg per capita), 1995-2014

Source: Ramboll Management Consulting based on Eurostat [env_wasmun]

The reduction in landfilling practices for municipal waste can be correlated with the adoption of specific legislation imposing targets to be achieved, introduction of landfilling charges and bans, that limits the amount of waste generated by imposing targets to be achieved²⁴ but also to the different collection systems and the capacity limits in terms of waste treatment handling facilities for the purpose of reuse.

The choice between different treatment methods for municipal waste varies widely among Member States (see Figure 5). For instance, recovery is favoured in Member States in Northern and Western Europe like Germany, Belgium and Sweden, whereas Member States in Southern and Eastern Europe such as Bulgaria, Romania, and Greece continue to rely to a large extent on landfilling.

Figure 5: Municipal waste treatment, by type of treatment method (% of total municipal solid waste production, 2014)

Source: Ramboll Management Consulting based on Eurostat [env_wasmun]

²⁴ Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, OJ L 365, 31.12.1994.

A report conducted for the European Commission in 2012²⁵ performed an additional, more in-depth analysis of the waste management performance of Member States and scored each Member State based on a set of 18 waste performance criteria.²⁶ The screening had a strong focus on municipal waste as the implementation of waste legislation for municipal waste was considered to show the most important implementation gaps. As can be seen from the following table, the sample of countries selected for further analysis in the present report includes top-performing Member States as well as Member States with average and below average performance.

Table 4: Waste management performance

Above average [31-39 points]	Average [19-25 points]	Below average [3-18 points]
DE, SE, UK, AT, BE, DK, FI, FR, LU, NL	ES , HU, IE, PT, SI	IT, PL, RO, BG, CY, CZ, EE, GR, LT, LV, MT, SK

Source: BiPro (2012), Screening of waste management performance of EU Member States

²⁵ BiPro (2012), Screening of waste management performance of EU Member States, European Commission, Brussels.

²⁶ The criteria encompassed inter alia: decoupling of waste from consumption, waste prevention programme, amount of waste recycled, amount of municipal waste recovered, amount of waste disposed, development of municipal waste recycling, existence of barriers/restrictions for the disposal of municipal waste into landfills, total typical charge for the disposal of municipal waste in a landfill, existence of pay-as-you-throw systems for municipal waste, access to waste collection services, available treatment capacity for municipal waste, number of court cases on WFD and Landfill Directives, number of infringement procedures on WFD and Landfill Directives.

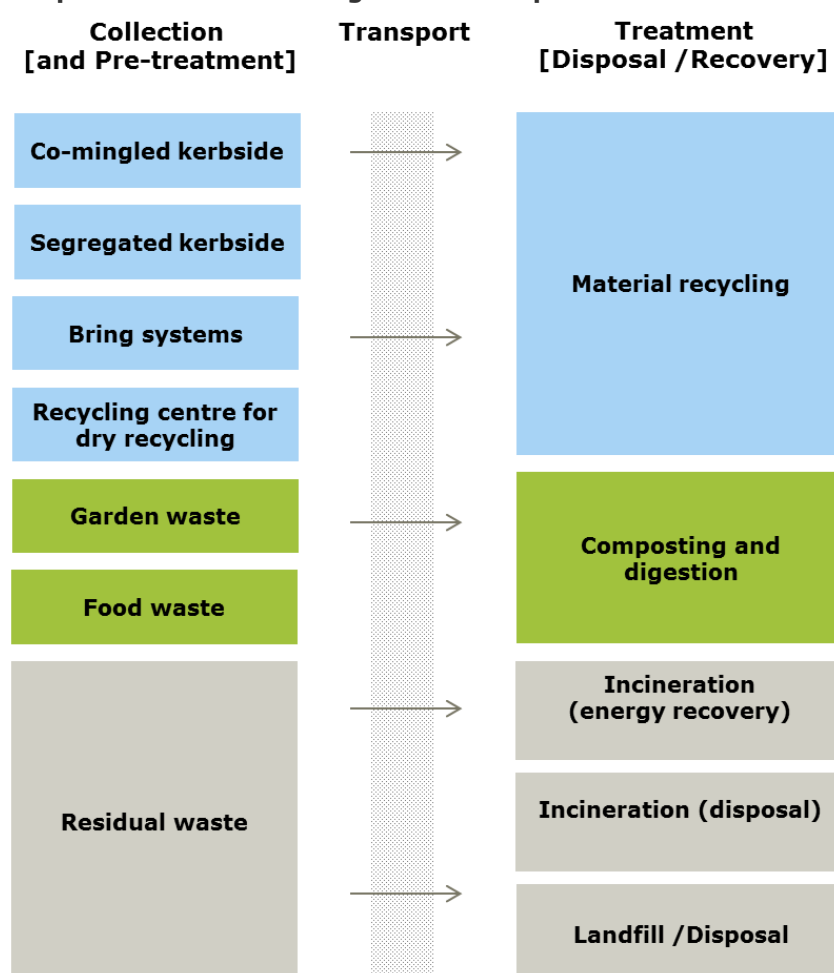
3.3 Main models of organising the provision of municipal waste management services

This section focuses on the main aspects of the organisation and provision of municipal waste management services in the Member States.

3.3.1 Main phases and characteristics of the waste management sector

Waste management systems rely on complex waste management cycles which comprise several different phases, namely collection, transport, treatment and disposal. The figure below illustrates, in a simplified manner, the **main phases of waste management** specific to the municipal waste management sector, including the different waste streams from households and public spaces and the available treatment methods for these.

Figure 6: Municipal Solid Waste management main phases²⁷



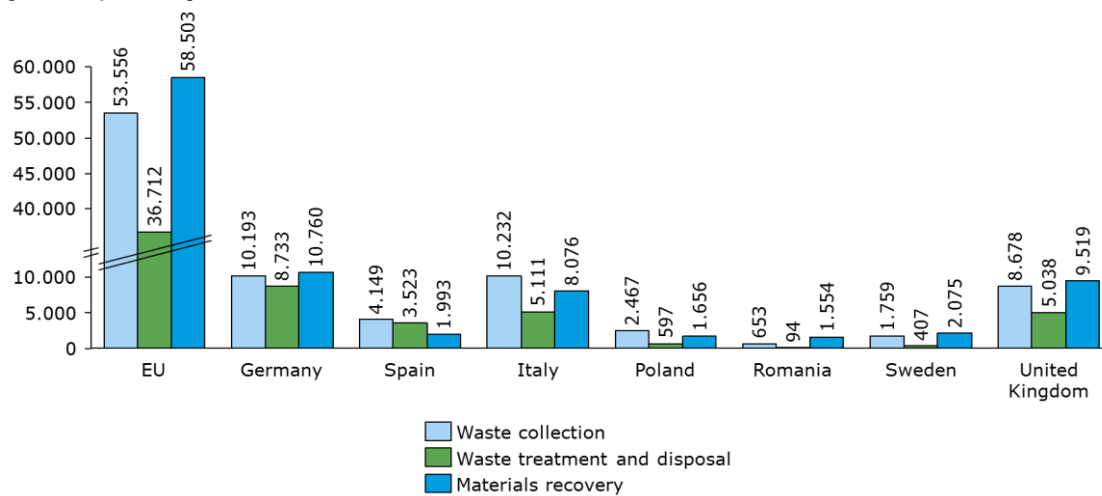
Source: Ramboll Management Consulting based on Eurostat

While the available statistics on the number of economic actors in the waste sector and their turnover do not distinguish between the municipal, industrial and

commercial segments of waste management, they nevertheless offer an overall indication of the dimensions of **economic activity** in the sector.

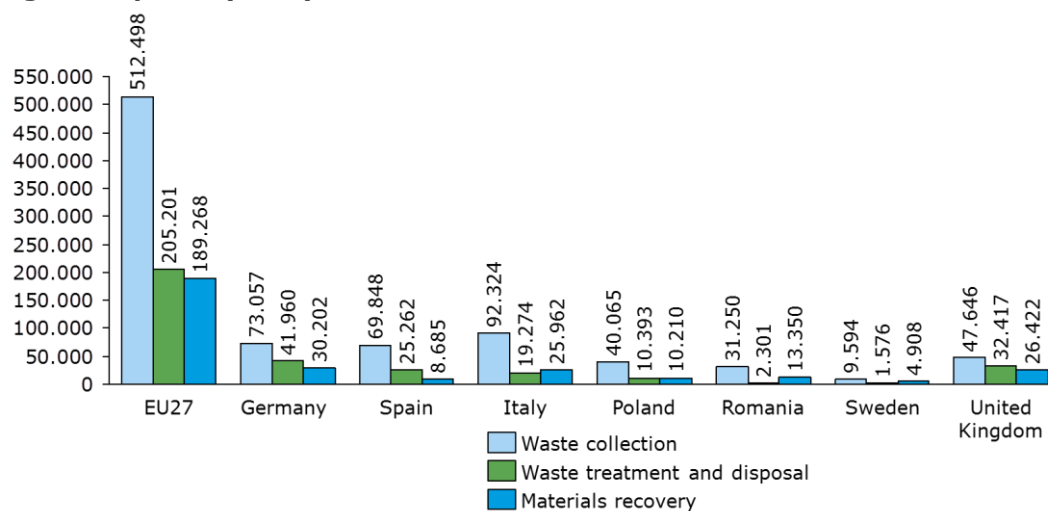
In terms of the turnover generated in the different segments of the waste sector (Figure 7), in 2014 it amounted to approximately EUR 150 million. It should be noted that the turnover related to material recovery is also higher than the turnover related to waste treatment and disposal, which is likely to be linked to the more costly nature of recovery services and the possible difficulties in achieving economies of scale given the high number of enterprises active in the sector (Figure 9). The high turnover for waste collection services reflects the wage costs of the relatively higher number of persons employed in the sector (Figure 8).

Figure 7 Turnover in the waste management sector per waste management phase ('000 €, 2014)



Source: Ramboll Management Consulting based on Eurostat [sbs_na_ind_r2]

Figure 8 Number of persons employed in the waste management sector per waste management phase (2014)

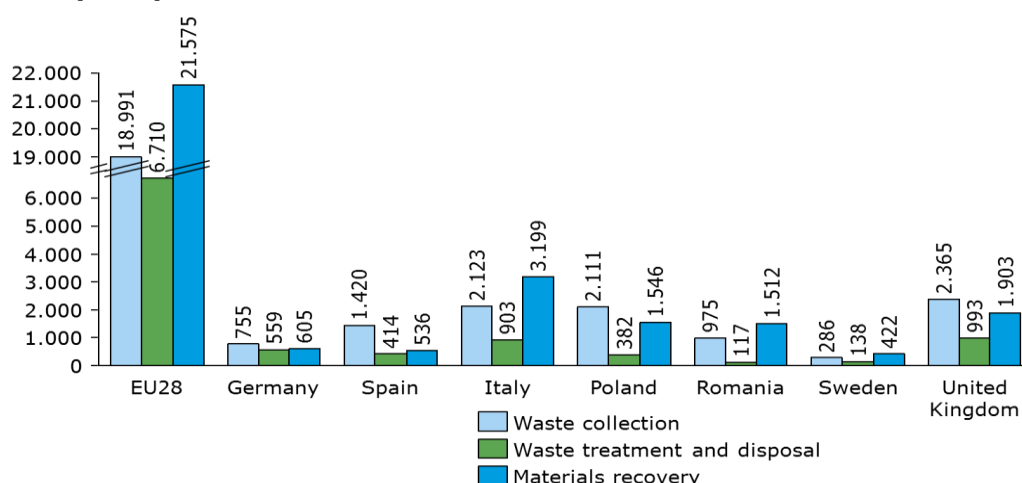


Source: Ramboll Management Consulting based on Eurostat [sbs_na_ind_r2]

²⁷ The figure is a simplified illustration of the main phases of management of municipal solid waste. The figure relies on Eurostat information for illustrating the different phases of waste management.

As of 2014, close to 47.000 enterprises were active in the various phases of waste management in the EU (see Figure 9). Generally speaking, the number of enterprises dealing with material recovery is higher than that of enterprises dealing with waste treatment and disposal as presented in the figure below. Waste treatment and disposal require more significant capital investments (e.g. landfills and incineration plants) compared to collection, sorting and recycling, which could indicate that treatment and disposal activities are carried out by fewer but larger enterprises.

Figure 9: Number of enterprises in the waste management sector per phases of waste collection (2014)



Source: Ramboll Management Consulting based on Eurostat [sbs_na_ind_r2]

3.3.2 Models of organising the provision of municipal waste management

The main responsibility for the delivery of services related to the different phases of municipal waste management falls in the remit of public authorities that can organise the delivery of services in three different ways: (a) either through municipal departments, (b) through municipally-owned waste management companies or (c) by outsourcing to (usually private) providers through procurement.²⁸

According to the literature on the topic, the different approaches towards the management of services of general interest can be categorised in several overarching management models. Van Dijk and Schouten classify the different approaches in four main models of management when assessing the European water supply and the sanitation market and the framework can also be applied to the waste management sector. The four models for the management and their specificities are presented in the following table.²⁹

²⁸ Corvellec, H. et al. (2013), Infrastructures, lock-in, and sustainable urban development: the case of waste incineration in the Göteborg Metropolitan Area. *Journal of Cleaner Production*, 50, 32–39.

²⁹ van Dijk, M. P. and Schouten, M. 2004. The dynamics of the European water supply and sanitation market. http://mir.epfl.ch/webdav/site/mir/shared/import/migration/D2_Final_Report.pdf.

Table 5: Types of organisation of the provision of waste management services (whole cycle)

	Direct management	Delegated management
Public management	Direct public management The responsible authority assumes full responsibility and executes the service itself, usually through one of its departments.³⁰	Delegated public management The responsible entity appoints a managing entity to execute the public tasks. Management entities usually remain under the ownership of the public sector, although in some cases there is the possibility of a minor private shareholding. Direct public management includes public-public cooperation³¹ and the use of "in-house entities".³²
Private management	Direct private management The public authority places the responsibility and execution in the hands of the private party, which assumes full responsibility for the provision of services. <i>NB: The research conducted did not identify examples of the application of this model in the municipal waste management sector in the EU.</i>	Delegated private management The responsible public entity appoints a private company for the management of tasks, on the basis of a time-bound contract in the form of public contract or concession contract, following procurement procedures. The private entity is independent from the responsible entity and acts as a contractor. The infrastructure may be owned by either the management or the responsible entity or be co-owned.

Source: van Dijk and Schouten

The choice of a particular management model determines the scope for participation of public and private service providers. In countries relying mainly on direct or delegated public management, there would be few opportunities for private companies to provide municipal waste management services. Conversely, countries relying on delegated private management will be characterised by the high market shares for the private sector.

In the Members states selected for the present analysis, **the predominant models of organising the provision of MSW services are delegated public and private management**. The data collected did not identify any concrete cases where the fourth

³⁰ This set up is sometimes referred to as "classical" in-house performance of services. This report does not use the term "in-house" to refer to Direct Public Management, but only when referring to the setups dealt with in CJEU case law which includes a separate legal entity; in the Van Dijk and Schouten model these setups would be classified as Delegated Public Management.

³¹ Public-public co-operations (as codified in Article 12(4) of Directive 2014/24) may not involve a separate legal entity, but may be direct (horizontal) co-operations where the responsibility for tasks is transferred directly between the participating contracting authorities (e.g. municipalities).

³² As allowed under the case law of the Court of Justice of the European Union and codified in Article 12 of Directive 2014/24. In-house provision could be executed through a typical 'vertical' in-house structure (e.g. a company wholly owned by the municipality), by in-house entities under joint control (e.g. a company owned jointly by several municipalities), via an 'reverse vertical' structure (e.g. a company controlled by a holding company transfers tasks to its parent) or a 'horizontal' in-house structure (e.g. one company controlled by a municipality transfers tasks to another company controlled by the same municipality).

model (i.e. direct private management) is used. It should be noted that in all Member States there is a **mixture of management models**, i.e. no Member State relies on a single model of municipal waste management.

In the *collection and transport* phase of the municipal waste sector, delegated private management is predominant in Poland, Romania, Spain, Sweden and the United Kingdom, while in Italy and Germany direct or delegated public management are more common. It can be noted that data collected from Germany and Sweden suggests that larger municipalities are more inclined to provide collection and transport services through their own departments whereas smaller municipalities tend to resort to delegated public or private management for the performance of such services.

In the *treatment and disposal* phase of the sector, delegated private management was found to be utilised predominantly in Poland, Romania, Spain, and the United Kingdom. In contrast, in Italy, Germany, and Sweden delegated public management has an equal or slightly higher share of the delivery of disposal and treatment services compared to outsourcing to the private sector.

These general trends in the organisation of the sector can also be found in the estimated share of services provided by public, private and mixed providers (Table 6). Where concrete data was available, the estimated share is broken down per phase of waste management cycle.

Table 6: Estimated share of services provided by type of provider in the selected Member States

Member State [year]	Private	Public	Mixed
Germany [2012/3]	50%	45%	5%
Italy [2016]	27%	55%	18%
Poland	N/A	N/A	N/A
Romania [2012]	53,7%	46,3%	N/A
Spain [2014]	Collection: 80%* Treatment: 80%*	Collection: 20%* Treatment: 20%*	Collection: N/A [low] Treatment: N/A [low]
Sweden [2015]	Collection: 71% Treatment: ~10%	Collection: 25% Treatment: ~90% ³³	4%
UK [2015]	Collection: 40% Treatment: ~<90%	Collection: 60% Treatment: >10%	Collection: N/A [low] Treatment: N/A [low]

Source: own research Ramboll Management Consulting

Please note that the data presented in the table below is not fully comparable across the countries as they refer to different time periods.

*based on market revenues. No data available on the share of public, private and mixed providers

The remainder of this section offers more in-depth analysis of the different patterns of public and private participation and management models in the municipal waste management sector at Member State level.

³³ Municipal self-administration: 48%; Municipal associations: 14%; Joint boards: 3%; Municipal companies, wholly-owned: 18%; Municipal companies, partial-owned (jointly): 16%

In **Germany**, municipal waste management services are almost equally shared between public and private providers and are provided through delegated forms of management. In general, waste collection and treatment is provided by municipalities, whereas more capital intensive treatment and disposal activities are procured from private companies. Overall, in 2016, the share of municipal enterprises in collection and treatment of residual waste was 47%, whereas the rest was divided between large private providers (i.e. Remondis, Veolia, Sita, Alba). Data from 2016 indicates that the share of public companies was significant, as approximately 550 municipal waste companies were active on the German market performing activities related to collection (56%), treatment (31%) and to a lesser extent recovery (4%).

In **Italy**, direct public management through the municipalities' departments was the main model of provision of waste services in approximately 1.000 out of 8.000 municipalities. At the same time, delegated public management through in-house contracts was identified as being one of the common systems to award contracts in particular in the Centre and North of Italy. Estimates provided by the interviewees suggest that the total share of in-house contracts amounts to approximately 70%. The Italian market is characterised by a high presence of public companies (55%) which together with the share of mixed companies (27%) generate approximately 70% of the revenues in the sector, the rest of 30% being generated by private companies representing 18% of the total number of companies present in Italy.

In **Romania**, a recent investigation of the sector indicates that delegated private and public management was utilised in 89,1% of the total contracts analysed. The proportion of contracts awarded through procurement procedures was slightly higher (54%) than the proportion of contracts awarded in-house (46%). An interesting trend identified in Romania is related to the participation of commercial operators in the sector. Over the past few years, there has been an increase in the organisation of the sector through separate legal entities - organised as private law companies, but fully controlled by the public sector (and, thus, exempt from tender requirements as in-house entities further to EU case law).

In **Sweden**, delegated private management is predominant in the collection and transport of waste as municipalities procure 71% of the collection of waste services from private companies. Delegated private management is also present in the treatment phase but only in recycling. In contrast, the treatment of waste through incineration is performed through direct management by the municipalities' administration (49%) or through delegated public management contracts awarded to publicly-owned companies.

