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IEA DSM TASK XVI

Competitive Energy Services
(Energy-Contracting, ESCo Services)

How to Procure (Complex) Energy Efficiency Services

A Guide for Contracting Authorities and ESCOs

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Table of Content

1 Motivation and Introduction

Energy Services (ES) - also variously labelled as 'ESCO Services', 'Energy-Contracting (EC)', 'Contract Energy Management (CEM)', 'Energy Efficiency Services (EES)' and others - are regarded as an important means to implement demand side energy efficiency projects. This article uses "ESCO Services" or "ES" to refer to such services, reflecting that more and more it is Energy Service Companies (ESCOs) who provide energy services on the market. Since the middle of the last decade, ES have climbed high on political agendas, even to the point of now having the status of its own European energy efficiency legislation [Directive 2006/32/EC][1], that is currently under review.

One of the key lessons so-far learnt is that successful market development for energy services – in particular for Energy Performance Contracting in the public sector – is demand-side driven: It is (potential) ESCO customers who define their goals and needs for energy service packages and put out requests for proposals on the market.[2] The mere availability of ESCO services without such demand would severely limit the size of the market and the uptake of services offered by ESCOs.

The energy services to be procured are typically described with functional specifications covering the entire project cycle (as opposed to detailed specifications for different trades and stages of the project cycle). In some European Union (EU) Member States such as Germany, Austria or Sweden the preponderance of ESCO contracts in the public sector were put to tender using the 'Negotiated Procedure'. In other EU Member States such as the UK[3] and France, the 'Competitive Dialogue' procedure appears to be the predominant public procurement procedure for significant ESCO contracts.

Since ESCO Service contracts usually cover an entire energy project or life cycle, the contract scope is comprehensive. Typically planning, procurement, construction, operation and maintenance activities are packaged and outsourced to one contractual party - the Energy Service Company (ESCO). Importantly, the ESCO assumes substantial financial, technical and operational risk in the project and provides guarantees for its output. This leads to a highly integrated product consisting of works, supply and service components. The nature of these types of contracts is sometimes referred to as "general contractor (GC)" or "total contractor (TC)", while another common term is EPC (Engineering, procurement, construction). In the Public-Private-Partnership model, variations of the term "Build-Operate-Transfer (BOT)" are applied to comparable types of contracts.

The goals of this report are:

1. to summarize the state of the art in (public) ESCO procurement and

[1] DIRECTIVE 2006/32/EC of The EUROPEAN PARLIAMENT and of the COUNCIL Of 5 April 2006 On Energy End-Use Efficiency And Energy Services, OJ 2006 L114/64 at 68

[2] World ESCo Outlook to be published in 2012

[3] Example RE:FIT

2. to encourage and give guidance to the demand side public buyers of energy services to put out qualified tenders and to procure ESCO services.

Consequently, our focus is on legal procurement issues and their practical application. Other important Energy-Contracting topics such as project development, selection of buildings or facilites, measurement and verification or model contracts are not covered here.

Differing slightly from the aforementioned EU legislation [Directive 2006/32/EC][4], we define Energy-Contracting in a more narrow sense as "a comprehensive energy service concept to execute energy efficiency and renewable projects in buildings or production facilities according to minimized project cycle cost". Typically an Energy Service Company (ESCO) acts as general contractor and implements a customized efficiency service package (consisting of e.g. design, building, (co-)financing, operation & maintenance, optimization, fuel purchase, user motivation). Key features are: the ESCo's remuneration is performance based, it guarantees the outcome and all inclusive cost of the services, and takes over commercial as well as technical implementation and operational risks. These are generally for the whole project term of typically 5 to 15 years.[5, 6]

Two basic ESCO business models can be distinguished, which provide either useful energy (Energy Supply Contracting – "ESC") or final energy savings (Energy Performance Contracting – "EPC") to the end user. Even though EPC is widely referred to, its market share in the EU is likely below 10 %[7] and its application is largely restricted to large projects in the public sector. ESC projects, although not explicitly defined in the EU Directive, achieve substantial final energy savings also in the industry, tertiary and housing sector even though their standard scope of service is limited to the "boiler room". This paper deals with both types of contracts between public authorities and an ESCO.

In Europe, it seems likely that very many contracts of public authorities with ESCOs will be subject to the EU public procurement rules. Under those rules, when procuring ESCOs services, PUBLIC contracting authorities are obliged to comply with many different requirements imposed by EU Directives 2004/18/EC and 2004/17/EC and the respective national implementation of these Directives. This paper combines the legal perspective, with the practical market and project facilitator's perspective, on state of the art ESCO public procurement. We outline the most important legal procurement framework at the European level and take a closer step-by-step look at the widely used "negotiated procedure", followed by conclusions, recommendations and future outlook for the sector.