In both **Spain** and **Poland**, the waste services are dominated by private providers which are delegated the management of collection, transport, treatment and disposal services from the local authorities. In Spain, the market shows a strong concentration with a limited number (5) of companies having more than 70 % of total market revenues.

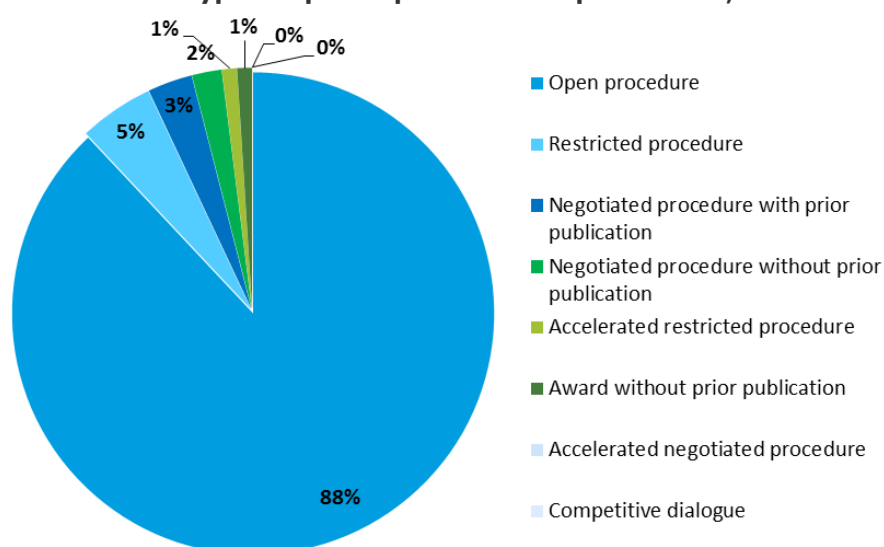
In the **United Kingdom**, certain regional variations are present in terms of how collection and transport activities are organised but Scotland, Wales and Northern Ireland rely predominantly on in-house operators (delegated public management). In England, 55-60% of collection contracts are provided by "in-house operators" or

"Direct Service Operators" (DSOs) (delegated public management) but certain regional differences are present, as regions in the North rely more on outsourcing. For the treatment and disposal phase, services are provided by Local Authority-owned waste disposal companies³⁴ (LAWDCs) and private firms. The data collected indicates that the vast majority (over 90%) of municipal waste treatment is outsourced to private sector providers through PPP and Public Finance Initiative arrangements.

3.3.3 Use of public procurement procedures

The provision of services through delegated private management is organised through public procurement procedures. Research by the European Commission indicates that the vast majority of the procedures used in the sector are open procedures. As indicated in Figure 10, a small number of contracts were awarded through restricted procedures (3%) and negotiated procedures without prior publication (2%).

Figure 10 Use of different types of public procurement procedures, 2011-2013



Source: Ramboll Management Consulting based on European Commission data³⁵

The data at national level presented in Table 7 reinforces these findings: the use of open procedures is predominant in all seven Member States (in six Member States the proportion is above 80%) and other procedures are used only to a marginal extent. There are two exceptions: in the United Kingdom, the use of the restricted procedure is very high (37%), and in Romania, the use of negotiated procedure without prior publication is also relatively high (17%). In the case of the United Kingdom, the conducted research could not identify the underlying causes for the use of restricted procedures, but in the case of Romania, analysis by the National Agency for Public Procurement indicates that in general, the wrongful application of the negotiation procedure without prior publication has been one of the main irregularities related to the application of public procurement rules.³⁶ However, more recent reports indicate

³⁴ There are two models for LAWDCs. The first model is one of collaboration with a private sector company holding 80 % and the Local Authority holding 20 per cent of the company's equity; in such arrangements, the joint-venture company (JVC) is controlled by the private sector, as the shareholding between private sector and the local authority reflects this corporate feature.

³⁵ European Commission (2015), Waste Management Public Procurement: A Sectoral Analysis.

³⁶ National Agency for Public Procurement, Annual Reports: <http://anap.gov.ro/web/rapoarte-de-activitate/>

that the situation was remedied and that the use of the negotiated procedure without prior publication has declined over the past few years (2010-2015).³⁷

Table 7: Type of procurement procedures for contracts above EU thresholds

	DE	IT	PL	RO	ES	SE	UK
Open procedure	90,39 %	86,7 %	90,03 %	82,1 %	95,9 %	96,0 %	50,1 %
Negotiated procedure	-	2,3 %	0,31 %	1,1 %	1,9 %	3,5 %	3,0 %
Accelerated negotiated procedure	0,24 %	0,1 %	0,27 %	-	-	-	0,2 %
Award without prior publication	1,01 %	0,7%	3,55 %	-	0,3 %	-	1,7 %
Competitive dialogue	0,12 %	0,1%	0,04 %	-	-	-	6,0 %
Negotiated procedure with prior publication	3,98 %	-	-	-	-	-	-
Negotiated procedure without prior publication	1,96 %	3,8 %	4,87%	16,8 %	1,6 %	0,2 %	0,5 %
Restricted procedure	2,31 %	5,2%	0,85 %	-	-	0,2 %	36,8 %
Accelerated restricted procedure	-	1,1 %	0,08 %	-	-	-	1,8 %
Not specified	-	-	-	-	0,3 %	-	-
Total	100 %	100 %	100 %	100 %	100 %	100 %	100 %

Source: TED

The analysis of award notices published on TED shows that contracting authorities use various justifications for the use of procedures without prior publication. The main reasons indicated in the award notices are presented in the table below.

Table 8: Justifications provided in award notices for contract awards without prior publication and for negotiated procedures without a call for competition

Reasons provided in award notices	IT	PL	RO	ES	UK
Technical reason (for instance when the required works/services can be provided by only one company)	X				X
Extreme urgency/Emergency situation brought about by events which the contracting authority cannot predict	X	X	X		
No offers (or no satisfying offers) received during the standard procedures	X	X			
New works/services constituting a repetition of existing work/services under existing contracts	X				X
Complementary / Supplementary works/ services	X	X ³⁸		X	X
Continuation of previous services				X	

Source: Country reports based on TED

Note: Sweden and Germany are not included in the table as TED did not contain information on the procedures which were not published prior to award.

³⁷ Ibid.

³⁸ According to the provisions of Article 67 (1) (6) of the Public Procurement Law, the awarding contracting authority may grant in a period of 3 years from the award of the main contract, the hitherto contractor of services of supplementary contracts constituting not more than 50% of the main contract value and involving the repetition of the same type of orders, if the main contract was awarded in an open tender procedure, and a supplementary contract was provided for in the contract notice for the basic order and complies with the subject of the main contract.

3.3.4 Use of concessions

In some Member States, contracting authorities resort to concession contracts in the delivery of services for waste management.

Spain and Romania are the only two of the studied Member States that make significant use of concession contracts. In Spain, concession contracts that require the concessionaire to build a new facility will typically also require it to transfer ownership of the facility to the contracting authority at the end of the contract period. However, it appears that at least some of these concessions did not entail a transfer of risk to the concessionaire and the Spanish administrative tribunals for public procurement appeals has annulled some of these contracts recently.³⁹

In Romania, prior to the transposition of the 2014 procurement Directives,⁴⁰ there was no legally expressed distinction between delegated management contracts qualified and consequently awarded as public service contracts and those qualified and awarded as concession contracts. The only choice was between awarding delegated management contracts as service concession contracts or as public-private partnership contracts. Thus, for the past nine years, almost all delegated management contracts were awarded as concession contracts, except for those cases when they were awarded as institutionalised PPPs.

Sweden appears to have made use of only a few concessions in the waste management sector. Four Member States (Italy, Germany, Poland, and United Kingdom) did not use concession contracts within waste management at all. According to the conducted analysis, in these countries there is an inherent incompatibility between the requirement that in a concession contract there is a transfer of operating risk to the concessionaire and the specificities of the national tax-based regimes for financing the performance of municipal solid waste services. For example, in Germany, Italy and Poland, households pay taxes or fees which are intended to cover the full actual costs of the performance of municipal solid waste services and this is seen as a hindrance for achieving a transfer of operational risk to a concessionaire.

3.4 Main models of monitoring and control mechanisms

The models of monitoring and control of waste services vary widely across EU Member States. None of the seven Member States has a single body tasked with the control of public service obligations in municipal waste management and in procurement of waste services. Instead, the responsibilities for control are shared by several public entities.

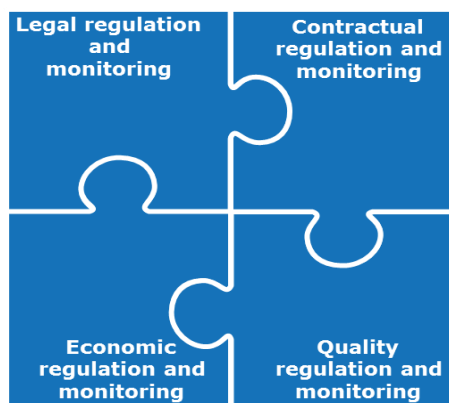
As already described in section 3.3.2, there are four distinct types of waste management based on **direct or delegated** provision of services by **public or private operators**. According to a recent publication by the OECD,⁴¹ each management model relies on four regulation and monitoring models that are identifiable at national and EU level – **legal, contractual, economic** and **quality** regulation and monitoring.⁴²

³⁹ See Section 6.3 for further details.

⁴⁰ Law 98/2016 on public procurement.

⁴¹ OECD (2013), Ad-hoc Network of Economic Regulators: A Regulatory integrated approach for water, wastewater and waste services.

⁴² The model presented in the OECD publication is further expanded and tailored for the purpose of this study.



Legal regulation and monitoring encompasses the legal regime for ensuring the delivery of waste management services to the population. Legal regulation and monitoring has a dual dimension including monitoring and control of waste services in general and monitoring and control of procurement of waste services. This is exercised at a more general level (e.g. government level) through regulatory instruments such as permits and licenses.

Contractual regulation and monitoring is connected to legal regulation and monitoring and encompasses the supervision of tender processes, contract documentation, contract amendments, contract compliance and the application of sanctions when adequate and necessary. Contractual regulation embeds to a certain extent economic and quality regulation, as contracts for services set clear prices and standards in terms of quality.

Economic regulation and monitoring of waste services encompasses the analysis of proposals for updating tariffs, the approval of tariffs, the monitoring of tariff application and the application of sanctions when necessary.

Quality regulation and monitoring includes the benchmarking and supervision of the quality of services provided in accordance with specified standards.

Each dimension of regulation and monitoring is present in all Member States but they rely on various regulatory instruments which are implemented by entities at national or regional / local level. A mapping of the regulatory authorities and their supervisory functions within the Member States is presented in Table 9. The table indicates a variety of approaches towards ensuring regulatory oversight that include the national, regional or municipal / local tiers.

In **Germany**, federal states (Bundesländer) have devolved the legal and contractual responsibility of waste services to the regional and local level, where municipalities and districts are in charge of the supervision of waste services and procurement procedures for waste services. The supervision and control of the price and quality by the contracting authorities is ensured normally through contract specifications, special authorisations given to the providers, municipal supervision (Kommunalaufsicht) as part of the federal state administration and the local responsible administrative court (Verwaltungsgericht). Merger control, the competitiveness of the market and prices of private sector companies are safeguarded by the Federal Cartel Office, the antitrust authorities of the German federal states (Landeskartellbehörde) and the Monopoly Commission.

In **Italy**, while the state retains a number of competencies including listing waste treatment and recovery plants of national interest,⁴³ the responsibilities for waste services and procurement of services are devolved to the regions and the

⁴³ Environmental Law Code, d. lgs. 3 April 2006, n. 152, Article 195.

municipalities. The municipalities control the economic and quality aspects of the provision of services through contracts. They are in charge of collecting taxes and ensuring the quality of the waste services provided. The sector is also supervised and monitored by the Anti-Corruption National Authority, the Competition Regulator and the Ministry of the Environment.

In **Poland**, responsibility for waste services falls with the municipalities, under the aegis of the provinces. Municipalities supervise and control the quality mainly by ways of contracts which stipulate the standards for provision of services. The municipalities are also in charge of determining the method for calculating the tax for waste.

In **Sweden**, municipalities are responsible for the collection, transport and disposal of household waste generated within their territory. The municipalities establish the municipal waste fees that are paid by the households, as well as the financing and investment plans for waste services. Quality is controlled through contractual relations and through permits issued by the Swedish Environmental Protection Agency. In addition to this, quality supervision is ensured through benchmarking conducted by the Swedish Waste Association through a benchmarking system (Avfall Web).⁴⁴

In **Spain**, the legislation places the responsibility for waste services in the hands of the Spanish municipalities. Supervision and control of the services in terms of quality and prices is ensured mainly through the specifications of the contracts concluded by contracting authorities with providers. In addition to this, on a more general level, the quality of the services is also controlled through permits and licenses granted to providers by the Autonomous Communities.

In **Romania**, waste management is entrusted to the local public authorities and supervised by a specialised authority for municipal services - the National Regulatory Authority for Municipal Services (A.N.R.S.C). A.N.R.S.C ensures the proper application of the legislation concerning municipal services of public interest and supervises the direct awards of contracts in conformity with the law. In parallel, the authority for public procurement (National Agency for Public Procurement) ensures the proper implementation of national procurement legislation which transposed the EU Public Procurement Directives whereas the National Council for Solving Complaints is in charge of solving complaints related to procurement procedures. At local level, contracting authorities are responsible for setting the prices and ensuring the quality of the services through contracts. According to Romanian stakeholders, such a system involving multiple authorities, is not fully optimal, as it leads to situations where the delineation of the responsibilities in terms of the interpretation and application of the law between authorities is not always clear and leads to legal uncertainty.

In the **United Kingdom**, regulation of the (municipal) waste sector takes place at different levels of government and is a devolved matter. In principle, local authorities are the main actors in the organisation and regulation of services. Local authorities control the service provision through contracts awarded to operators. At national level, the National Audit Office has ultimate monitoring and auditing functions for

⁴⁴ The indicators of the Avfall Web are used to evaluate the activities of municipalities. According to an interview with representatives of Avfall, Avfall Web is essential in the cooperation of municipalities as it fosters quality of services, expertise and finances which benefit both end users and waste facilities.

procurement by local authorities of England, Wales, Northern Ireland and Scotland. According to stakeholders in the United Kingdom, the supervision and control of the sector through direct and delegated public management is considered to lead to a better control of the sector and to ensure that the quality and price of the services provided are adequate.⁴⁵ Additionally, direct and delegated public management is considered to allow for more flexibility in terms of adapting to the needs of the consumers.

The evidence suggests that having supervision and control mechanisms has led to corrective measures in some Member States where procurement procedures did not abide by the law. For example, in Romania, as further explained in section 6.3.1, several cases of misuse of negotiated procedures without prior publication for the award of waste service contracts in alleged extreme emergency situations were successfully challenged with both the National Council for Solving Complaints (NCSC) and court rejecting the qualification of the situation as being an „extreme urgency“. In addition to this, as a result of the existence of mechanisms of control and supervision, several cases of irregularities concerning the use in-house exemptions have been identified (e.g. Sweden) (see section 6.3.2).

The table below maps out the different regulatory authorities and their control functions in the different Member States.

Table 9: Regulatory and control functions

		Germany	Italy	Poland	Romania	Sweden	Spain	UK
LEGAL AND CONTRACTUAL REGULATION	Waste management Plans /Strategy	Federal States	Ministry of Environment	Ministry of the Environment Regional Inspectorate for Environmental Protection	National Agency for the Protection of the Environment ATUs and IDAs (Municipalities)	Swedish Environmental Protection Agency Municipalities (local)	Coordination Commission on waste (State Level) Autonomous Communities	Department for Environment, Farming and Rural Affairs Environmental Agency for England Scottish Environmental Protection Agency Northern Ireland Environmental Agency
	Licenses and Permits	Federal States Municipalities and districts	Ministry of Environment Regions	Unclear	National Regulatory Authority for Community Services of Public Utility National Agency for the Protection of the Environment	Swedish Environmental Protection Agency	Autonomous Communities/ Municipalities	Environmental Agency for England and Wales Scottish Environmental Protection Agency Northern Ireland Environmental Agency
	Supervision of PP contracts	Federal States - municipal supervision Municipalities and districts	Optimal Territorial Authorities Municipalities	Municipalities Provinces	National Authority for Public Procurement National Council for Solving Complaints ATUs and IDAs (Municipalities)	Municipalities	Advisory Board for Public Contracting Administrative tribunals for public procurement appeals Municipalities	National Audit Office Local authorities
	Supervision of in-house contracts	Federal States - municipal supervision Municipalities and districts	Optimal Territorial Authorities Municipalities	Municipalities Provinces	National Regulatory Authority for Community Services of Public Utility ATUs and IDAs (Municipalities)	Municipalities	Advisory Board for Public Contracting Administrative tribunals for public procurement appeals Municipalities	National Audit Office Local authorities
	Market competition	Private sector companies: Federal Cartel Office Antitrust authorities of the federal states	National Competition Authority	Office of Competition and Consumer Protection	Competition Council	Swedish Competition Authority	National Competition and Markets Authority	Competition and Markets Authority

		Germany	Italy	Poland	Romania	Sweden	Spain	UK
		Public sector companies: Federal States - municipal supervision Municipalities and districts						
ECONOMIC REGULATION	Tariff regulation	Private sector companies: Federal Cartel Office Antitrust authorities of the federal states Public sector companies: Federal States - municipal supervision Municipalities and district admin. court	Optimal Territorial Authorities Municipalities	Municipalities Provinces	National Regulatory Authority for Community Services of Public Utility ATUs and IDAs (Municipalities) ⁴⁶	Municipalities	Municipalities	HM Revenue and Customs Local authorities
	Investment plans	Municipalities and districts	Regions	Unclear	ATUs and IDAs (Municipalities)	Municipalities	Unclear	Local authorities
QUALITY REGULATION	Quality standards	Municipalities and districts	Optimal Territorial Authorities Municipalities	Municipalities Provinces	National Agency for the Protection of the Environment ATUs and IDAs	Municipalities	Autonomous Communities Local authorities	Local authorities
	Benchmarking	Municipalities and districts (price benchmarking)	Central government/parliament ⁴⁷	Unclear	National Regulatory Authority for Community Services of Public Utility ATUs and IDAs	Swedish Waste Association	Unclear	Unclear

Colour scheme: National (Governmental) Body / Regional/Municipal/Local authority / Sector-specific organisation

Source: Ramboll Management Consulting based on country reports

⁴⁶ Administrative-territorial units (Municipalities), Inter-community Development Associations.

⁴⁷ According to Article 117 (2) of the Italian Constitution, benchmarking is in the competence of the government and parliament, but in practice this mandate has not been exercised so far.

4. Trends and developments in municipal waste management

The following sections present the findings concerning trends and consequences of public and private participation in municipal waste management.

4.1 Trends in privatisation or municipalisation

During the 1980s and 1990s, many EU Member States (including inter alia Eastern European states, Germany, France, Spain, Italy, etc.) underwent a process of privatisation of the waste management services. The process has been driven by political, legal and fiscal factors. One of the main factors for the privatisation of the waste management services were the difficulties encountered by public waste management authorities in ensuring the adequate disposal of increasing amounts of waste which required considerable investments in treatment facilities.

At EU level, the adoption of procurement legislation has further affected direct public services and obliged public authorities to follow a procedural framework when carrying out privatisation. Additionally, mounting pressure on public finances has led to the development of public-private partnerships (PPPs).⁴⁸

In recent years, several concurrent trends have been registered in what regards the mode of organisation and management of the waste sector in the EU Member States, namely:

- **Re-municipalisation:** in recent years a shift towards the re-municipalisation of waste management services has gained momentum in states where the waste services had been previously privatised.⁴⁹ This trend has been reported mainly in Germany.⁵⁰
- **Continued municipal control and management with some degree of privatisation:** in particular in Northern States (Sweden, Denmark, Finland, Austria) where the management of waste sector has traditionally been carried out by the public sector.
- **Reinforced privatisation:** in recent years in some Member States (Spain, Poland) an increased privatisation of the sector has been registered.
- **Other trends** have been identified, i.e. concentration (large companies acquiring smaller companies), selling of public shares (public companies sell their shares to face financial difficulties), absence of investments in some regions of Italy.

The data collected through the country reports provides a more nuanced picture and explanation of why these trends occurred, as presented in the table below.

⁴⁸ EPSU (2012), Re-municipalising municipal services, Report commissioned by EPSU to Public Services Internal Research Unit.

⁴⁹ Ibid.

⁵⁰ Nordic Competition Authorities, Competition in the waste management sector – Preparing for a circular economy.

Table 10: Explanation of trends in terms of re-municipalisation or privatisation in Member States

MS	Explanation of trends
Germany	An increase in the share of municipal enterprises in waste management has been observed. While the overall contribution of municipal enterprises to GDP has only slightly increased in the past years, the share of municipal enterprises covering the collection of residual municipal waste has risen from 37,4% in 2005 to 45% in 2013.
Italy	- No trends in terms of privatization or re-municipalisation were identified. - A trend towards more concentration of the market due to acquisitions poses a complex problem in relation to procurement. One issue that occurred is related to the unclear stance of entities due to acquisition, i.e. if a private or mixed company acquires a public company that has been awarded an in house provision contract, it is unclear whether the aforementioned private or mixed company gains the right to provide services under the in house provision contract.⁵¹ In addition to this, a trend in selling of public shares due to financial difficulties and an absence of investments in the South of Italy also impose challenges in the adequate delivery of services.
Poland	- Before 2013 a large wave of privatisation in the municipal waste sector was observed. Public companies became either fully privatised or mixed joint ventures with involvement of private suppliers. - A trend towards more public management is anticipated as a result of the legislative changes allowing the use of in-house service provision.
Romania	Trend towards services being provided increasingly by publically owned commercial entities. The data collected indicates that the public sector is increasingly organising the public provision of services in separate legal entities - organised as private law companies, but fully controlled by the public sector (and thus exempt from tender requirements further to the in-house rules).
Spain	Data on the share of market revenue by private sector companies indicates a trend towards further privatisation - in recent years their market share has increased by 4,5%.
Sweden	- Compared with the early 1990's when more than 50% of household collection was "in-house", there has been a politically driven shift towards more procurement. - In 2015, 71% of the <i>collection services</i> in Sweden were procured by municipalities and carried out by private contractors, whereas in 25% of collection services were provided solely in-house, and in 4% of cases the provision was done by a combination of public and private. Before the 1990's, only approximately 30-40% of the collection services were outsourced to private contractors. - The <i>treatment and disposal phase</i> continues to be dominated by public (municipal) companies. In Sweden, in 2015, out of 34 Waste-to-Energy (WtE) facilities, approximately 30 were owned by public companies.⁵² Public companies in the Northern states in general are investing more in incineration and biogas plants, whereas private companies invest more in material recycling plants.⁵³
UK	A significant trend identified in the UK is related to privatisation and contracting out the municipal waste services by the local government as a result of Compulsory Competitive Tendering (CCT) introduced by the Local Government Act in 1988.

Source: Ramboll Management Consulting based on country reports

⁵¹ The CJEU judgment in the *Sea* case suggests that such a transfer of shares to a private party would constitute a substantial modification of the in-house contracts, implying that the affected contracts should be (re-)tendered (case C-573/07, *Sea Srl v. Comune di Ponte Nossia*, para 53).

⁵² Interview with Municipal Waste Europe / Avfall Sverige.

⁵³ Interview with Sysav, Interview with Avfall Sverige/ Municipal Waste Europe.

4.2 Decisive factors for the change in management of municipal solid waste services

The review of literature and the consultation of industry stakeholders identified a number of factors that can explain the trend towards re-municipalisation or privatisation of waste services. The research conducted suggests that just as the trends towards privatisation and municipalisation differ from country to country, so do the main drivers, reflecting the differences in the economic, social and political situation in the EU Member States. Table 11 presents the main factors identified as affecting decisions on changes in the management of the municipal waste sector and lists the countries where they have been found to be present via the country report analysis. The following subsections offer a closer look at the factors, with examples from the studied countries.

Table 11: Mapping of decisive factors for in-sourcing and out-sourcing in the Member States

Decisive factors		DE	PL	RO	ES	SE	UK
IN-SOURCING	Flexibility in terms of adapting to needs	X					X
	Cost-benefit advantages	X			X		X
	Control over the delivery of services	X		X			X
	Reduce public spending	X					
	Political preference	X	X		X		X
	Securing jobs for the local authorities						X
	Tradition (Path-dependency)					X	
	Infrastructure ownership					X	
	Expiry of private contracts	X		X			
OUTSOURCING	Cost-efficiency advantages			X	X		
	Higher quality of services				X		
	Need for investments				X		
	Legal requirements for public procurement		X			X	
	Pensions						X

Source: Country reports based on interviews and national level desk research

4.2.1 Factors leading to (re-)municipalisation

The analysis conducted at national level on the basis of desk research and interviews with industry stakeholders identified a number of different factors that motivate public authorities to switch from private to public provision of municipal waste services.

The need for **flexibility** and **control over the delivery of services** were cited as decisive factors in Germany⁵⁴ and the United Kingdom⁵⁵ where the contracting authorities

⁵⁴ Views shares by stakeholders interviewed for the Germany Country report; Heinrich Böll Stiftung (2010): In und Outsourcing in der kommunalen Abfallwirtschaft

generally consider in-house provision contracts to be more easily adaptable to the needs of consumers and allowing for a better control of the quality of services. Representatives of public sector service providers are of the view that public management models are examples of best practice as immediate control over the services is considered to ensure their functioning according to the rule of law and that the quality and price of the services provided is adequate.⁵⁶

Other important factors incentivising (re-)municipalisation reported by stakeholders and identified through desk research are the fact that in-house procurement is associated with **reduced transaction costs of tendering**. The **expiry of private contracts** in many Member States has been an additional catalyst that has led to a shift in the management of the waste sector in some states.

In the case of the United Kingdom, delivering a service in-house was cited as a manner of **securing local authority jobs**.⁵⁷ In addition to this, several Member States (Germany, Romania, Poland, the United Kingdom) indicated **cost-benefit advantages** and **local political preferences** as catalysts for in-sourcing. Cost saving is also cited by stakeholders as a factor for outsourcing the services (see next Section), but the review of the evidence (Section 4.3) suggests that isolated examples notwithstanding, there are little or no systematic significant differences in efficiency between public and private provision of services. It should be noted that the specifics of the waste sector could also present additional economic incentives for public authorities to manage the provision of municipal waste services themselves or even enter into other segments of the waste market – this issue is discussed in Section 5.4.

4.2.2 Factors leading to privatisation (outsourcing)

The privatisation process is often linked to **efficiency gains due to economies of scale, access to specialised know-how and state-of-the-art waste treatment technology** and **market innovation**.⁵⁸ Large waste management companies have extensive purchasing power which may enable the level of capital investment required to be reduced, resulting in a lower contract price.

Overall, the most commonly cited factors for outsourcing were **cost-efficiency considerations**, the **quality of services** and **legislative requirements** for the use of public procurement to provide services. These were reported as decisive factors in the case of Romania, Spain, Poland and the United Kingdom.

Privatisation was identified as an important trend in Spain and Poland, in particular in connection to the treatment phase, which is characterised by high sunk costs and risks. Outsourcing through PPP models creates incentives for cost efficient solutions and provides the potential for **transfer of risks to private parties**. A PPP contract transfers a major part of the risk in every stage of the project to the private partner, which implies that the contract will take a full life cycle of the business and minimise the overall costs.⁵⁹ The following figure shows the differences between public procurement and PPP contracts in terms of risk sharing.

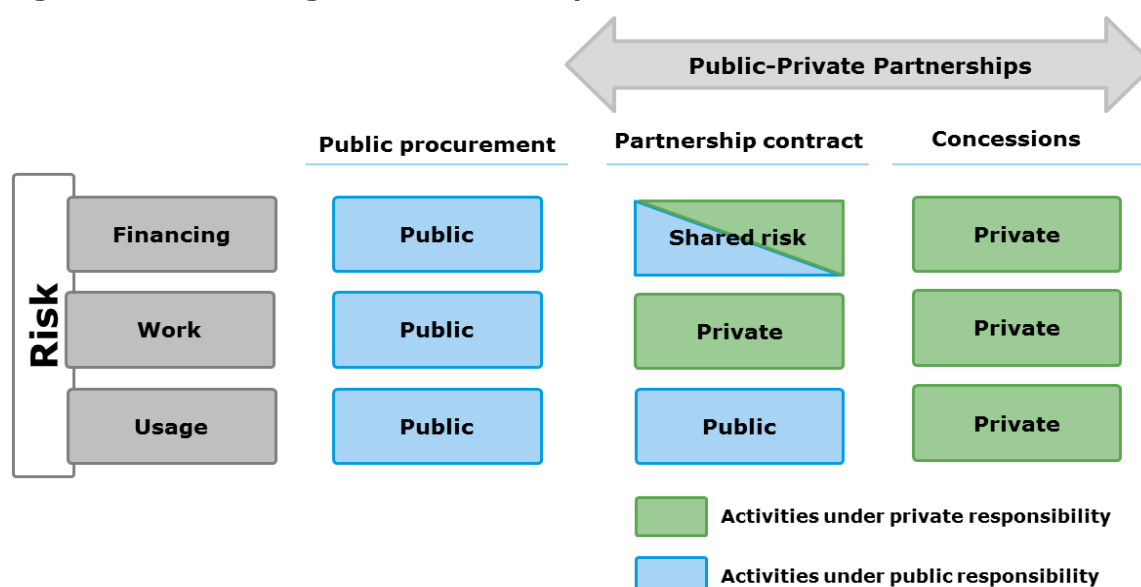
⁵⁵ Views shares by stakeholders interviewed for the UK Country report; 2016 analysis of industry data and online survey published in Ricardo Energy & Environment (2016) Public Realm Services – Making the Right Choice

⁵⁶ Interview with Verband der öffentlichen Wirtschaft und Gemeinwirtschaft, Interview with Avfall Sverige / Municipal Waste Europe.

⁵⁷ Ricardo Energy & Environment (2016) Public Realm Services – Making the Right Choice

⁵⁸ Interview with FEAD, Interview with BusinessEurope

⁵⁹ Copenhagen Economics (2015), Public Outsourcing, Potential in the EU: Benefits and Barriers, Commissioned by E3PO.

Figure 11: Risk sharing in PPP and Public procurement⁶⁰

Source: Copenhagen Economics (2015), Public Outsourcing, Potential in the EU: Benefits and Barriers

To sum up, the evidence suggests that the decision to opt for in-sourcing in the provision of services can be motivated by political preferences, the need for flexibility and control over the delivery of services, whereas the main incentives for out-sourcing of services are represented by cost benefit-advantages and legal requirements for public procurement. It should be noted that econometric empirical studies of efficiency and privatisation in waste management have found no systematic evidence to support a difference in costs between public and private provision and the efficiency has to be considered on a case-by-case basis. The lack of efficiency gains in private provision has been linked in some studies to the high concentration of waste markets, in that the limited number of private providers makes the market less competitive.⁶¹

4.3 Evolution of costs, price and quality, and investment patterns

The following sections look into the evolution of the costs, price and quality, and investment patterns in the municipal waste sector, reflecting, where feasible, the connection between these characteristics and choice between public and private provision of services.

4.3.1 Costs of services for contracting authorities

According to Eurostat data, government expenditure for waste management in the EU Member States has registered a slight increase in most of the seven Member States studied, one exception being the United Kingdom.

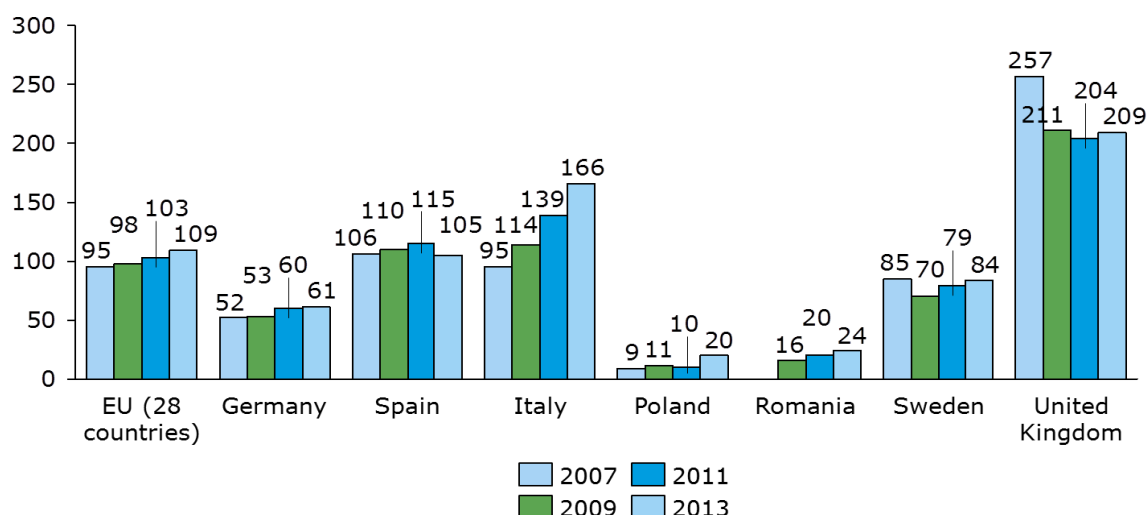
On an EU level, the average annual growth rate for expenditure (EUR per inhabitant) for the period 2007 to 2013 was approximately +2% and in 2013 the expenditure was

⁶⁰ Financing risk is the probability of loss that increases as the repayment period of an investment increases. Work risk is related to risks associated to the workplace (e.g. accidents related to the management of waste). Usage risk can be connected to overcapacity due to fluctuating waste amounts.

⁶¹ Bel, G., Fageda, X., and Warner, M. E. (2009), Is Private Production of Public Services Cheaper than Public Production? A meta-regression analysis of solid waste and water services. Working Paper of the Research Institute of Applied Economics, 23, 1–33.

14,6% higher compared to 2007 (Figure 12). It should be noted that the high levels of expenditure in the United Kingdom are most likely due to the on-going Private Finance Initiative (PFI) which funds the construction of waste treatment facilities.

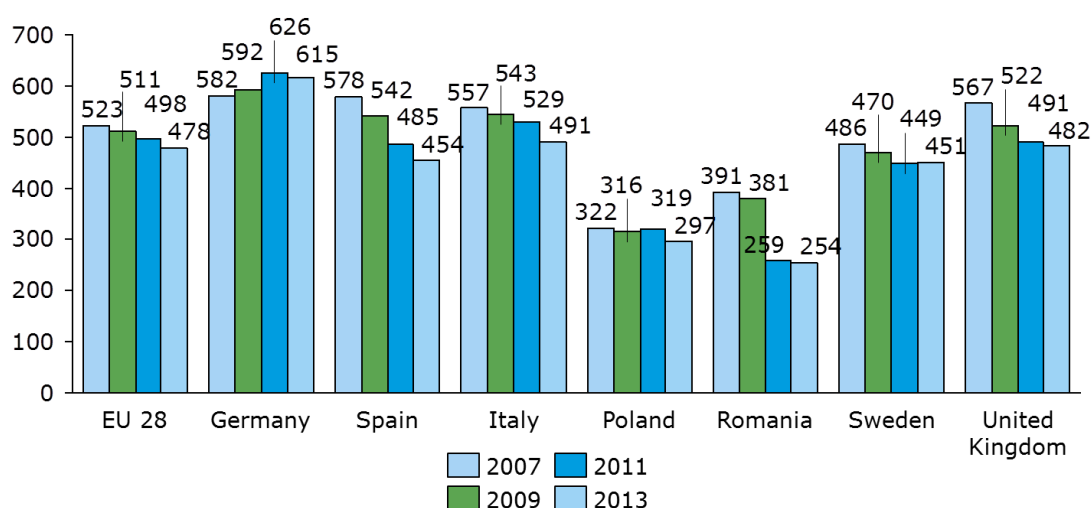
Figure 12: Trends in waste management expenditure in the selected Member States (EUR per inhabitant)



Source: Eurostat. Waste management expenditure in EUR per capita is not available on Eurostat. Thus, the figures were calculated based on [gov_10a_exp: Waste management, Central Government Expenditure, Total general government expenditure] and [tsp00001: Population]. The data was extracted from Eurostat as of 27.11.2016.

Figure 13 presents the amounts of municipal waste generated in 2013. In most of the Member States there is a downward trend in municipal waste generated which corresponds to the overall trend in the EU.

Figure 13: Trends in municipal waste generated in the selected Member States (kg per capita)



Source: Eurostat, [env_wasmun], waste per capita. Data extracted as of 28.11.2016

Comparing the figure on waste management expenditure and the amount of waste produced indicates that there is no positive correlation between waste expenditure and municipal waste generation. In fact, there are multiple other factors that affect government expenditure on waste services such as choice of disposal/treatment

methods, levels of investment in state-of-the-art technologies for management of waste, and taxation reforms.⁶²

A recent report from the World Bank estimated the costs of solid waste management across world countries, including OECD countries. The findings were presented per groups of countries categorised according to their income and indicate high variations in terms of costs for different collection and different types of waste treatment in different Member States (see Table 12).

Table 12: Estimated Solid Waste Management Costs by Disposal Method⁶³

	Lower Middle Income Countries	Upper Middle Income Countries	High Income Countries
Income (GNI/capita)	€ 791 - 3,293	€ 3,293 - 9,691	>€ 9,691
Waste Generation (tonnes/capita/year)	0.29	0.42	0.78
Collection Efficiency (% collected)	68%	85%	98%
Cost of collection and disposal / treatment (EUR/tonne)*			
Collection	27 - 67	36 - 81	76 - 255
Sanitary Landfill	13 - 36	22 - 58	36 - 81
Open Dump	2,7 - 9	NA	NA
Composting	9 - 36	18 - 67	31 - 81
WtE incineration	35 - 90	54 - 135	63 - 180
Anaerobic Digestion	18 - 72	45 - 90	58 - 135

Source: World Bank (2012), What a waste, A Global Review of Solid Waste Management, Urban Development Series

*This is a compilation table from several World Bank documents, discussions with the World Bank's Thematic Group on Solid Waste, Carl Bartone and other industry and organizational colleagues. Costs associated with uncollected waste—more than half of all waste generated in low-income countries—are not included.

*Note that the WB report included the costs in US\$/tonne. To convert the values a conversion rate related to the official exchange rate (from ECB) was used: 1.1066.

*Collection includes pick up, transfer, and transport to final disposal site for residential and non-residential waste.

*Composting excludes sale of finished compost.

*Anaerobic digestion includes sale of energy from methane and excludes cost of residue sale and disposal.

As can be seen from Table 10, the costs of more sophisticated methods of treatment are higher than those from landfill disposal. As already noted in Section 3.2, there is an increased use of recycling, composting and incineration (see Figure 5) across the EU, which could explain the increasing costs per capita for waste treatment shown in Figure 12.

4.3.2 Price and quality of waste services for end consumers

Waste management services are generally financed through taxes and fees. The fees are set by the municipalities or local authorities and they can vary considerably. In cases where the taxes and fees collected from consumers do not fully cover the costs related to the provision of services, differences are compensated for from the public budgets. The data collection retrieved no comprehensive data on fees and charges for waste services

⁶² Increased taxes for waste could potentially lead to increased government spending.