[4] DIRECTIVE 2006/32/EC of The EUROPEAN PARLIAMENT and of the COUNCIL Of 5 April 2006 On Energy End-Use Efficiency And Energy Services, OJ 2006 L114/64 at 68

[5] Quoted after Bleyl, Jan W.; Schinnerl, Daniel "Energy Contracting" to Achieve Energy Efficiency and Renewables using Comprehensive Refurbishment of Buildings as an example in: Urban Energy Transition edited by Peter Droege, Elsevier 2008

[6] Also the latest German energy efficiency action plan (NEEAP) to the European Commission has adopted this definition to a large extent

[7] In Germany the two ESCo associations "ESCo Froum im ZVEI" and VfW e.V. report 7% respectively 8% of EPC market share.

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2 Legal Framework

2.1 Legislation and Principles Applicable to Public Procurement

ESCO services procured in the EU by a government or government agency are typically subject to the EU rules on public procurement set out in a number of "Directives". They do not apply to purely private sector procurement. Even if the public procurement is not subject to the relevant EU Directives, the basic principles of EU law still apply. These principles are discussed in this section.

The general rules on EU public procurement are set out in Directive 2004/18/EC on the coordination of procedures for the award of public work contracts, public supply contracts and public service contracts[8].

The following focuses on Directive 2004/18/EC which is of more general applicability. Before proceeding it should be noted that the performance of the contract, is not governed by Directive 2004/18/EC, which only regulates the award process. Whether a contract with a public authority has been properly performed is generally subject to contract law, rather than the law on public procurement. Public authorities in the EU are subject to the EU public procurement Directive 2004/18/EC where the ESCO contract in question is equal to, or above, the EU Directive's specified monetary thresholds (see chapter 2.2.1 following for discussions of thresholds). Some EU Member States also require compliance with these EU rules even when the amounts involved are much less than the thresholds set out in Directive 2004/18/EC.

Directive 2004/18/EC is not a legal instrument directly applicable in the national law of a Member State. The Directive has to be implemented into national law by each of the twenty seven EU Member States, normally through national regulations, decrees and rules on procedures for procurement of goods, services and other products by public authorities in the Member State concerned. National implementation can vary between Member States so regard should always be had to the national (specific EU member State) implementing law and rules.

There are more specific EU Directives applicable to entities operating in the water, energy, transport and postal services,[9] as well as distinct EU rules that apply to public authorities in the fields of defence and security.[10] These more industry specific Directives follow the same approach of the main EU Directive 2004/18 dealing generally with public works, public supply and public service contracts. There will

[8] Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public work contracts, public supply contracts and public service contracts, OJ L/134/114 30.4.2004.

[9] Directive 2004/17/EC, OJ 2004 L134/1

[10] Directive 2009/81/EC, OJ 2009 L216/76

undoubtedly be circumstances where Energy Efficiency Service contracts are procured by authorities in the defence, water, energy, transport and postal sector, and in that case the more specific EU rules apply. The industry specific rules are based on the same principles and often have similar requirements to the general public procurement Directive 2004/18/EC. The following discussions only considers Energy Efficiency Service contracts with public entities from the point of view of the generally applicable EU Directive 2004/18 on public procurement.

To the extent ESCOs are concerned, the intention behind the EU public procurement regime is to open up the market for government procurement, including the energy service markets across the EU (and to prevent 'buy national' policies). Importantly, it has an objective of also ensuring there is no discrimination against ESCOs (and their services) because an ESCO is based in another EU Member State. In addition, the public procurement rules aim to better ensure that public authorities receive the best ESCO project value for money.

To achieve these purposes, and thus to facilitate the market for ESCO services, public contracting entities have to comply with the fundamental principles of EU law (also enshrined in Article 2 of Directive 2004/18/EC). These include, most relevantly, **transparency and equal treatment**. Examples of application of the principle of transparency can be found in the different provisions of Directive 2004/18/EC on the publication of a contract notice and the obligation for public authorities to inform the tenderers concerned why their tenders were rejected. Provisions on selection and award criteria, for example, embody the principle of equal treatment. Non-compliance with these two fundamental principles of EU law in any public procurement process may have severe consequences for the public authority and the ESCO concerned. Consequences can include complaints to the EU Commission or legal proceedings that result in the award contract being ineffective, project delays, additional costs and penalties, or may trigger a law suit for damages (see chapter 2.7).

2.2 Contracts Awarded to ESCOs: How to Classify?

2.2.1 Public Works, Supply and Services

The contracts between a public authority and an ESCO can take a multitude of forms. It might involve (i) only the delivery of a new boiler (and/or its installation), (ii) engineering, procurement and construction services with other contractors providing equipment to be installed, or (iii) a total construction service including supply of equipment, refurbishment, construction works, and installation of equipment either by the ESCO itself or with subcontractors. The contract might also involve financing of works and equipment such as through a hire or hire-purchase agreement with a financial institution or bank. Such ESCO contracts can involve supply installation and maintenance of boilers, insulation materials, photovoltaic, wind, biomass, meters, management systems, and new shading, heating and lighting equipment. It can be seen then, that given the very wide range of services, works and equipment that an ESCO might provide.