⁶³ All values provided in the table are exclusive of any potential carbon finance, subsidies, or external incentives. Costs included are for purchase (including land), operation, maintenance, and debt service.

High Income Countries: BE, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IE, IT, LU, MT, NL, NO, PT, SK, SI, ES, SE, UK;
Upper Middle Income Countries: LV, LT, PL, RO; **Lower Middle Income Countries:** BG

at EU level. Thus, the analysis below relies on data collected through the country reports in the seven Member States.

As mentioned in Section 4.2, amongst key stakeholders in the field, there are diverging opinions on whether public or private provision of waste management services is more cost-efficient. In general, it is considered that a shift in the management of the services may have consequences in terms of the price and quality of services.

Desk research identified some empirical studies which indicate that, contrary to common assumptions, there are little or no systematic significant differences in efficiency between public and private provision of services.⁶⁴ A study concerning the *Financing and Incentive Schemes for Municipal Waste Management* (2002) carried out a set of 20 case studies on financing systems at local and national level looking into the costs of different collection and treatment options for municipal waste services utilised by contracting authorities which trickle down to the level of consumers of waste services. The analysis of the different schemes, including variable charging (i.e. pay-as-you-throw or pay-per-bag schemes), producer responsibility schemes, schemes with joint waste management/social objectives, schemes designed to incentivise municipalities, schemes designed to incentivise positive behaviour by households, did not indicate the presence of any correlations between the type of provision and the various schemes of financing and incentive. Similarly, the OECD analysis of costs in the sector does not draw any concrete conclusions on the link between public or private provision and the cost level in a given country.

The research conducted at national level through the country reports for seven Member States did not identify any strong evidence in favour of either side of the argument. Some evidence was collected in the cases of Germany and Sweden, where it was reported that the opening of the sector to private competition can have a positive impact in terms of prices. In Sweden, stakeholders observed that increased market competition has led to lower prices for the buyers of the services, independent of the ownership of the service provider. In Germany, several isolated examples⁶⁵ where re-municipalisation has led to an increase in prices were provided. One such example is a case where two districts decided to cooperate for the collection and disposal of organic waste after 15 years of working with a private company. Another example provided concerned the re-municipalisation of services after 20 years of private provision. In both cases, the switch is reported to have led to an increase in fees.

Changes in the management structure of waste services are also considered to affect the **quality of services**. The quality of services can be broken down in multiple indicators, such as: *coverage of the population, frequency of collection of waste, availability and diversity of treatment methods*.

⁶⁴ Hall, David (2010), *Waste management in Europe: framework, trends and issues*, Report commissioned by the European Federation of Public Service Unions (EPSU).

⁶⁵ An association of private companies provided examples of increases in the costs following re-municipalisation. A district in Rhineland Palatinate decided to cooperate with another district for the collection and disposal of organic waste after 15 years of working with a private company. In a court case the Higher Regional Court decided that the contract should have been awarded after open competition. The courts documents showed that the waste management costs under the intended cooperation would have been much higher than they had been for the private company. The second example concerned the re-municipalisation of municipal waste services in Bremen. The city decided to opt for a PPP following a 20 year long contract with a private provider. During that contract period fees for waste management have remained stable while in cities of similar size where waste management was organized by the public waste management authority fees had often doubled in the same period.

In terms of the *coverage of the population* with services, Eurostat data show that in the majority of the seven Member States, the coverage rate with waste collection services was 100%, with the exception of Romania. Data from 2013 indicates that the coverage rate is slowly increasing even in Romania, having already reached 100% in the case of Poland.

Table 13: Coverage rate with waste collection services (national average, %)

	2010	2011	2012	2013
Germany	100 %	100 %	100 %	100 %
Spain	100 %	100 %	100 %	N/A
Italy	100 %	100 %	100 %	100 %
Poland	79,4 %	80,8 %	80,6 %	100 %
Romania	70,83 %	75,87 %	75,41 %	[79 %]*
United Kingdom	N/A	N/A	N/A	N/A
Sweden	N/A	N/A	N/A	N/A

Source: Eurostat, Coverage rate of municipal waste collection by NUTS 2 regions, [env_rwas_cov]

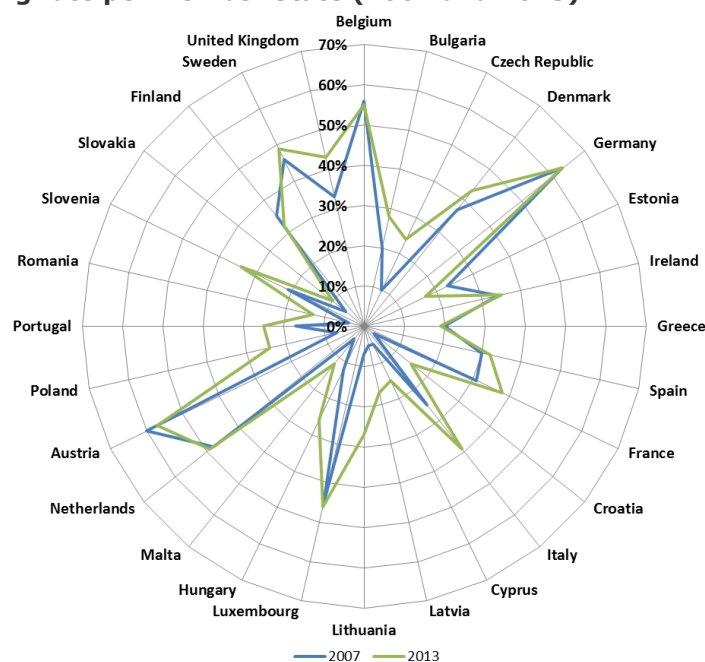
* Data was not available (N/A) on Eurostat. The figure is retrieved from the national level, i.e. INSSE Romania⁶⁶

The data gathered indicates that the increase in coverage rate is related to legislative requirements. In the context of the case study of Romania, data gathered also indicates that the intensification over time of the involvement of the public authorities in the provision of waste services to population is considered as one of the factors that led to an increase in the rate of coverage with waste collection services of an increasing proportion of the population.

Collection of household waste is organised at local or municipal level and the frequency of collection varies widely across Member States. In general urban areas are better connected to the waste service system and the frequency of collection is higher than in rural areas. However, given the varied practices amongst Member States and within Member States, aggregated data on frequency of collection were not available.

In terms of availability of treatment methods, as presented in Figure 5, there is a variety of treatment methods utilised in the Member States. However, in some Member States (e.g. Romania) sanitary landfilling remains a predominant method of treatment whereas in others the methods of treatment utilised are more advanced, including incineration, recovery through incineration or recovery through recycling. The *recycling rate* is also an indication of the quality of services. As requested by environmental legislation, Member States ought to strive towards increasing their recycling of materials from municipal waste. Despite experiencing a significant increase in contrast to the past, the recycling rate is still fairly low in a number of Member States indicating a sub-optimal functioning of the sector. The figure below illustrates the situation in terms of recycling rate in 2007 and 2013.

⁶⁶ National Statistics Institute, Metadata [O4_9]: http://www.insse.ro/cms/files/Web_IDD_BD_ro/ob4.htm.

Figure 14: Recycling rate per Member State (2007 and 2013)

Source: Ramboll Management Consulting based on Eurostat

The further from the centre in the radar chart, the better the waste management. The recycling rate is calculated as the percentage of municipal waste generated that is recycled. Total recycling includes material recycling as well as composting and digestion of bio-waste.

Research performed for the European Commission in 2012 analysed the waste systems performance of each of the EU Member States based on a set of 18 criteria and ranked them as top performers, average performance and low performers (see Table 4 in Section 3.2).⁶⁷ The group of top performers includes Germany, Sweden and the United Kingdom (amongst the Member States that fall in the remit of the present study). As presented in section 3.3.2, both Germany and the United Kingdom have an almost equal share of participation of the public and private sector in the system, whereas Sweden has a system characterised by predominant participation of private actors in the collection phase and predominant participation of public entities in the treatment and disposal phase (in particular incineration).⁶⁸ The group of average performers includes Spain, where the participation of the private sector is predominant. Finally, the group of low performers includes Italy, a Member State where public participation is high, Poland where private participation is high, and Romania, where traditionally the services were provided by the private sector but where the public provision has gained momentum in the past few years. Thus, no clear pattern or correlation concerning the extent of public and/or private participation and the performance of the waste management system can be established.

4.3.3 Patterns of investment

Generally, there are two types of municipal waste infrastructure: (a) light infrastructure (bins, lorries etc.) and (b) heavy infrastructure (building plants, waste-to-energy facilities, digestion plants etc.). The literature concerning patterns of investments

⁶⁷ BiPro (2012), Screening of waste management performance of EU Member States, European Commission, Brussels.

⁶⁸ In Sweden, the private sector is predominant in the delivery of recycling activities.

indicates that, in general, investments associated with "light" infrastructure are undertaken by both the public and private sector, whereas investments associated with "heavy" infrastructure (e.g. infrastructure for treatment and disposal of municipal waste) imply higher investments, sunk costs and risks and there is a higher likelihood that they are undertaken by private providers.

Investments in waste management capacities in the EU have historically been made by both the private and the public sector. Data collected in the framework of this study shows a mixed picture when assessing patterns of investments in "heavy" and "light" infrastructure across the Member States.

In terms of "light" infrastructure, investments in the seven Member States are made by both the public and the private sector, with a slightly higher participation of the private sector. In contrast to what is indicated in the literature, evidence collected in Romania, Italy and Poland suggests that there is a tendency for **private suppliers to invest in light infrastructure, whereas investments in "heavy" infrastructure are made by public entities.**

In the Member States studied, this trend is driven by several factors. In the case of Poland and Romania, it can be accounted for by the fact that major investments are made by the public sector through the **use of structural national grants, public aid and EU funds.** In Italy, this trend was linked to the presence of an **ambiguous legal framework** which disincentives investments in heavy infrastructure by the private sector. Furthermore, in the United Kingdom and Italy there is a trend of tightening in the finances of local authorities which contributes to a trend towards **shorter duration of contracts** or extensive use of short interim contracts (2-3 years). Such shorter contracts do not allow for the recovery of high sunk costs associated with investments in "heavy" infrastructure, inhibit investments in new infrastructure and create reliance on existing assets. For example, in the case of Italy, 55% of contracts awarded in 2015 have duration of less than three years, and 22% have duration of one year only.⁶⁹ However, the Organization for Economic Cooperation and Development (OECD) has estimated that even the smallest investments in the waste management sector - such as the purchase of vehicles - require an average recovery period of five years.⁷⁰

Eurostat data from 2004 to 2012 in all seven Member States indicates a decrease in the number of landfilling facilities or deposits onto or into land in all Member States. This is primarily a consequence of the environmental legislation which requires the phasing out of landfilling and the move towards more advanced treatment techniques for waste and towards waste prevention and minimisation. In line with this, a trend across all states in the increase of incineration capacity and recovery facilities can be noted as presented in

⁶⁹ Utilitatis, Green Book, 2016, pp. 17-18. AGCM, Indagine conoscitiva sui rifiuti urbani, 2016, p. 133.

⁷⁰ OECD (2000), Competition in local services: Solid Waste Management, p. 165.

Table 14.⁷¹

⁷¹ Eurostat, Number and capacity of recovery and disposal facilities [env_wasfac]

Table 14: Number of facilities for treatment of waste

State	Year	Landfill / deposit onto or into land	Incineration / disposal	Incineration / energy recovery	Recovery other than energy recovery
Germany	2004	2.019	120	618	10.069
	2008	1.649	101	751	11.235
	2012	1.147	93	901	11.496
Spain	2004	462	16	64	1.574
	2008	439	26	63	2.216
	2012	520	51	101	4.491
Italy	2006	557	63	687	2.960
	2008	640	121	580	3.600
	2012	470	100	491	3.733
Poland	2004	1.445	20	354	630
	2008	1.060	57	531	866
	2012	701	85	773	961
Romania	2004	449	N/A	37	2
	2008	343	14	212	208
	2012	129	20	202	267
Sweden	2004	343	16	261	12.924
	2008	239	15	82	285
	2012	227	8	80	467
UK	2006	721	3.104	362	26.737
	2008	561	4.655	500	27.251
	2012	594	87	27	3.542

Source: Eurostat, Number and capacity of recovery and disposal facilities, [env_wasfac]

Note: The data for the United Kingdom and Sweden is included as presented in Eurostat and show substantial reductions for recovery (SE, UK) and incineration (UK) which could not be explained by the conducted research. It has not been possible to validate the data.-

According to data collected in the seven Member States, some patterns can be noted in relation to **investments in different types of treatment infrastructure**. For example, in Sweden, investments in incineration facilities and biogas plants are often done by the public sector, whereas investments in recovery through recycling facilities are made by private market actors.⁷² In Germany, the United Kingdom and Italy, recovery facilities or incineration facilities can be under private, mixed or public ownership, whereas in Spain, infrastructure investments are mainly private, through concession contracts. According to industry stakeholders, currently, public authorities are generally reluctant to invest in processing facilities and even where they conduct collections in-house, they prefer to contract material processing to the private sector. Lower commodity prices are currently putting pressure on contracts and, combined with weaker public finances, are creating difficult investment conditions.⁷³

The findings of the country reports are presented in more detail in the following table.

⁷² Interview with Sysav, Interview with Avfall Sverige/Municipal Waste Europe

⁷³ Interview with FEAD.

Table 15: Infrastructure investments in Member States

MS	Overview of infrastructure investment data
Germany	▪ In the period 2004 and 2008 the capacities of recovery plants not used for incineration grew by 37% which indicate high infrastructure investments. ▪ The data was not conclusive whether the investments were made by the public or private sector.
Italy	▪ Estimated volume of investments for the past 6 years was EUR 2 billion ▪ Private companies usually invest in light infrastructure for waste management due to the short duration of contracts. ▪ Public entities invest in heavy infrastructure; EUR 400 million were invested by the public sector for the construction of two new incinerators. ▪ Investments are made also by mixed companies which are the only ones quoted on the stock exchange.
Poland	▪ Under the National Ecological Policy, over EUR 16 billion will be spent by the end of 2016 on environmental projects, of which 10% has been allocated for waste management. ▪ EUR 2.941 billion of the Environment Operational programme 2007-2013 was made available for projects related to waste disposal and protection of the land surface. ▪ Private suppliers normally invest in light infrastructure (i.e. vehicles and equipment) whereas investments in heavy infrastructure (i.e. plants and installations) are made by the public sector through structural national grants, public aid and EU funds.⁷⁴
Romania	▪ EUR 1.687 million (EU and national funds) were invested in building infrastructure in the framework of integrated waste management systems. ▪ Private suppliers normally invest in light infrastructure whereas investments in heavy infrastructure are made by the public sector through structural national grants, public aid and EU funds.
Spain	▪ No concrete data on the level of investments was available. ▪ Infrastructure investments are made by both the public and private sector.
Sweden	▪ Data on the levels of investments in infrastructure was not available. ▪ Investments in light infrastructure connected to collection are made by the private sector. ▪ Investments in heavy infrastructure are made by both the private (recycling facilities) and the public sector (incineration facilities).
UK	▪ Waste infrastructure investment, including recycling facilities, residual waste treatment capacity, and collection fleets & depots exceeded £3.8 billion from 2007-2012; averaging £750 million annually, with Veolia, Viridor and Biffa being the largest private sector investors. ▪ Investments through Private Finance Initiatives (PFIs) are phased out. Authorities are procuring private services to avoid capital expenditure due to restrictions on public sector spending.

Source: Ramboll Management Consulting based on country reports

⁷⁴ On average, the duration of a public contract in the municipal waste sector in Poland is between 18 and 19.7 months.

5. Openness of the municipal waste management sector

The Court of Justice of the European Union has repeatedly stressed that the purpose of the EU Public Procurement Directives is to “develop effective competition in the field of public contracts”.⁷⁵

The following sections provide a detailed assessment of the extent to which public procurement contributes to effective competition through the openness of the municipal waste management sector.

5.1 The market covered by public procurement

A first indicator for the overall effect of public procurement on the openness of the market for municipal waste management services is the share of the market that is actually provided through publicly advertised public/concessions contracts. Table 16 presents data on the volume of contracts published on TED⁷⁶ as well as data on government expenditure for waste management based on Eurostat data. The ratio of these two variables can be used as a naïve estimation of the proportion of public procurement for municipal waste management services taking place within the rules of the procurement directives in different Member States compared to the entire public expenditure for such services.

While the quality of TED and Eurostat expenditure data is not sufficiently reliable to perform robust comparisons between the public procurement volumes and expenditure,⁷⁷ it does indicate that in some Member States the value of procured contracts is relatively low compared to overall public expenditure, which could suggest that in these countries, public procurement is not the main mechanism for arranging the provision of municipal solid waste services. Within the sample of countries selected for this study, data for which is presented in the following table, it is noteworthy that Poland has a very high “publication rate”, while Spain and Germany have relatively low ones. As noted in the Country report on Poland, until recently, the Polish law prohibited the use of in-house arrangements from public procurement in the waste sector and instead mandated the outsourcing of services, which could explain the high publication rate. As for Spain, the conducted research indicates that there is a high share of outsourcing in the provision of municipal waste management services,⁷⁸ which contradicts the estimates of publication rate in Table 16. This could be due to the noted issues with TED and Eurostat data, but it could also relate to the finding of the country study on Spain that suggests the presence of irregularities with the publication of contracts on the relevant public procurement portals. The low estimates for Germany could relate to relatively low level of expenditure (compared to the other countries in the sample) and the general trend of low levels of public procurement, which have been noted in in other Commission assessments⁷⁹ and which Germany has been called to address.⁸⁰ A more in-depth analysis of the situation in

⁷⁵ CJEU, 2009, “Hochtief and Linde-Kea-Dresden”, C-138/08, with reference to CJEU, 1999, “Fracasso and Leitschutz”, Case 27/98L and CJEU Joined Cases “Lombardini and mantovani”, C-285/99 and C-286/99; CJEU, 2002, “Universale-Bau”, Case C-470/99; and CJEU, 2004, “Sintesi” Case C-247/02.

⁷⁶ It should be noted that TED is meant to contain data only on procedures which are above the thresholds that bring them within the scope of EU public procurement rules.

⁷⁷ TED data has been extracted from European Commission (2015), Waste Management Public Procurement: A Sectoral Analysis, but can be considered to be “underestimated”. This happens due to e.g. failure of the contracting authorities to report the contract award value on TED or inaccurate entry of the information. Furthermore, large differences in the expenditure levels of certain Member States in the data set suggest that there are issues with the accuracy and comparability of the government expenditure data reported on Eurostat.

⁷⁸ See results in Table 6 (Estimated share of services provided by type of provider in the selected Member States)

⁷⁹ European Commission (2016) Country Report Germany 2016 - Including an In-Depth Review on the prevention and correction of macroeconomic imbalances. Available on:

http://ec.europa.eu/europe2020/pdf/csr2016/cr2016_germany_en.pdf

⁸⁰ Ibid.

these and other countries below the EU average could help identify and address the factors affecting the publication rate.⁸¹

Table 16: Value of contract award notices on TED (2009-2013)

MS	Number of contract awards	Total value of TED contract award notices in mEUR	Total value of gov. Expenditure on waste management in mEUR	Proportion of TED procurement contract value to expenditure
DE	3481	€ 758,20	€ 20.043,00	3,78%
ES	675	€ 399,43	€ 22.747,00	1,76%
IT	2306	€ 3.596,98	€ 38.528,00	9,34%
PL	2714	€ 1.037,92	€ 1.999,10	51,92%
RO	285	€ 179,04	€ 1.842,40	9,72%
SE	596	€ 176,92	€ 2.522,70	7,01%
UK	2065	€ 4.577,57	€ 55.414,00	8,26%
EU	30648	€ 20.248,22	€ 212.174,70	9,54%

Source: Ramboll on the basis of European Commission data from TED⁸² and Eurostat⁸³

The size and scope of the “procurement market” and the differences between Member States should be kept in mind when making comparisons at national level. For instance, the size of the “procurement market” within a specific part of the sector may have an impact on the number of private providers established in the Member State or seeking to gain entry – which may affect the number of bids in individual tenders. As already noted, in many Member States there is, in fact, a predominant public sector share in the market.

It should be stressed that these results do **not** necessarily imply a failure to observe public procurement legislation. As discussed in section 3.1.2, the EU public procurement legislation allows contracting authorities to carry out tasks assigned to them internally or through controlled (in-house) entities without having to go through a tender as long as there is compliance with a set of criteria related to the ownership and control of the entity through which the services are provided and the extent to which that entity provides services to the private sector (Teckal criteria). When the contracting authorities in the Member States take advantage of this opportunity, there will be fewer public procurement procedures and lower private participation in the municipal waste management sector. Furthermore, even where a tender is conducted, EU public procurement legislation does not hinder the contracting authority from cancelling the tender and continuing to carry out the tasks internally if no satisfactory tenders are received (presuming that the cancellation is objectively justified and not contrary to Treaty principles, including equal treatment).⁸⁴

Among the studied Member States, *in-house arrangements* are particularly wide-spread in Germany, the United Kingdom, Sweden, and Italy. Prior to the adoption of Directive 2014/24, the rules on in-house service provision were mainly developed through the

⁸¹ The European Commission has planned an investigation into the situation in Germany in 2016-2017. See <http://ted.europa.eu/udl?uri=TED:NOTICE:292002-2016:TEXT:EN:HTML&ticket=ST-413913-isMtU8sJZGQjHPzXqGtjsysqIieVbtIDZmCLYZefB70jLNzjlyMVzXnd59jTDG1cS56hA5iOM9TK9M1QunaeoAW-PHsIUVMVSXYC0yl3iXFXWta-cGklOQg5obFeGVOo8Vwi9JLGLwalK6G3yYgJ3LTfzwV>

⁸² European Commission (2015), Waste Management Public Procurement: A Sectoral Analysis.

⁸³ The estimates of government expenditure represent the sum of gross capital formation and intermediate consumption from general government expenditure for waste management (Data set: General government expenditure by function (COFOG) [gov_10a_exp])

⁸⁴ Denmark has regulated a procedure which may be used when a municipality is not sure whether it will be advantageous to outsource a set of activities, or keep performing the activities internally. In such cases, the municipality may state in the contract notice that it intends to submit a “control bid” (a calculation of the expected long-term income and costs related to the continued municipal performance of the activities, if the activities are performed in accordance with the technical specifications in the tender). If the “control bid” is evaluated to be better than the submitted (external) bids, the tender is cancelled and no contract is awarded (for further details, see the case study on Denmark). Although Poland has generally required tendering of all MSW activities, it has been recognized that public management could result in the rare case of unsuccessful tenders (as described later in this section).

jurisprudence of the Court of Justice, therefore, their manifestation at national level took different forms,⁸⁵ as did their interpretation.

As already noted, Poland constitutes a special case where in-house arrangements have not been used, since waste management contracts have been subject to mandatory tendering, meaning that the municipalities could only carry out waste management tasks themselves in the event that the tender ended with no contract award. However, a new Public Procurement Act, which implements the 2014 EU Public Procurement Directives in Polish law, will allow for in-house service provision, but requires that they should be awarded in a single-source procurement procedure which involves the publication of a contract notice.⁸⁶

In the context of this study, the subject of the use of in-house arrangements was further investigated through three case studies on the interpretation of the rules in Germany, Romania and Denmark, prior to and after the implementation of the Directive 2014/24. The cases highlighted the several instances of legal uncertainty as to how particular aspects of the rules are to be interpreted. For example, the old case law required the in-house entity to perform the “essential part” of its activities with its controlling entities, but the case law did not fully settle what “essential part” meant in practice. While some of these points were addressed after the adoption of the Directive 2014/24, others remain unresolved (see Section 6.4).

European and national courts found a number of arrangements made by the contracting authorities under the exclusions for in-house provision and provision through public-public cooperation to be non-compliant with the actual rules (see further details in Section 6.3.2 on irregularities). As to the effect of these violations of the rules on the openness of the municipal waste sector, it could be argued that when related only to the control requirements, they do not always have a negative impact. However, cases in which direct awards under in-house arrangements or public-public co-operations are found to violate the requirements in that there is private ownership in the entity awarded a contract (there have been cases on this in Germany and Italy), or in that the entity provides more than 20% of its services on the private market (cases identified in Sweden, Denmark), there is in fact a case to be made as to the detrimental effect on competition and openness of the sector.

The effect of in-house arrangements on the openness of the sector can also be debated on a more general level. Some of the stakeholders consulted in Germany considered that it is problematic and a case of conflict of interest that public waste management authorities can in parallel act as a participant in the market for municipal solid waste and as the lower instance of waste management administration, responsible for monitoring compliance with the legal requirements for waste management. Hence the public authorities can have access to commercial information of their private competitors and can exclude them from the market if desired.⁸⁷ Several interviewees noted that a private company wishing to organise a commercial collection of specific waste has to request an authorisation with the local waste management authority. The authority can “easily” reject such a request and where deemed profitable organise it in-house. In connection to this, the case study on in-house rules in Romania showed how such situations can be prevented – in Romania, a public entity that in principle can act both as an administrator and as a provider of the regulated municipal solid waste services may be required to transfer the administrative authority to another entity in case of potential conflict of interest.

⁸⁵ In some cases the court’s jurisprudence was incorporated in the legal instruments transposing Directive 2004/18 (e.g. Romania), in others – not (e.g. Germany, Denmark).

⁸⁶ The new Polish Act on Public procurement was accepted by Parliament on 13th May 2016. See: <https://www.uzp.gov.pl/aktualnosci/ustawa-o-zmianie-ustawy-prawo-zamowien-publicznych-oraz-niektorych-innych-ustaw-zostala-uchwalona-przez-sejm-w-dniu-13-maja-2016-r>

⁸⁷ Monopolkommission (2013), Hauptgutachten 2012/2013, Kapitel V Kommunale Wirtschaftstätigkeit und der Trend zur Rekommunalisierung.

5.2 Openness within public procurement procedures

Within the share of the municipal solid waste sector that is open to private sector participation through public procurement procedures, the subject of openness can be discussed in different dimensions. The following analysis starts with a discussion of the current situation in cross-regional participation in public procurement, continues with an examination of direct and indirect cross-border procurement and finally presents the identified obstacles to openness in the sector that can be related to the way public procurement procedures are set up.

5.2.1 Cross-regional participation in public procurement

The effect of public procurement measures at national level in the municipal waste sector would find an expression in the participation of companies from one region in tenders by contracting authorities in another region. Lack of cross-region participation and awards could indicate that “local” or “incumbent” providers have an advantage in winning/retaining public contracts, although it should be noted that even in procedures performed fully in line with the rules there could be few participants for other legitimate reasons, including the capacities and commercial priorities of the economic operators.

The data collection at national level identified some evidence of advantages of incumbent providers in the case of the United Kingdom and Germany. In the United Kingdom, data for 2006 shows that only 27% of waste collection contracts in the country were not won by the incumbent service provider.⁸⁸ However, consulted industry stakeholders did not consider that there is currently a trend in incumbent providers having an advantage. According to some of the interviewed private companies in Germany, there is a tendency for public waste management authorities that were satisfied with the incumbent contract partner to tailor their calls for tenders so as to maintain the partnership. This is done by requiring a location within a specific area referring to environmental protection through limiting transport distances or by requesting specific references or qualifications that only the incumbent can have. However, the consulted stakeholders did not offer concrete examples where this issue was present.

5.2.2 Direct cross-border participation in public procurement

The objective of EU public procurement policy to ensure free movement of goods and services and freedom of establishment within the public contracts domain finds an expression in the extent to which public procurement procedures are open to participation of non-domestic bidders, i.e. companies located in Member States other than the Member State where the contracting authority is located.

The TED database, which provides for the centralised publication and storage of information related to procedures subject to the EU procurement rules, collects information on the companies *awarded* the contract where this information is publicised in a contract award notice. According to an analysis performed by the European Commission services and presented in the following figure, 1,3% of the contract awards in the municipal solid waste sector in 2009-2013 were cross-border in nature. The Member States with the highest shares (6-7%) are Slovakia, Austria and Luxembourg, while in a number of Member States there were no cross-border contract awards.

⁸⁸ According to a survey by the Office of Fair Trading;

Figure 15: Percentage of cross-border contract awards of all awards in the municipal solid waste sector, 2009-2013 (in %)



Source: Ramboll based on TED data presented in EC (2015)⁸⁹

It should be noted that the TED data is not sufficiently detailed for a complete analysis of the potential cross-border provision of services. The available data on the volume of the contracts is not sufficiently robust, thus, it is not possible to comment on the impact of these cross-border awards on the sector as a whole. Furthermore, TED does not collect data on the participation of “non-domestic” bidders in procurement procedures. It only captures the nationality of the legal entity being awarded the contract, and therefore a contract award would be classified as cross-border if the nationality of this entity is different from the nationality of the contracting authority. As discussed in the following section, large multinational companies usually set up local subsidiaries for the provision of municipal waste management services, and contract awards to a subsidiary established in the same country as the contracting entity would not be counted as “cross-border”. On the other hand, if a contract was awarded to a non-domestic parent company, it would be reported as “cross-border”, even if the parent company was using local subsidiaries as sub-contractors for the performance of all or most of the services.

The conducted research did not identify any particular trends as regards the occurrence of cross-border procurement specifically within the municipal solid waste sector. Several obstacles were identified in relation to the set-up of public procurement procedures and more information on this is available in Section 5.2.3.

5.2.3 Indirect cross-border public procurement - non-domestic companies

Another measure of the openness of the municipal waste sector is the involvement of non-domestic companies in the provision of services through local subsidiaries’ participation in public procurement procedures (indirect cross-border procurement).⁹⁰

As discussed in Section 3.2, in some Member States there is significant private sector participation in the municipal waste management sector. The turnover of the top-15 companies on the European market for waste management was estimated in 2011 to be approximately EUR 31 billion.⁹¹ In many cases, the main municipal waste management operators are multinational companies (MNCs). The major waste companies normally belong to one of four major groups of companies:

⁸⁹ European Commission (2015), Waste Management Public Procurement: A Sectoral Analysis.

⁹⁰ Within this context, companies considered “non-domestic” are these companies that are established in another Member State or are owned by a parent company established in a Member State other than the Member State where the subsidiary operates.

⁹¹ Hall, David and Tue, Ann (2012), Waste Management in Europe : Companies, Structure and Employment.

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- **Stock exchange listed companies** - like the French companies Suez and Veolia (and Seche-SAUR), which have government shareholders;
 - **Privately owned companies** - „traditional“ private companies, such as the German groups Rethmann-Remondis and Alba or subsidiaries of major listed construction groups FCC, ACS, and Ferrovial;
 - **Companies owned by private equity funds** - the Dutch AVR/van Gansewinkel, and Biffa (UK);
 - **Municipally owned companies** - in some cases, acting also outside their own country.

The following tables presents the largest companies in Europe with information on their type, country of origin and waste management operations in European countries.

Table 17: Largest municipal waste management companies in Europe 2015

Company	Parent type	Country of origin	Waste management operations localisation	Waste Management Revenue (mEUR)	Revenue by country (mEUR)
Veolia	S	FR	AT, BE, CZ, DK, EE, FR, DE, HU, IE, IT, NO, PL, CH, UK, UKR	8,692	FR: 2,549.2 ⁹²
Suez Environment	S	FR	BE, CZ, FI, FR, DE, HU, IE, NL, PL, SK, SE, UK	6,356.8 ⁹³	
Remondis	P	DE	AT, BEL, BE, BG, CZ, EE, FR, DE, HU, IE, IT, NL, PL, RO, SK, ES, SE, CH, TUR, UK, UKR	6,400 ⁹⁴	
Alba	P	DE	DE, PL, SI, BiH	1,355.9 ⁹⁵	
FCC	S	ES	AT, BiH, BG, HR, CZ, HU, IT, MKD, MN, PL, PT, RO, SE, SI, SK, ES, UK, UKR	2,855.6 ⁹⁶	ES: 1,518.1; UK: 926.9; Central Europe: 369.0; Other: 41.6
Indaver	Mun	NL	BE, DE, IE, IT, NL, PT, UK	554 ⁹⁷ (operating revenue)	BE: 197; NL: 121.7; DE: 144.1; IE/UK: 83.7; PT, IT, ES: 7.5
Urbaser	S	ES	FR, EL, IT, PT, ES, UK	524 ⁹⁸	
Van Gansewinkel	PE	US/UK	BE, CZ, FR, HU, LU, NL, PL, PT	945 ⁹⁹	NL: 550.6; BE & LU: 320.2; Other EU: 74.1
Cespa	S	ES	PT, ES, UK	n/a	
Biffa Group	PE	UK	-	878 ¹⁰⁰	
Shanks Group	S	UK	BE, NL, UK	469 ¹⁰¹	UK: 144.6; NL: 190.7; BE: 133.7
CNIM	S	FR	AZE, FR, IT, RU, UK	292 ¹⁰²	
Lassila & Tikanoja	S	FI	FI, RU, SE	256.5 ¹⁰³	SE: 22.3
Ragn-Sells	P	SE	DE, EE, LV, NO, PL, SE	480 ¹⁰⁴	
SAUR-Seche	S	FR	FR, DE, ES, HU, IT	460.9 ¹⁰⁵	FR: 437.5
Saubermarcher	P	AT	AT, HR, CZ, HU, RO, SI	N/A	

(P=private; PE=private equity; S=stock exchange listed; Mun=municipal)

Note: The indicated revenues are from waste management activities in the EU, potentially include industrial and commercial waste revenues

Source: Hall and Nguyen, Waste Management in Europe: companies, structure and employment, 2012; Revenue figures from the annual reports of the listed companies where available.

As can be seen from the table, despite the low level of direct cross-border public procurement noted in Section 5.2.2, the activities of large multinational companies through their subsidiaries in many countries show that the market is overall much more

⁹² See: http://www.finance.veolia.com/docs/2015_Registration_Document_and_Annual_Financial_Report.pdf.

⁹³ See: <http://www.suez-environnement.fr/wp-content/uploads/2016/04/reference-document-2015.pdf>.

⁹⁴ See: <http://www.rethmann-gruppe.de/en/r-g/group/remondis-group/>.

⁹⁵ See: http://www.alba.info/fileadmin/PDF/Bilanzkonferenz/2016/ALBA_SE_Business_Report_2015.pdf.

⁹⁶ See: <http://fcc.es/fccweb/wcm/idc/groups/public/documents/document/mdaw/mdg0/~edisp/cscp102502.pdf>.

⁹⁷ See: <http://www.indaver.com/en/sustainabilityreport/sustainability-report-2015/>.

⁹⁸ See: http://www.grupoacs.com/informe-anual-2015/actividades/page_eng/Economic_report_Part_I_ACS_Group_2015/index.html.

⁹⁹ See: https://www.van-gansewinkel.be/-/media/nieuws/van_gansewinkel_duurzaamheidsverslag_2015_eng.pdf?la=fr-be, p. 13.

¹⁰⁰ See: <http://www.biffa.co.uk/wp-content/uploads/2015/12/Biffa-Group-Ltd-Annual-Report-March-2015.pdf>, p. 36.

¹⁰¹ See: <http://www.shankspc.com/~media/Files/S/Shanks-Refresh-v3/documents/reports-and-presentation/reports/ara-2015.pdf>, based on own calculations for share for EU operations.

¹⁰² See: http://www.cnim.com/resources/fichiers/cnim_fr_en/pdf%202016/cnim_2015_annual_results_pres.pdf, Results for environment services segment.

¹⁰³ See: <http://www.lassila-tikanoja.fi/en/company/annual-report-2015/pdf/lt-annual-report-2015.pdf>.

¹⁰⁴ See: http://www.ragnsells.com/index_en.html (accessed 27 June 2016), SEK 4.5 billion.

¹⁰⁵ See: http://www.groupe-seche.com/documents/communication/rapport_2015_en.pdf, p. 5.

integrated than the level of direct cross-border procurement indicates.¹⁰⁶ Furthermore, in many countries there is more than one multinational company present, which can be seen as a positive sign for the level of competition present within the market.

According to the collected data, in some of the studied Member States, such as Poland, Romania and the United Kingdom, multinational municipal solid waste corporations provide a substantial share of the services.

A study on the municipal solid waste market in **Poland** between the years of 2010-2014 reports of significant presence of non-domestic providers (Remondis, Sita, Veolia, Alba) of municipal waste management services – for the period studied, non-domestic providers owned 33% of the Polish municipal solid waste market volume and over 40% in market value (in annual terms).

In the **United Kingdom**, large multinational corporations such as Veolia, Suez and FCC hold significant shares of the collection, disposal and treatment markets. According to data for 2015, foreign-owned or listed companies provide for 52% of the overall waste services market. While no statistics are available specifically for the municipal solid waste market in the United Kingdom, it is considered that the patterns are largely similar to those in the overall market.

In **Romania**, several major foreign companies provide waste management services on the national market - the FCC Group (A.S.A. Abfall Service AG - through ASA Servicii Ecologice) (ES), Remondis (DE), Saubermacher (AT), Brantner (AT).

In other Member States, such as Italy, Spain, Germany and Sweden, the presence of non-domestic providers is more limited, with only few foreign-owned providers in each country.

5.2.4 Obstacles to sector openness related to the set-up of procurement procedures

The openness of the municipal waste management sector within the segments that are outsourced to the private entities depends on the proper interpretation and application of the EU public procurement regime. To the extent that public procurement procedures are organised in a way that possibly discriminates against potential service providers, it can be said that there is an impediment to the openness of the sector.

The analysis of the municipal solid waste sector in the Member States covered by the study identified the presence of several limiting factors to the sectors' openness, specifically related to the use of public procurement procedures. Table 18 presents an overview of the findings, with further details in the remainder of this section. It should be noted that the analysis looks at the overall trends, while concrete case law on identified violations of the public procurement rules mentioned are presented in Section 6.

¹⁰⁶ European Commission (2015), Waste Management Public Procurement: A Sectoral Analysis.

Table 18: Overview of factors affecting the openness of the municipal solid waste sector

Factors	DE	ES	IT	PL	RO	SE	UK
Proximity restrictions	X	X	X	X			X
Lack of transparency		X					
Requirements putting SMEs at disadvantage		X					
Administrative requirements				X			

Source: Country reports

Narrow interpretation of the proximity principle in some Member States

According to the analysis conducted by legal experts at national level, some Member States have interpreted the **proximity principle** described in Section 3.1.1 in their **national legislation** in a way that potentially limits the openness of the municipal solid waste market by introducing geographic criteria with regard to the location of the waste plant or transit station. For example, in **Italy**, political concerns following the Naples waste management crisis¹⁰⁷ motivated the development of legal provisions that effectively limit the circulation of waste within Italy. Regional authorities must ensure that they are self-sufficient for the treatment of non-hazardous waste, i.e. have sufficient treatment/recovery facilities on their territory (*proximity principle*) and use these for the treatment of municipal solid waste. Furthermore, the legislation requires waste management services to be provided in an integrated manner, from collection to recovery/disposal. According to a report by the Italian Competition Authority this limits the competition for the provision of municipal solid waste services, especially when all services are to be provided by a single economic operator¹⁰⁸ and it can be considered as further strengthening the restrictive effect of the proximity principle described above.¹⁰⁹

There are similar provisions in **Spain**, where according to central government regulation 180/2015,¹¹⁰ the formal approval of the affected Autonomous Community is required both for the export and import of waste between Spanish regions. The primary purpose of this law is to prevent richer Autonomous Communities to ship their waste to poorer regions, where treatment and disposal are cheaper. However, tender procedures are typically organised in a manner where this does not provide hindrances for a free and fair competition. The contracting authority would typically ensure that the successful tenderer has access to the necessary facilities within the relevant geographical area – either because the selected provider is contracted to build new facilities, or because the facilities are owned by the contracting authority and made available to the provider.