One of the challenges facing public authorities in procuring ESCOs services is how to define what type of contract it is. By their very nature ESCo services are often

highly integrated products, which (as indicated above) may include construction or refurbishment of a building's shell, the supply of energy, operation and maintenance, and the guarantee for energy cost savings (i.e., ESCO is paid from actual energy saved). This constitutes a mixture of various types of contracts (work, supply, services and may even have a concession element). This is important because the extent of the obligation and thresholds to apply the EU public procurement procedures depends on the type of contract itself and the estimated value of the contract.

In general, EU public procurement rules, to a greater or lesser extent, apply to three categories: (1) public work contracts for execution, or both execution and design, of works related to, for example, refurbishment of a building shell; (2) public supply contracts having as their object the purchase or lease of products, e.g. HVAC equipment or Megawatthours of electricity; (3) public service contracts (e.g., maintenance and energy management services).

An energy savings contract between a public authority and an ESCO can be any one of these three types of contracts, or can be a mixture of the three. Whether the public procurement falls within one or other of these three categories can be important. This is because different monetary value thresholds apply to the different types of contract. Once the thresholds are reached the EU public procurement rules must be applied. Currently the thresholds for application of the general EU Public procurement are:

1. for public works contracts – EUR 6,242,000
3. for central government authorities listed in the Annexes to EU Directive 2004/18 for public supply and public services contracts – EUR 125,000
4. for public service and public supply contracts by other non-central government public authorities – EUR 193,000

These thresholds are exclusive of VAT, and can change from time to time (c.f. e.g. Commission Regulation No 1177/2009).

There are some exceptions to the above thresholds, but these would likely be of limited concern in the context of Energy Efficiency Service contracts.[11] It should also be noted that many EU Member States require their public authorities to follow the same EU procurement rules at much lower thresholds.

A "works" contract is one having as its object the design and executions of building or civil engineering works taken as a whole, which is sufficient of itself to fulfill an economic or technical function.

A "supply" contract does not come within the definition of "works" and has as its object the purchase, lease, rental or hire purchase, with or without an option to buy, of products. If as an incidental matter the supply of products also covers sitting and installation operations, it is equally considered a supply contract.

A "service" contract is one for the provision of services, but if it includes both products and services, it is also considered a service contract if the value of the services exceeds that of the products covered by the contract.

[11] For details of exceptions see ss 7.8.12-19 and Annexes to EU Directive 2004/18, OJ 2004 L134 at pp. 129-134.

A contract between a public authority and an ESCO might involve (i) "works" that includes replacing a buildings insulation[12] and (ii) "services" that include maintenance and repair services, engineering and consulting services.[13] If the public contract includes both such "services" and "works" but the works are only incidental to the object of the contract, then the contract is regarded as a public service contract.

One way of determining how a public contract should be classified, and therefore which thresholds for application of the EU public procurement rules, is to consider the value over the likely life of an ESCO contract (typically 5-15 years) of each of the "works", "services" and "supply" aspects of the contract. For example:

Deliverable	Payments	Project (Total over 15 years)
Construction "works" e.g. Equipment, insulation	Total investment € 2-3 million	€ 2-3 million
Service e.g. Concept optimization, o & m	Concept/optimization € 150 k o & m € 20k/yr	€ 0.45 million
Supply e.g. heat and electricity	Heat € 700k/yr Electricity € 300k/yr	€ 15.0 million

In the above example, given the most significant estimated value of the contract is the part dealing with provision of supply and services, and that the main objective of the ESCO contract is to save energy (a product to be supplied), the threshold applicable to public supply and service contracts would be the one applicable (i.e. currently € 125,000).

It is emphasized however, that many EU Member States require compliance with procurement rules that are either the same or very similar to those required under the EU Directives, when the thresholds are much lower than those currently applicable under EU law.

2.2.2 Concessions

Concession contracts have a special status under Directive 2004/18/EC and are not subject to the full EU public procurement regime. Public service and public works **concessions** are of the same type as a public service/works contract except that the payment (or other consideration) for provision of the service/works consists either solely in the right to exploit the service/works or in this right together with payment[14].

A service concession granted by a public authority might, for example, be related to the supply of energy to a public building. The ESCO energy supplier (after completing energy savings measures) might be given the right to directly charge the ten-

[12] Annex I, Directive 2004/18/EC
[13] Annex II, Directive 2004/18/EC
[14] Article 1(3) and (4) of Directive 2004/18/EC

ants of the building for the energy supply and/or use of the energy savings measures. The ESCo would, in such a scenario, assume the risk of non-payment by the building's tenants, as well as the risk that the energy savings do not reach the level agreed in the contract with the public authority. If the ESCO assumes the risks of non-payment by tenants under the procurement scenario outlined above, the call for tenders would be regarded as a call for tenders for a "concession". The procurement of a concession is subject to only very limited aspects of the EU procurement rules, with most of the formal procedural requirements applicable to other types of procurement contracts not being applicable.