In **Germany**, several of the federal states have included the principle of proximity in their waste management legislation. North Rhine-Westphalia, for example, lays down in its waste act that waste which cannot be recycled should be deposited in proximity to the place of generation. This waste should be disposed within the state.¹¹¹ Apart from this legislative proximity requirement, consulted stakeholders say that also many calls for tenders request companies to be located within or close to the area where services will be provided. In most cases this is meant as a selection criterion that requires the service

¹⁰⁷ See e.g. Pasotti, Elena (2010) Sorting through the Trash: The Waste Management Crisis in Southern Italy, South European Society and Politics Vol. 15, No. 2, June 2010, pp. 289–307.

¹⁰⁸ AGCM (2016), Indagine conoscitiva sul mercato dei rifiuti urbani, 2016, p. 10 ff; see also at 43 ff.

¹⁰⁹ Ibid. p. 153 ff.

¹¹⁰ Real Decreto 180/2015, de 13 de marzo, por el que se regula el traslado de residuos en el interior del territorio del Estado.

¹¹¹ Regional Waste Law North Rhine-Westphalia, §1.

provider to be located in proximity to the place of the generation of the waste in order to be admitted to the comparative assessment (in contrast to the United Kingdom where it is merely an award criterion). This might sound as if this leads to discrimination but according to the Federal Cartel Office (responsible for public procurement) this does not pose any problem, as companies can submit an offer, if they can prove in their tender that they will be able to build up a location until the start of the contract. Depending on the service to be provided this can be of different complexity. According to some private sector stakeholders in Germany, there might be a tendency that public waste management authorities that were satisfied with the contract partner tend to tailor their calls for tenders *in a way to maintain the partnership*. This is done by requiring a location within a specific area referring to environmental protection through limiting transport distances or by requesting specific references or qualifications that only the incumbent can have.¹¹² While other bidders may seek legal review of such contract awards, it may be difficult to prove that such requirements are not intentionally discriminatory.

According to the Monopoly Commission in Germany, at local level the municipal solid waste market for disposal and combusting is in practice limited to one district and the attached districts. Companies with a location further away than that rarely participate in public procurement procedures. Only in the case of recovery of paper and cardboard longer distances are worthwhile. This does affect the market for collecting waste.

Similarly, in **Poland** the proximity principle is reflected in its legislation and has an effect on the organisation of waste management services at local level. Legal provisions that entered into force in 2013 require that storage and transport depots are located within 60 kilometres from the boundary of the municipality where the utility operates.¹¹³ There is an additional legal requirement¹¹⁴ for providers of municipal solid waste services to register in the municipality in which they are to provide the services. This obligation does not apply to municipal organizational units but is referred to in procurement notices for municipal solid waste contracts. Since entry to the register is connected with owning at the time of bidding certain equipment and a technical base in parameters close by the municipality, if the requirement is interpreted as a condition to participate in a tender that would potentially hinder the competition on the market and favour local bidders. Therefore, Polish commentators argue that having an entry in the register should be a contractual condition in the awarded contract rather than a term of procurement participation.¹¹⁵ However, that is not the practice that may be observed on the below presented Ożarów Municipality case, as well as in a judgment of the National Board of Appeal from 19 January 2015.¹¹⁶ In the latter the appeal was denied to the bidder that had been excluded from the tender on the basis of not having an entry in the register at the stage of procurement process.

The conducted research also showed that geographical proximity criteria are sometimes integrated directly in public procurement procedures without any evident link to environmental law/administrative requirements.

For example, the review of the legal framework in the **United Kingdom** did not identify specific provisions that would suggest a narrow interpretation of the proximity principles.

¹¹² The stakeholders consulted did not offer concrete examples where this issue was present and it was not possible to establish whether the geographical restrictions are part of the selection or award criteria.

¹¹³ Journal of Laws OJ of 2013, item 122.

¹¹⁴ Polish Act on maintaining cleanliness and order in municipalities, OJ 1996 No. 132 item 622, Article 9.

¹¹⁵ Commentary on the Act of 13 September 1996 on maintaining cleanliness and order in municipalities, 30 January OJ, 2013 nr 21 (3411): gazetaprawna.pl.

However, according to the Local Authority Recycling Advisory Committee (LARAC) in the United Kingdom, proximity clauses are commonly used in public procurement procedures, in line with good practice guidance provided by the government,¹¹⁷ which suggest the inclusion of distance to source as an award criterion. The interviewed LARAC representative did not consider this practice to be detrimental to competition, as it does not preclude any bidders from participating in the procedure but takes proximity into account along with other criteria, in line with broader environmental policy goals. According to the respondent, no complaints from private sector providers have been received about this practice and the consulted private sector stakeholders did not bring this up either.

Review of public procurement procedures in the United Kingdom advertised on TED in the past five years based on the information included in the contract notice or award notice shows that the proximity clauses are included in some procedures in the municipal solid waste sector. In the identified cases, the distance requirements are tied to a “delivery point” or similar, implying that the provider will need to receive waste within a certain distance – but will not be required to treat it within this area. It seems that the distance requirement reflect the distance within which the public authority is prepared to transport the waste.

While there may be some legitimate uses for proximity criteria, they can also be used in ways which heavily favour incumbent providers. This may be the case where such criteria are combined with other requirements, e.g. where contracts require the selected provider to make a relevant – and expensive – facility available for the performance of the contract, particularly where incumbent providers are already in possession of such facilities within the relevant geographical area. Such issues could be aggravated where the contract does not guarantee a volume of waste that is sufficient to ensure that the investment in the new facilities can be recouped, e.g. due to a short contract duration.

Transparency in the set-up of procurement procedures

Non-compliance with the requirements for publication of contract notices affects negatively the transparency in the market for municipal solid waste services, especially for non-domestic providers. Among the Member States studied, there is information about non-compliance with the publication requirements in Spain. While the majority of contract notices are published on the Spanish Public Sector Contracting Platform (PCSP) and TED, there is still a substantial number of contracting authorities that fail to use these platforms. A detailed analysis by Transparency International of Spain in collaboration with the Public Procurement Observatory that was published in January 2016 shows that among the 110 largest Spanish cities, three out of four municipalities do not meet the legal obligation (Law 20/2013) to publish their contracts and tenders in the Platform for Public Sector Procurement.

Requirements putting SMEs at disadvantage

The analysis conducted identified obstacles specific to the participation of SMEs in procurement procedures for the provision of municipal solid waste service in Spain, but it is likely that they are present across the EU. According to Spanish stakeholders, the aggregation of demand in large contracts can put small and medium-sized companies at a disadvantage vis-à-vis larger companies, especially when the contracting authorities do not resort to dividing contracts into several lots and require a disproportionately high proof

¹¹⁶ Ruling KIO 2812/14.

¹¹⁷ Documentary evidence of these guidelines could not be obtained.

of solvency. The consequence is that SMEs find it difficult to participate in these tenders, unless as a subcontractor of one of the larger companies.

According to analysis by the European Commission, the mean value of a contract award notice for the provision of municipal solid waste services in the EU in the period 2009-2013 was EUR 1,886,589. In comparison, the median value of all contracts published on TED in 2011-2012 was EUR 312,000.¹¹⁸ According to analysis of SME participation in public procurement in general, SMEs are more successful in below- than in above-threshold procurement.¹¹⁹

Administrative requirements for registration

The conducted research shows that administrative provisions requiring the registration of bidders within the territory of the contracting authority could also be an obstacle. For example, in Poland there are administrative requirements for the registration of municipal solid waste providers within the region in which they want to provide the municipal solid waste services, which could represent an obstacle when interpreted too narrowly.

5.3 Exports and imports of municipal solid waste

Trade in waste has been growing,¹²⁰ due to inter alia differences in environmental regulation, market prices (influenced e.g. by gate fees and taxation), technology and capacity as well as growing incentives for recycling and recovery, declining transport costs, and more stringent classification of material.¹²¹

Cross-border procurement activity in the municipal solid waste services segment of the waste sector could be related to some extent to the overall trends in export and import in waste. Figure 16 presents data on non-hazardous waste trade in the EU without differentiating between municipal, commercial and industrial waste, as there is no systematic reporting on the amounts of waste imported or exported specifically from the municipal waste segment at either EU or national level. Available data for 2014 Italy suggests that just about 1% of the municipal waste was exported and a similar amount got imported.

The research conducted at national level showed that the high import levels of waste in Germany and in Sweden have different underlying causes. In Germany, increased producer responsibility and a stronger focus on recycling have led to a decrease in the amounts of waste generated by households. This has decreased the need for capacity in waste incineration plants which are primarily in municipal ownership. As a consequence Germany imports waste from other EU Member States to fully utilise capacities.¹²² Among the main EU exporters to Germany are the Netherlands, Belgium and the United Kingdom.

¹¹⁸ PWC (2014), SMEs' access to public procurement markets and aggregation of demand in the EU.

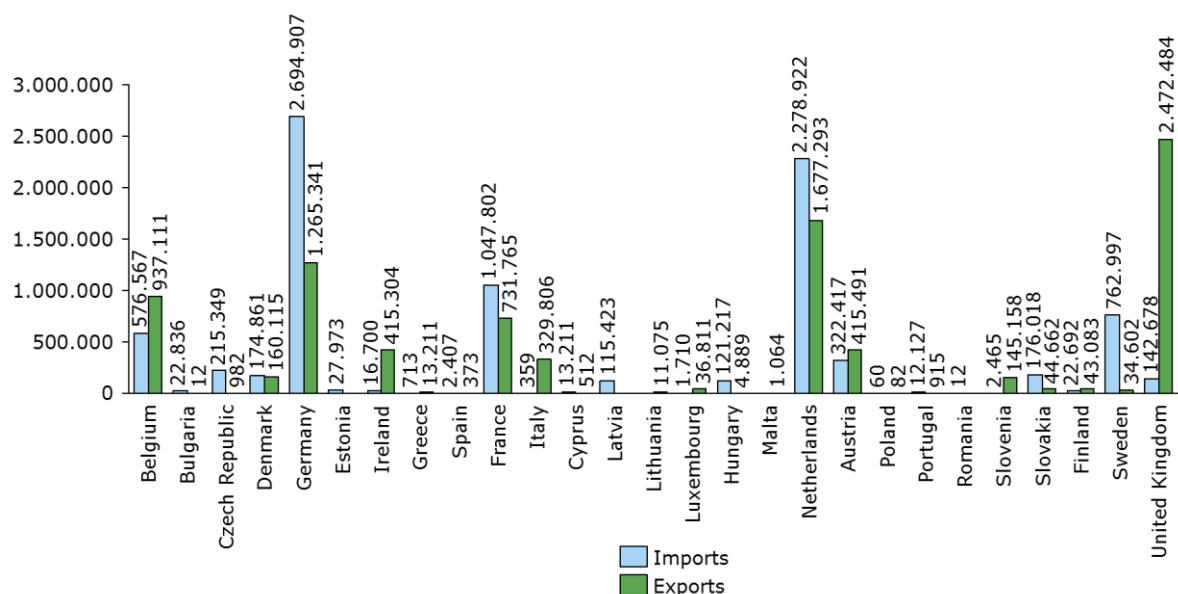
¹¹⁹ Ibid.

¹²⁰ European Environmental Agency (2012), Movements of waste across the EU's internal and external borders.

¹²¹ OECD Competition Committee (2013), Policy Roundtables Waste Management Services. doi:DAF/COMP(2013)26

¹²² Monopolkommission (2013), Hauptgutachten 2012/2013. Kapitel V Kommunale Wirtschaftstätigkeit und der Trend zur Rekommunalisierung.

Figure 16: Exports and imports of non-hazardous waste (municipal, commercial & industrial waste) between EU countries, tones, EU-28, 2013



Source: Eurostat (2015) Trans-boundary shipments of waste by partner, hazardousness and waste operations [env_wasship]

In Sweden the import of waste has more than doubled from 2009 to 2012.¹²³ The large increase derives from a large expansion of municipal incineration plants. The expansion has led to a large excess capacity and the municipalities are therefore forced to import waste to fill the incinerators. Though this might seem as a forced act by the municipalities to minimise the risks of high spending by an expansive operation of the infrastructure, it has at the same time been very profitable for the municipalities to import waste from other countries. Imports from the United Kingdom account for about two-thirds of all non-hazardous waste imported in Sweden from the EU.

As can be seen from Figure 16, the United Kingdom has the largest exports of waste towards the EU of all MS. This can be linked to the lagging levels of investment in treatment capacities in the United Kingdom and the noted overcapacities in other countries. After the Netherlands which imports about half of the United Kingdom's waste, the country's other biggest EU trading partners for non-hazardous waste are Sweden and Germany.

It should be noted that the EU Waste Shipment Regulation lays down as a main principle that waste subject to recovery activities should move freely within the EU without any unjustified restrictions. The idea is that waste for recycling and recovery must be allowed to move to the facility where it is best treated. However, according to a public consultation on the functioning of the waste markets conducted by DG Environment in 2015, several of the Waste Shipment Regulation's rules were perceived as obstacles for the movement of waste, e.g. the notification requirements and provisions concerning shipments through transit countries, Member States' differing interpretations of the definition of 'waste', diverging classifications of waste as 'hazardous' or 'non-hazardous' and the application of national end-of-waste criteria (the latter provisions also related to the Waste Framework Directive). In the context of the consultation, both MWE and FEAD argued that due to differences in interpretation of the Waste Shipment Regulation

¹²³ See: <http://www.naturvardsverket.se/Sa-mar-miljon/Statistik-A-O/Avfall-import-och-export-2004-2013/>.

administrative burden can be different in different Member States and where substantial, it can prohibit movements of waste for sorting for recycling or for energy recovery in case where these treatment methods are either not available or when there is insufficient local or national capacity.

5.4 Relationship between the municipal solid waste sector and other segments of the waste sector

The conducted research identified several links between the openness of the municipal waste sector and competition outcomes in the commercial and industrial waste segments of the waste sector. Such issues are typically not due to public procurement law, but rather to the ways in which public sector entities choose to conduct their activities in the sector.

Cross-subsidisation

According to private sector stakeholders, publically owned waste operators that are granted management of household waste through the in-house exclusion often benefit from unfair competitive advantages, when they also operate on open household waste and industrial waste markets in parallel.

A recent report of the Nordic Competition authorities discusses in detail the impact of different choices of municipal solid waste service organisation on competition and on competitive outcomes.¹²⁴ While under certain circumstances, a fully vertically integrated system can usually be quite an efficient solution - for example, if there is no or only very limited access to capacity from private operators in the waste management market, or if there are no private operators that are prepared to make investments to develop or create the necessary infrastructure, such a system can also create relatively high barriers to entry which may effectively shut out all competition. A municipality that has constructed such a system will arguably have the highest cost for switching systems, and thereby also incentives to protect and maintain the investments that have been made. The system also locks the municipality into a particular waste management solution. Furthermore, there may be spill-over effects into other markets when a municipality has to ensure that there is a continuous flow of combustible waste to be incinerated, and they may therefore extend the local definition of waste in order to maximise the input. That may for instance cause problems for companies recovering or recycling waste themselves.

According to private sector stakeholders in Sweden, municipalities in their country have awarded contracts for MSW directly to municipal waste companies that are mixing household monopoly waste management services (household waste) with commercial waste management services, cross-subsidising between these without holding a separate accounting and fulfilling the Teckal criteria.¹²⁵ These situations are said to occur when a municipally owned company carrying out household monopoly services for the municipality creates a separate entity specifically for commercial services and interprets the Teckal criteria in such a way that the commercial services of the subsidiary should not be taken into account when determining whether the parent company benefits from Teckal exemption. According to the data and views collected for the country report on Sweden, the large public investments in municipally owned waste incineration infrastructure have led to surplus capacities, which has prompted the noted expansion in

¹²⁴ Swedish Competition Authority (Konkurrensverket) (2016), Nordic Report Waste Management.

¹²⁵ FEAD (2015), Public Consultation on the Functioning of Waste Markets.

treatment of commercial waste and import of waste (see Section 5.3). According to stakeholders, municipal companies can also offer a better price for waste management to commercial customers if they buy district heating generated by the same company. According to private stakeholders, these practices of the municipal companies lead to a situation in which they are often the dominating actor on the regional market and SMEs have difficulties in entering and growing on the market with their solutions. Furthermore, companies that focus on material recycling have difficulties in competing with the low prices for incineration of the municipally owned incinerators. The Swedish Competition Authority is conducting several investigations into this issue (see Section 6.3 for more information).

According to FEAD, investments in over- capacities in Sweden have also been made for biogas production. Many of these biogas plants owned by the municipalities are not economical, which has led municipalities to depreciate these plants with tax payers' money. This causes unfair competition for the same type of plants built by private investors that gain no such benefits.¹²⁶

Separately collected fractions from households being considered a service of general economic interest

According to industry organisations, in France, the ability of contracting authorities to use in-house companies to collect and treat waste without tendering has enabled some public entities to enter in the commercial and industrial waste market. In-house companies qualify their services as **service of general economic interest** and take advantage of the associated no-VAT regime in order to propose a more competitive offer for the treatment of commercial and industrial waste. This way, they compete with private companies in waste markets segments which do not constitute a service of general economic interest (commercial and industrial waste) by cross-subsidising their activities in these markets with local taxes paid by citizens for the treatment of municipal waste.¹²⁷ In some Member States, such as **Germany**, waste fractions from households, e.g. metal scrap, old textiles and paper, which are normally collected in recycling centres, have been kept out of the market and their collection has been allocated to municipalities. This development occurs due to the instrument of handover obligation that requires the handover of such household waste to municipalities.¹²⁸ In some cases, it has been reported that private small-waste collectors are being prohibited from collecting scrap and metal from commercial fractions. This might lead to many businesses being closed down.¹²⁹ The European Federation of Waste Management and Environmental Services (FEAD) as well as the Monopoly Commission criticised this situation, noting that processing and recycling structures of these materials were sufficiently advanced and that waste volumes could easily allow for collection by private companies.¹³⁰ But it has to be stated, that the handover obligation does not apply in Germany if a private company offers the service too.¹³¹ So, if the abovementioned cases appear, the concerned private companies may seek legal protection.

¹²⁶ Ibid.

¹²⁷ Ibid.

¹²⁸ Kreislaufwirtschaftsgesetz, §§ 17, 18.

¹²⁹ FEAD (2015), Public Consultation on the Functioning of Waste Markets; Interview with FEAD.

¹³⁰ Monopolkommission (2013), Hauptgutachten 2012/2013, Kapitel V Kommunale Wirtschaftstätigkeit und der Trend zur Rekommunalisierung.

¹³¹ Gesetz zur Förderung der Kreislaufwirtschaft und Sicherung der umweltverträglichen Bewirtschaftung von Abfällen (Kreislaufwirtschaftsgesetz - KrWG) KrWG Ausfertigungsdatum, 24.02.2012; §§ 17, 18.

Different VAT treatment between public and private companies

According to 2011 survey by FEAD, in some of the EU Member States there are different VAT rates on the collection of household and industrial waste depending on whether it is carried out by the public or private sector.

In cases where in-house operations do not pay VAT following Article 13 of Directive 2006/112/EEC they may appear advantageous compared to outsourcing solutions that are subject to (higher) VAT rates.¹³² Until 2011, public owned companies in **Germany** made use of a VAT exemption. But this exception was abolished by a decision of the Federal Fiscal Court (Bundesfinanzhof).

¹³² European Commission (2015), Germany: Public Procurement in Waste Management. Part of the Waste Management Public Procurement report.

6. Review procedures and irregularities

The following section presents the analysis of review procedures and irregularities in the municipal waste management sector in the EU.

6.1 Review of cases of the Court of Justice of the EU

The Court of Justice of the European Union has heard several cases in recent years concerning the public procurement aspects of waste management. Most of these cases concern the extent to which public entities can enter into waste management co-operations without being required to tender the co-operation agreements. This includes the city of Hamburg case on horizontal co-operations,¹³³ as well as several cases concerning the scope for in-house contracting.¹³⁴

It is also worth mentioning that the Court has considered the proximity principle in the context of public procurement in a single case from Estonia.¹³⁵ In this case, a municipality had held a public procurement procedure for a service concession for the processing of municipal waste at a specific landfill site for a 10-year period. During this period, the municipality tendered a new concession for collection and transport of waste produced on its territory. In the contract documents in this second procedure, the municipality required the chosen concessionaire to transport any collected municipal waste to the abovementioned landfill. One waste management operator claimed that such a condition would be contrary to the EU Treaty provisions on free movement of goods and services and the right of establishment.

The Court found that, under the applicable EU environmental legislation, a local authority was indeed entitled to require municipal waste to be transported to the nearest appropriate treatment facility in the Member State, and that this was not contrary to the free movement of goods. The court did not consider whether such a requirement would be contrary to the free movement of services or the right of establishment, as it considered the case to have no real cross-border interest in the treatment of the municipal waste.

6.2 Review of infringement procedures launched by the European Commission

Infringement procedures and investigations launched by Article 258 TFEU have been reviewed on the basis of *publically available information* from the websites of the Commission services.

The database of DG GROW on infringement procedures¹³⁶ was searched for infringement procedures of relevance for the use of public procurement in the waste management sector.¹³⁷ The research identified six cases which directly relate to the application of public procurement rules in the municipal waste management sector. All identified cases concern the direct award of contracts.

¹³³ CJEU, 2009, "Commission v Germany", C-480/06

¹³⁴ Including the cases CJEU, 2008, "Sea Srl v. Comune di Ponte Nossa", C-573/07 and CJEU, 2011, "Econord SpA v Comune di Cagno and Comune di Varese", C-182-183/11, as well as several other cases referenced in the Member State reports.

¹³⁵ CJEU, 2012, "Ragn-Sells", C-292/12.

¹³⁶ See: http://ec.europa.eu/growth/single-market/public-procurement/infringements/index_en.htm

¹³⁷ The search covered information about infringement proceedings that took place between January 2010 and April 2016.

Several of the cases are specifically about non-compliance with the requirement that there is no private ownership in the entity that is directly awarded a contract.

The most recent case is from 2014, when the Commission requested **Italy** to respect EU rules on public contracts in relation to the direct award of waste management services to a privatised company by the municipalities of Varese and Casciago. In the reasoning for the launch of the procedure, the Commission brought up Italian legislation allowing contracts awarded without competitive tendering procedures to companies with private participation to remain in force until their natural end-date. According to the Commission, this situation could prevent companies across Europe from having a chance to enter the market and provide the best value-for-money service, also in the interests of users and tax-payers.¹³⁸

In 2011, the Commission considered that **the Netherlands** has failed to fulfil its obligations to open competitive tendering procedures at EU-level by allowing two contracting authorities (Coöperatieve Vereniging VAOP u.a., and Vaop Oud Papier B.V.) to directly award to economic operators public contracts for used paper processing and transport worth more than EUR15 million per year.¹³⁹

Direct awards of public contracts in the municipal solid waste sector in **Germany** came under particular scrutiny in 2011, 2010 and 2009. In 2011, the Commission requested Germany to ensure fair access to a waste disposal contract in Sachsen-Anhalt. In 2002, the former district of *Sangerhausen* concluded a waste disposal contract set to run until 2015 with a public-private company without a prior tender procedure. In 2004, the same company won a contract from the *Mansfelder Land* until 2017, this time following an EU-wide tender procedure. In 2007, Sangerhausen and Mansfelder merged into the Mansfeld Südharz district and then held 75% of the company's shares carrying out the waste disposal contracts. In 2009 the merged district sold all of its shares in the company to another private company, which then continued to carry out the directly awarded contracts. In line with the case-law of the EU's Court of Justice, according to which public contracts have to be (re)opened to competition if amended in a way which is materially different in character from the original contract,¹⁴⁰ the Commission considered that in the Mansfeld Südharz case the change of ownership of the waste disposal contractor constitutes a new contract award, given the involvement of the new owner in the operational management of the contracts. The Commission therefore considered that the contract should be opened up to a new open and competitive tendering process in line with EU public procurement rules.¹⁴¹

In 2010, the Commission had acted to ensure fair access to a waste disposal contract in *Nordsachsen* under similar circumstances. The Commission considered that that a waste disposal contract in the former district of Delitzsch, now district of Nordsachsen had not been reopened to competition despite being subject to substantial modifications. In this case, the former district of Delitzsch had concluded in 1992 a waste disposal contract with a mixed undertaking, composed of the district itself (55%) and one private partner (45%). In 2005 the parties amended the contract, waiving the right to terminate the contract until 2025. In 2006, the original private partner of the mixed entity was

¹³⁸ European Commission (2014) October infringements package: main decisions MEMO 14/589 http://europa.eu/rapid/press-release_MEMO-14-589_en.htm?locale=en.

¹³⁹ See: http://europa.eu/rapid/press-release_IP-11-1120_en.htm?locale=en.

¹⁴⁰ CJEU, 2007, "Presstext Nachrichtenagentur GmbH v Austria", C-454/06.

¹⁴¹ http://europa.eu/rapid/press-release_IP-11-1116_en.htm?locale=en.

replaced by another private firm. A public procurement procedure has not taken place at any time.

In its reasoned opinion¹⁴² the Commission is of the view that the original contract did not need to be tendered out, as it was concluded before entry into force of the EU Public Procurement Directive 92/50/EEC. However, the waiver of the right to terminate the contract, as well as the selection of a new private partner, constitutes essential modifications of the contract. According to the Commission, these modifications have to be considered as a new contract award for which the procedures foreseen by the applicable EU Public Procurement Directives had to be respected. Modifying essential terms and conditions of a public contract without giving other bidders the opportunity to compete for the contract entails a serious risk of distorting competition, deterring potential new bidding companies and wasting taxpayers' money.

In 2010, the Commission requested Germany to comply with the judgment of the Court of Justice on the award of a waste disposal contract in *Bonn*. In its judgment (Case C-17/09); the Court ruled that Germany had failed to fulfil its obligations under the EU public procurement rules by concluding a contract for the disposal of biodegradable and green waste without any competitive tendering procedure. The Commission considered that the German authorities have not taken the necessary measures to comply with the judgment of the Court as the waste disposal contract had not been terminated and gave the German authorities two months to comply with ruling before referring the case again to the Court.¹⁴³

The Court judgment concerned a combined waste disposal arrangement concluded between the City of Bonn and a private waste management company: the company collects and delivers the household waste that is to be incinerated in the City's incineration plant and in return treats bio-waste for the City in its composting plants. The Court confirmed the Commission's position that, with respect to the bio-waste part, this arrangement has to be regarded as a public service contract. By awarding the contract without a competitive tendering procedure, the German authorities failed to fulfil their obligations under the EU Public Procurement Directives.

Finally, there has been one infringement case concerning the requirement that an in-house entity must perform the essential part of its activities with its controlling entities (limiting the potential for performing activities on the private market).

In 2010, the Commission investigated whether **Sweden** had breached EU public procurement rules by allowing local authorities to award contracts for waste management without any tendering procedure. The municipalities of Ängelholm and Helsingborg awarded several waste management contracts to a company they co-own with other municipalities. The municipalities of Tomelilla and Simrishamn also awarded waste management contracts to SYSAV - a company they co-own with other municipalities. In both cases, no prior call for tender was published at EU-level. According to the Commission, the two companies concerned were also active in the private market where they made a significant share of their turn-over. Therefore, the so-called "in-house" conditions developed in the case law of the Court of Justice were not met.¹⁴⁴ The Swedish courts found that in the case regarding SYSAV, the company did not fulfil the condition of

¹⁴² See: http://europa.eu/rapid/press-release_IP-10-500_en.htm?locale=en

¹⁴⁴ See: http://europa.eu/rapid/press-release_IP-10-1442_en.htm?locale=de

performing the essential part of its activities with its controlling municipalities, and therefore contracts awarded by the municipalities to SYSAV were not exempt from public procurement (see Section 6.3.2 for more information on the case).

6.3 Review procedures and irregularities at Member State level

The data collection on irregularities at national level in the Member States selected for the analysis shows that there are several different areas in which irregularities come up. The following table provides an overview and the subsequent analysis provides more details. A full description of the identified cases can be found in the respective country report.

Table 19: Overview of identified cases of irregularities at national level

	DE	ES	IT	PL	RO	SE	UK
Public contracts		X		X	X	X	X
In-house provisions	X		X			X	X
Competition-related		X		X	X	X	
Corruption, crime		X	X				

Source: Country reports

6.3.1 Irregularities in the set-up and award of public contracts

The review of national case law identified a number of irregularities related to the set-up of procurement procedures and the award of public contracts.

In **Romania**, a recurrent issue concerns the **misuse of negotiated procedures without prior publication** for the award of waste service contracts in alleged extreme emergency situations (see Table 7 and Section 3.3.3). Usually, such „extreme urgency“ situations were related to the expiry of the term of the current/previous delegated management contracts and the need for municipalities to enter a contract for a limited duration, usually up to the closing of a full open award procedure. Several of these negotiated procedures were successfully challenged, with both the National Council for Solving Complaints (NCSC) and court rejecting the qualification of the situation as being an „extreme urgency“ because the required conditions for the use of such procedure had not been fulfilled. However, in at least one case the court has decided to maintain the contract in force, despite its irregular award, as a measure to ensure protection of public interest.

Extreme urgency as a ground for negotiated procedures without prior publication might also have been occasionally abused in **Italy**. A borderline case was recently decided by the *Consiglio di Stato*. A municipality used such a negotiated procedure to award a waste collection and treatment contract during the time required for a fully competitive procedure because the in-house entity previously responsible for providing the service had gone bankrupt. With an argument sitting uncomfortably with the notion of ‘similar control’ which is constitutive of in-house according to EU law, the *Consiglio di Stato* argued that, even if the municipality was the sole stakeholder of the company, it needed not to know in detail the financial situation of the company.¹⁴⁵

¹⁴⁵ Cons. Stato, Sez. V, 14 October 2014, n. 5124; it is, however, to be remarked that the contract duration was set at only 6 months (with a possible further extension of 3 months).

Apart from the misuse of negotiated procedure without prior publication, another irregularity encountered in the waste sector is linked to **requirements for a valid contract award**. Such cases have been identified in **Romania** in connection to requirements in the Local Public Utilities Law that an open procedure has to be annulled and reiterated within 60 days if there are fewer than three offers and three compliant bidders. If the two conditions are not met at the second open procedure, a negotiated procedure may be launched with the participation of only those bidders that submitted an offer in any of the two prior stages. In several cases in the waste sector, the contracting authorities have disqualified all bidders or almost all (keeping one or two valid offers) in the first stage and moved to the next open procedure. This decision was usually challenged by the disqualified participants, as the reasons for invalidating offers were deemed to be excessive. Moreover, in these challenges it was pointed out that this approach might affect competition, as especially in high value contracts draw all players in the market and they gain access to the financial offers of their competitors in the first stage. Both the NCSC (when retaining such cases) and courts have judged such challenges by primarily referring to the two formal conditions required by law for the validity of the procedure.

Moreover, in Romania some municipalities acted in an anti-competitive manner when establishing delegated management contracts with a long duration. In 2008 the Romanian Competition Council conducted a sector investigation on the delegation of waste management by the municipalities of all six districts of Bucharest. The investigation was aimed at identifying potential distortions of competition rules induced by the district councils through the service delegation contracts investigated, with a focus on the **duration of the contracts**. The Competition Council found that all six sector municipalities acted in an anti-competitive manner when establishing the duration of the delegated management contracts and identified three types of anti-competitive behaviour.¹⁴⁶ Some municipalities extended the contract with the existing operator after the expiry of the initial contract duration without organizing any tender procedure. Other municipalities delegated the public service following a tender, but the contract was entered into for 25 years without properly identifying the investment to be performed by the operator. Yet, in other cases, a procedure was organized for the delegation of the service for 25 years without any specific investment obligation included in the tender documents (but the procedure was not completed and no contract was entered into prior to the publication of the decision of the Competition Council).

In the **United Kingdom**, there have been two cases concerning an alleged **material change of the bid of the winning tenderer after the closure of the procurement process**.¹⁴⁷ Another noted pattern of irregularities concerns substantial changes to the initial public procurement procedure. A case from 2011 concerned a complaint that the contracting authority had failed to disclose the criteria, sub-criteria and weightings which would be applied when determining which of the tenders was the most economically advantageous and that it applied criteria, sub-criteria and weightings which were inconsistent with the information which it had disclosed.¹⁴⁸ The most recent case of note is from 2013 - the grounds for complaint were that after seven years of competitive dialogue, the contracting authority appointed a preferred bidder and excluded as "fundamentally unacceptable" the offer of the complainant who claimed that there were

¹⁴⁶ Decision no. 58/2009 of the Romanian Competition Council, http://www.consiliulconcurentei.ro/uploads/docs/items/id2906/decizie_de_publicat.pdf.

¹⁴⁷ SITA v Greater Manchester Waste Disposal Authority (GMWDA) (2009), and Natural World Products v Northern Ireland's Southern Waste Management Partnership (SWaMP2008) (2012).

¹⁴⁸ J. Varney & Sons Waste Management Ltd v. Hertfordshire CC [2011] EWCA Civ 708.

manifest errors in the procurement process (several key elements of the claimant's tender had been marked as "fundamentally unacceptable" which aggrieved them) and sought an injunction to prevent the contracting authority entering into the contract with the preferred bidder.¹⁴⁹

In Poland, complaints regarding abnormally low tenders both in general and within the municipal solid waste sector are quite frequent.¹⁵⁰ In the municipal solid waste sector, complaints are often raised by private contractors challenging the award of the contract to municipal companies. Appellants question why the contracting authority did not fulfil its obligation to request explanation of the **abnormally low pricing** and/or did not exclude municipal companies from the tender based on the submitted abnormally low tenders. Consequently, over the years in its judgements the National Board of Appeal (KIO competent for review procedures linked to public procurement) has considered and elaborated upon the definition and character of abnormally low tenders as well as the legal basis of the obligation to request explanations and exclusions from the procurement process on the basis of an abnormally low tender.¹⁵¹ Other issues often considered by KIO include changes in the contract duration or scope,¹⁵² non-fulfilment of conditions for participation in a tender (including lack of knowledge and experience (selection criteria) or lack of entry into the register or having a base warehouse and transport located in the municipality of the area in which the entity collects the waste or not more than 60 km from the border of the municipality¹⁵³), as well as discriminatory description of technical specification and/or tenders terms and conditions.¹⁵⁴

Finally, under the Directive public contracts could incorrectly be labelled as a "service concession contract" so that the full regime of the EU public procurement rules and procedures would not have to be applied. In **Spain**, administrative tribunals have annulled procedures incorrectly set up as procedures for the award of a "**service concession contract**" when there was no transmission of the "operating risk" meaning that the contract should instead be a "service contract".

In **Germany**, there has been a case related to the use of concession contracts for municipal waste management services. The German legislation¹⁵⁵ foresees the delegation of waste management tasks to third parties but such a solution does not revoke the municipal authority's responsibility for fulfilment of these tasks. As only the authority is thus in direct relation to the citizen, only the authority can collect fees for the provided services – implying that the award of service concessions is not possible.¹⁵⁶

6.3.2 Irregularities in the use of in-house contracts and other cooperation agreements

In several Member States, the courts or independent review bodies noted irregularities related to the exceptions foreseen in the public procurement rules for agreements between contracting authorities where the requirements for exemption were not found to

¹⁴⁹ Covanta Energy Ltd v. Merseyside Waste Disposal Authority [2013] EWHC 2922 (TCC).

¹⁵⁰ KIO judgment of 5 July 2013, KIO 1456/13; Judgment of the District Court in Katowice on 11 April 2013, XIX Ga 179/13; KIO judgment of 30 July 2012, the KIO 1502-1512; KIO judgment of 3 January 2013, KIO 2810/12; KIO judgment of 10 January 2013, KIO 2856/12; KIO judgment of 13 November 2012, the KIO 2413/12; KIO judgment of 6 November 2012, the KIO 2364/12; KIO judgment of 26 October 2010, KIO 2218/10.

¹⁵¹ KIO judgment of 4 May 2015, KIO 802/15; KIO judgment of 27 June 2014, KIO 1205/14; KIO judgment of 13 October 2010, KIO 2144/10; KIO judgment of 29 May 2008, KIO/UZP 466/08.

¹⁵² KIO judgment of 2 January 2014, KIO 2857/13.

¹⁵³ KIO judgment of 19 January 2015, KIO 2812/14; KIO judgment of 18 July 2014, KIO 1362/14. KIO judgment of 16 January 2015, KIO 2751/14.

¹⁵⁴ KIO judgment of 20 June 2013, KIO 1279/13; KIO judgment of 30 March 2015, KIO 510/15.

¹⁵⁵ Kreislaufwirtschaftsgesetz.

be fulfilled. In many of these cases the question raised is whether the in-house entity being awarded the contract has not carried out too much activity on the private market. This includes also the provision of services to other public entities which are not parties to the public-public cooperation. As matter of fact, in such a case the contracting authority is acting as an economic operator on the private market. A detailed analysis of the in-house rules application in Denmark, Germany and Romania can be found in the enclosed case studies.

In **Italy**, according to a report of the competition regulator, direct awards are at times made without the conditions for in house provision being met.¹⁵⁷ As mentioned in section 6.2, the Commission launched an infringement procedure on this issue in 2016. A recent case seen at the Italian administrative courts concerns a municipality that decided to become a partner with and entrust the management services concerning its wastes to a company which had been incorporated following an IPPP and which, therefore, had a private partner. The *Consiglio di Stato* (the Italian highest administrative court) struck down the decision based on the case law holding that the presence of private partners rules out the in house character of the arrangement. The judgment is remarkable because the court refused to apply Art. 12 of Directive 2014/24/EU both because the deadline for implementation had not yet expired and – which is very sensible – because in any case Article 12 allows private participation to in house entities only a) under restrictive conditions and b) when a Member State so decides. Since Italy had not yet implemented the 2014 Directives at the time of the decision, the condition under b) was obviously not met in that case.¹⁵⁸

In the Italian case law there are several cases where different aspects of the in-house criteria are interpreted – e.g. whether the “similar control” requirement is fulfilled¹⁵⁹ or whether the notion of ‘essential part of the activity’ along with the ‘similar control’ requirement are necessary in order to comply with the EU definition of the ‘in house’ exclusion.¹⁶⁰ The latter case concerned an in-house entity serving a number of municipalities while also collecting hazardous waste from public and private entities which were not controlling the in-house entity. It is thus assessed whether the “in-house” rules are applied correctly. The *Consiglio di Stato* considered that in doing so the in-house entity was still discharging the waste management Services of General Economic Interest which had been entrusted to it by the municipalities.

Sweden has also experienced cases regarding the question as to whether the requirements for award of in-house contracts without public procurement have been fulfilled. A very recent judgement¹⁶¹ found that when calculating the activities of the parent company SYSAV, the activities of its subsidiary (which mainly provided services in competition with private undertakings) should have been included. As a consequence, it was found that SYSAV did not fulfil the condition of performing the essential part of its activities with its controlling municipalities, and therefore contracts awarded by the municipalities to SYSAV were not exempt from public procurement. The judgment is under appeal to the Stockholm Administrative Court of Appeal. Review is also on-going in a few other cases on related issues.

¹⁵⁶ OLG Düsseldorf, decision of 19.10.2011 – VII-Verg 51/11, Verg 51/11 – juris Rn. 35 ff.

¹⁵⁷ See the Indagine AGCM, p. 56; or ‘often’ p. 121.

¹⁵⁸ Cons. Stato, Sez. V, 11 September 2015, n. 4253, point 3c.

¹⁵⁹ CJEU, 2015, “Undis Servizi Srl”, pending, C-553/15, pending.

¹⁶⁰ Cons. Stato, Sez. V, 24 July 2014, n. 3941, Section 4.

¹⁶¹ Judgement of the Stockholm Administrative Court on 30 May 2016 (Case number 15332-15).

In **Germany**, a frequent subject of disputes is **inter-municipal co-operation** and whether it should be subject to public procurement law. The Court of Justice of the European Union (ECJ) argued in several instances that public procurement rules would not apply where a “co-operative approach” was followed by the municipalities. Where this is not the case, it is an exchange of a service against a remuneration and hence a public procurement (these criteria are sometimes referred to as the *City of Hamburg* criteria).¹⁶² In the field of waste disposal in Germany, decisions in both directions have been made. In the case of Hamburg, the ECJ identified a co-operative approach in the use of Hamburg’s waste incineration plant by surrounding districts.¹⁶³ In contrast, the Higher Regional Court Koblenz decided that the co-operation of two districts where one organized the treatment and disposal of organic waste for the other district was restricted to a service for which remuneration was paid. The task should thus have been publicly procured.¹⁶⁴

The Higher Regional Court Celle submitted a case to the ECJ on the creation of a special purpose association for the collection and transport of paper and cardboard waste.¹⁶⁵ It is debated whether the activities of this association have become commercial and whether this would not require public procurement. The decision of the ECJ might have an important impact on a number of similar German municipalities that cooperate in this form.¹⁶⁶

Denmark has in recent years experienced a few cases where it was claimed that contracts between contracting authorities in the field of incineration should be exempt from public procurement because they applied the “co-operative approach” of the *City of Hamburg* case law. This was however rejected, in one case from 2012 by the Danish Competition and Consumer Authority¹⁶⁷ and in a different case from 2014 by the Danish Complaints Board for Public Procurement.¹⁶⁸ The cases concerned public incineration providers which had insufficient incineration capacity and therefore entered into contracts with other public incineration plants to perform incineration for them against payment of fees and applicable taxes (all waste incineration plants in Denmark are currently publicly owned). It was essentially found in both cases that these contracts did not fulfil the *City of Hamburg* criteria because they did not contain mutual obligations in order to achieve a common objective, but were similar to regular public contracts where one party performs a service for the other party against payment of a fee.

6.3.3 Irregularities related to unjustified discrimination of non-local operators

The research did not identify any specific cases related to the unjustified discrimination of non-local operators. Analysis presented in Section 5 provides information on certain factors in national legislation that could affect the level of competition generated through procurement procedures in the municipal solid waste sector.

6.3.4 Abuse of dominant position, cartels and collusion

The conducted research revealed several cases of uncompetitive behaviour from providers of waste management services.

¹⁶² CJEU, 2009, "Stadtreinigung Hamburg", C-480/06; CJEU, 2013, "Kreis Düren and Stadt Düre", C-386/11.

¹⁶³ CJEU, 2009, "Stadtreinigung Hamburg", C-480/06.

¹⁶⁴ OLG Koblenz, decision of 03.12.2014 - Verg 8/14 – Zusammenarbeit zweier Landkreise in der Bioabfallentsorgung

¹⁶⁵ CJEU, 2016, "Remondis", C-51/15.

¹⁶⁶ OLG Celle, decision of 17.12.2014 - 13 Verg 3/13 – Region Hannover.

¹⁶⁷ Danish Competition and Consumer Authority, (non-binding) opinion on L90’s conclusion of contracts for the disposal of waste through incineration, 1 October 2012.

¹⁶⁸ Sønderborg Affald A/S v. Affaldsregion Nord I/S, Danish Complaints Board for Public Procurement ruling of 10 February 2014.

In 2015, the National Commission of Markets and Competition (CNMC) in **Spain** imposed antitrust fines totalling EUR 98,2 million to 39 companies as well as three associations for market sharing in Spain's waste management sector, which constitutes a single and continuous infringement of Article 1 of Spain's Competition Act 15/2007. According to evidence included in the file, participants in the infringement exchanged sensitive information, allocated customers and colluded in public tenders. The sanctioned associations assisted in the implementation of the market-sharing agreements through collective recommendations.

The decision distinguishes three areas related to waste management where the market sharing agreement has taken place: industrial waste management (basically, waste generated by industrial customers), paper and board recovery and urban sanitation (which includes municipal solid waste management, street cleaning and sewage treatment). In case of the latter, the CNMC found proof that the leading market players (FCC, Cespa, Urbaser and Valoriza) had colluded in several public tenders organized by the municipality of Madrid between 2011 and 2013. Collusive agreements in this sector have also affected the regions of Andalusia and the Basque Country, like for instance the deal struck by FCC and Urbaser in 2010, according to which both firms would jointly bid in every urban sanitation tender conducted in the province of Málaga, a deal which was subsequently expanded to the cities of Ceuta and Melilla. The anticompetitive conduct of these firms was aided by the trade association ASELIP where firms would often meet to reach a common position regarding public tenders that did not satisfy the members' interests (the decision of the CNMC includes a table listing the public tenders discussed in ASELIP and boycotted by the members).

In **Poland**, a 2013 investigation of the Office of Competition and Consumer Protection (UOKiK) showed that the company Chemeko-System in Wroclaw - the owner of the only installation for the processing of municipal waste in the region - used its monopoly position in the local market and unjustifiably raised prices for accepting waste. The increase was of nearly 115%. The company was fined in the amount of nearly PLN 400,000 (about EUR 93,000).¹⁶⁹

In 2015, UOKiK completed an investigation that showed the Department of Waste Management (ZGO) in Bielsko-Biala restricted competition through the owner of the landfill exerting his dominant position by imposing unfair prices for certain counterparties. UOKiK imposed on the ZGO in Bielsko-Biala financial penalty in the amount of nearly PLN 60,000 and ordered the abandonment of the practice limiting competition.¹⁷⁰

In **Sweden**, the Swedish Competition Authority (SCA) conducted an investigation concerning potentially anti-competitive co-operation between the companies *Bilfrakt Botnia AB* and *Ragn-Sells AB* concerning public procurement procedures on the market for collecting and transporting waste (SCA case number Dnr 184/2014).

In November 2015, the SCA closed an investigation concerning a potential bid rigging cartel on the markets for collecting and burning of waste. The investigation had started with a dawn raid and the SCA had suspicions that the municipally owned companies Umeå Energi AB and Sundsvall Energi AB had co-ordinated their bids in a public

¹⁶⁹ See: https://uokik.gov.pl/aktualnosci.php?news_id=10494.

¹⁷⁰ See: https://uokik.gov.pl/aktualnosci.php?news_id=11943.

procurement procedure conducted by the *City of Örnsköldsvik*. During the investigation, the SCA did not find any proof of a bid-rigging cartel and, consequently, closed the case (SCA case number Dnr 598/2014).

The Swedish Competition Authority has also recently investigated three complaints with regards to competitive neutrality issues in waste management markets.

In one of the cases¹⁷¹ a municipally owned company covered the costs relating to operations in a competitive market with the household waste collection tariffs rather than revenues from services sold in the market where the costs were incurred. This, it was argued, resulted in a cross-subsidy which was detrimental to competition. However, the SCA did not find that the magnitude of this cost shift was substantial enough to also result in below cost pricing in the commercial waste market by the company in question.

In another case¹⁷² a company owned by three municipalities offered rebates on household waste fees on condition that the households also purchased kerbside collection of packaging waste, and the effective price was found to be below cost. The SCA's investigation considered whether the company in question was abusing a dominant position. However, the municipalities chose to change local waste management rules to allow for competition, and the case was subsequently closed.

In the last case¹⁷³ a company owned by two municipalities did not keep separate accounts regarding operations in competitive markets and markets where it had an exclusive position. The household waste fee therefore covered costs from both the competitive packaging waste market and the market for household waste and thus resulted in cross-subsidisation. However, due to a low interest from private undertakings in this market, the SCA concluded that competition was in fact not inhibited and the case was subsequently closed.

6.3.5 Corruption

According to a recent report on corruption in the EU, the waste sector is one of the sectors that is most affected by irregularities, especially at local level.¹⁷⁴ The research conducted at national level showed several instances where corruption in the waste management sector has been subject to judicial review.

In **Spain**, two of the most famous cases were "Cloaca Operation", in the Autonomous Community of the Balearic Islands, and the "Brugal Operation", in the Autonomous Community of Valencia. Both cases were discovered by the Anti-Corruption and Economic Crime Group of the Police and prosecuted by the Courts of Justice. The detainees were accused of crimes as prevarication, bribery, fraud, concealment and influence peddling by the alleged payment of commissions for the award of contracts related to waste management.

According to the legal expert for **Italy**, bribery and other criminal behaviours do not normally lead to administrative proceedings in the Italian context. Organised crime,

¹⁷¹ Swedish Competition Authority's, case no. 76/2011.

¹⁷² Swedish Competition Authority's, case no. 536/2011.

¹⁷³ Swedish Competition Authority's, case no. 226/2011. This description of the cases is taken from the 2016 Report from the Nordic Competition Authorities on Competition in the Waste Management Sector – Preparing for a Circular Economy, p. 108.

¹⁷⁴ European Commission (2014), Report from the Commission to the Council and The European Parliament EU Anti-Corruption Report.

particularly in the South of Italy was seen as one of the biggest problems for the sector,¹⁷⁵ but a limited number of final judgments attest to this,¹⁷⁶ although prosecutions are often launched.¹⁷⁷ Petty corruption is also a problem, as it is shown by the conviction of public officials who falsely attested that their contractor was in possession of the machinery needed to process waste.¹⁷⁸

6.4 Outstanding issues

Desk research and interviews revealed a number of legal issues which stakeholders and authors did not find to be yet sufficiently resolved, e.g. in case law or the new directives on public procurement and concessions. It should be noted that some of these issues are currently under judicial review at national level.

Regarding the in-house exclusions, several issues have been identified in relation to the interpretation of the criterion that the controlled legal person must carry out “the essential part” of its activities in the performance of tasks entrusted to it by the controlling contracting authority. After transposition of Directive 2014/24, the requirement is that this must cover at least 80% of its activities, e.g. calculated with respect to turnover. The following questions are raised in relation to this:

- How should this “essential part” be calculated when the same contracting authority controls *several separate legal persons*? An example is a group structure where a municipality owns a parent company with several subsidiaries; In this case, should the “essential part” be calculated in relation to the company being awarded the contract in question or in relation to the parent company (consolidating the total activities of the group)?¹⁷⁹ In case of a contract awarded to the parent company, should the activities of its subsidiaries be included in the calculation?¹⁸⁰
- When the share of activities is calculated further to “turnover”, which income should be included in this calculation? For instance, if waste is incinerated at a Combined Heat and Power Plant (CHP), the incineration of waste produces electricity and central heating which can be sold on the open market; would the proceeds from such sales be classified as being achieved in the performance of tasks entrusted by the controlling contracting authority?

Another issue related to the in-house rules can be formulated as follows: If a private or mixed company acquires a public company that has been awarded an in house providing contract, does the aforementioned private or mixed company gain the right to provide the services under the in house providing contract?¹⁸¹

¹⁷⁵ D'Amato, Alessio and Mazzanti, Massimiliano and Nicolli, Francesco (2011), Waste Sustainability, Environmental Management and Mafia: Analysing Geographical and Economic Dimensions. CEIS Working Paper No. 213. Available at SSRN: <http://ssrn.com/abstract=1947303> or <http://dx.doi.org/10.2139/ssrn.1947303>.

¹⁷⁶ Cass. pen., Sez. V, 1 October 2008, n. 39042.

¹⁷⁷ See e.g. the news at <http://www.ilsole24ore.com/art/notizie/2015-06-05/oltre-200-milioni-mirino-holding-criminale-102132.shtml?uuid=ABa8L0sD> ; <http://www.ilsole24ore.com/art/notizie/2015-10-06/trentacinque-incendi-sei-mesi-rischio-riciclo-rifiuti-italia--224737.shtml?uuid=ACWMeRBB>; see more generally the report commented at <http://www.quotidianoentilocali.ilsole24ore.com/print/AB8ZDMj/0>.

¹⁷⁸ Cass. pen., Sez. V, 24 November 2014, n. 48738.

¹⁷⁹ See: <http://www.ens.dk>, which leans toward the former of the two solutions. The wording of Article 12(1) of Directive 2014/24 also appears to support the former solution.

¹⁸⁰ The Stockholm Administrative Court judgement of 30 May 2016 concerning SYSAV (mentioned in section 6.3.2) answered in the affirmative, implying that the parent company had not fulfilled the in-house criteria due to the commercial activities performed by a subsidiary.

¹⁸¹ The ECJ Judgment in the Sea case does suggest that such a transfer of shares to a private party would constitute a substantial modification of the in-house contracts, implying that the affected contracts be (re-)tendered, but this was not central to the conclusion of the case (case C-573/07, Sea Srl v. Comune di Ponte Nossia, para 53).

In Germany, it has also been considered unclear whether the creation of a (public sector) special purpose association is within the scope of public procurement law or not. Currently, the CJEU is considering a reference for a preliminary ruling by the OLG Celle which concerns the set-up of municipal special purpose associations.¹⁸²

¹⁸² Case C-51/15 – Remondis (Request for a preliminary ruling from the Oberlandesgericht Celle (Germany) lodged on 6 February 2015 — Remondis GmbH & Co. KG Region Nord v Region Hannover)

7. Conclusions

This concluding chapter seeks to summarise the results of the study and raise questions identified as requiring further attention from the European Commission and other relevant stakeholders. To reiterate, the objective of the study was to examine how public procurement rules are applied in the waste management sector across Europe, leading to a better understanding of the sector, and to detect best practices as well as deficiencies and obstacles.

Based on the information collected at national and EU level and the cross-cutting analysis performed, it can be concluded that, at present, the organisation of the municipal solid waste sector in Europe employs different models of management. In all the Member States studied, the research identified the presence of different models of public and private management, but on an overall level it can be said that delegated private management and delegated public management (through in-house provision or public-public cooperation) are the main forms of service organisation. The picture on private and public participation is variegated at national level with some Member States having a higher participation of the private sector (e.g. Poland, Spain) whereas others have a higher participation of the public sector (e.g. Sweden, Italy). Public and private participation also varies across the different phases of waste management. In general, private participation was found to be more prevalent in the collection and transport phase than in the treatment phase. The participation of public and private entities in the treatment and disposal phase varies from one Member State to another, with some Member States relying to a high extent on the private sector for the provision of treatment and disposal services (e.g. Poland, Spain) whereas others rely on both private and public entities (e.g. United Kingdom, Germany, Sweden, Romania).

The evidence collected did not indicate a clear pattern or correlation concerning the extent of public and/or private participation and the performance of the waste management system. Member States identified as top performers have varied systems that rely both on private and public participation (see section 3.2).

The public sector participation in the performance of municipal waste management activities is typically not tendered, and therefore the part of the municipal waste sector subjected to public procurement varies significantly in size between Member States. Further research on this subject could help identify and address the factors leading to the variation in the share of the sector open to public procurement. Some of the identified case law showed that contracting authorities were relying on in-house arrangements and public-public co-operations to an extent which goes beyond what has been allowed by the CJEU case law.

In those cases where public procurement procedures are employed for the provision of municipal solid waste services, there are some obstacles to the openness of the sector in the form of rules or practices that restrict the opportunities for SMEs or impede cross-regional or cross-border provision of services. This includes the use of various forms of proximity criteria in national legislation or public procurement procedures, partly due to different interpretations of the principle of proximity in the Waste Framework Directive. Some of the obstacles have been documented in national and European case law.

The study confirmed the presence of competition between the public and private sector for provisions of municipal solid waste services, as well as other segments of the waste sector in some cases. The choice between public and private provision of services is a highly politically sensitive one and the noted tensions as well as the noted need for additional investments in order to comply with the targets for waste treatment in the Waste Framework Directive can be expected to lead to sector reforms in the future, as well as further cases regarding the application of the available exclusions regarding service provision through delegated public management. The rules on horizontal and vertical cooperation of public entities for the provision of services introduced by Directive 2014/24 are likely to require the revision of some of the arrangements previously used to provide services in-house or through public-public cooperation. Furthermore, the study found that the rules on in-house entities and public-public co-operations in Directive 2014/24 leave some issues unresolved which can be important for delineating the allowed scope of delegated public management in the municipal solid waste sector. Specifically, there are several aspects of the criterion that the controlled legal person must carry out “the essential part” of its activities in the performance of tasks entrusted to it by the controlling contracting authority, which are likely to require additional clarifications by the courts.

APPENDICES

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APPENDIX 2 – LIST OF ABBREVIATIONS

ANRSC	National Regulatory Authority for Municipal Services (Romania)
ANAP	National Agency for Public Procurement (Romania)
ANMP	National Environmental Protection Agency (Romania)
BImSchG	Bundesemissionsschutzgesetz (Germany)
BMW	Biodegradable municipal waste
CCT	Compulsory Competitive Tendering (United Kingdom)
CJEU	The Court of Justice of the European Union
CNSC	National Council for Solving Complaints
CONAI	Consorzio nazionale imballaggi (Italy)
DCLG	Department for Communities and Local Government
DEFRA	Department for Environment, Farming and Rural Affairs
DSO	Direct Service Operator (United Kingdom)
EU	European Union
FEMP	Federación Española de Municipios y Provincias (Spain)
GWB	Gesetz gegen Wettbewerbsbeschränkungen (Germany)
GNM	National Environmental Guard of Romania (Romania)
IDAs	Inter-Community Associations (Romania)
JCCA	Junta Consultiva de Contratación Administrativa (Spain)
JVC	Joint-venture company
KIO	The National Board of Appeal in Poland (Poland)
KrWG	Kreislaufwirtschaftsgesetz (Germany)
LATS	Landfill Allowance Trading Scheme
LARAC	Local Authority Recycling Advisory Committee
LAWDS	Local Authority-owned waste disposal companies
MINAHP	Ministerio de Hacienda y Administraciones Públicas (Spain)
MS(s)	Member States
MSW	Municipal Solid Waste
MW	Municipal Waste
MWDA	Merseyside Waste Disposal Authority (United Kingdom)
NCSC	National Council for Solving Complaints (Romania)
NIEA	Northern Ireland Environment Agency (United Kingdom)
NIK	Najwyższa Izba Kontroli (Poland)
OECD	Organization for Economic Cooperation and Development
PEMAR	Plan Estatal Marco de Gestión de Residuos (Spain)
PFI	Public Finance Initiative (United Kingdom)
PPPs	Public Private Partnerships
PSCP	Publication on the Public Sector Contracting Platform
PSO	Public Service Obligation
RDF	Refuse derived fuel
SCA	Swedish Competition Authority (Sweden)
SCB	Central Bureau of Statistics in Sweden (Sweden)
SEAP	Electronic System for Public Procurement (Romania)
SEPA	Scottish Environmental Protection Agency (United

	Kingdom)
SRF	Solid recovered fuel
SYSAV	Sydskönes avfallsaktiebolag (Sweden)
TAR	Tribunali amministrativi regionali
TED	Tenders Electronic Daily
TRLSCP	Texto Refundido de la Ley de Contratos del Sector Público (Spain)
UA	Unitary authorities
UOKiK	Office of Competition and Consumer Protection (United Kingdom)
VerpackV	Verpackungsverordnung (Germany)
WCA	Collection authorities
WDA	Disposal authorities
WET	Waste and Emissions Trading
WFD	Waste Framework Directive
ZGO	Polish Department of Waste Management (Poland)

APPENDIX 3 – ANALYTICAL FRAMEWORK

Separate document

APPENDIX 4 – COUNTRY REPORTS

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APPENDIX 5 – CASE STUDIES

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