It is likely that in most cases a service concession (excluded from the detailed procedural procurement rules of EU Directive 2004/18) would not be applicable to an ESCO energy savings contract. This is because the public authority normally does not grant the right to exploit the supply of energy that is being saved in an energy savings contract. Note however, that if the contract was in fact a concession contract, care would need to be taken if such a concession amounted to a "public works concession" where the value of the concession was equal to or more than € 4,845,000. If the Energy Efficiency Service contract was such a "public works concession", the special EU rules on public works concessions would need to be followed.[15] This paper only discusses the definition of a concession, and does not deal with either the rules applicable to public works concessions or the rules on what advertising and non-discriminating treatment must be applied by concessionaires when procuring supplies or services in respect of the concession.[16]

The EU Court of Justice has emphasized in the *WAZV* case, that a work/service concession contract exists where the contractor assumes all, or at least a significant share, of the operating (including payment) risk faced by the contracting authority, even if that risk is, from the outset very limited[17].

The *WAZV* case involved a dispute between WAZV Gotha, an association of municipalities, and a tenderer Eurawasser who objected to WAZV Gotha's intention to award the service for the distribution of drinking water and the disposal of sewage by way of a service concession, and not by a formal tender procedure for the award of a service contract. The tender notice provided that the concession holder, in its own name and on its own account, would supply the abovementioned services to users resident in WAZV Gotha's territory and that it would receive, in consideration, payment directly from those users. The dispute between WAZV Gotha and Eurawasser subsequently reached the national court which asked the European Court of Justice to rule on whether a service concession exists where the supplier is entitled to collect payment from third parties (i.e. households in the locality) and assumes all, or at least to a predominant extent, the risk which the contracting authority runs in operating the service.

The Court in the *WAZV* case confirmed the existence of a service concession where the service provider's remuneration came from payments made by users of those services, and rejected the argument that the financial risk transferred to the concession holder must be significant. The Court noted that certain sectors, in particular those involving public service utilities (e.g., the distribution of water and the

[15] Art. 56 Directive 2004/18/EC

[16] Articles 56-65 Directive 2004/18/EC

[17] Case C-206/08 *WAZV / Eurawasser* [2009], paragraph 80

disposal of sewage) are subject to rules which may have the effect of limiting the financial risks entailed, and therefore what really matters is whether or not the contracting authority transfers to the concession holder all, or at least a significant share, of the operating risk (which may include risk of non-payment by users). In the complete absence of a transfer of risk, however, the transaction is a service contract.

As mentioned above, it should also be noted that public work concession contracts are nevertheless subject to some (limited) provisions of the EU procurement rules (tender publication and award notice)[18]. However, if a transaction is categorized as a service concession, then Directive 2004/18/EC is not applicable at all[19]. According to settled case law of the EU courts, in such circumstances the awarding of the concession nevertheless remains subject to the fundamental principles of EU law, in particular to (a) the principles of equal treatment and non-discrimination on the ground of nationality, and (b) the obligation of transparency,[20] in the process leading to award of the concession contract.

An important consequence of the case law of the European Courts is that even when awarding public concession contracts, public authorities are still in principle, obliged to ensure a degree of advertising that is sufficient to enable the concession to be opened up for competition across Europe. Although this does not necessarily imply an obligation to launch an invitation to tender for the concession with a publication notice in the EU Official Journal, it does imply some sort of publicity of a non-discriminatory tender process for the concession.

2.3 Procedural Requirements for Public Authorities

It seems likely that many contracts of public authorities with ESCOs could be subject to the EU public procurement rules either because they exceed the EU thresholds or EU Member State law extends the scope of the rules to much lower thresholds. When procuring ESCOs services, public authorities are obliged to comply with many different requirements imposed by Directive 2004/18/EC. The most important of them are outlined in this section as well as discussed in greater detail in following sections.

The requirements applicable to procurement by a public authority generally, fall into two broad categories:

- obligations of public authorities, e.g., publication of a tender, selection, award and time frames.
- requirements for a tender: technical specifications including performance based specifications and performance conditions (such as fulfilling certain social and environmental conditions to be complied with in the process of performance).

[18] Articles 56 to 61 of Directive 2004/18/EC

[19] Article 17 of Directive 2004/18/EC

[20] Case C-324/98 *Telaustria and Telefonadress* [2000] ECR I-10745, paragraphs 60 to 62; Case C-231/03 *Coname* [2005] ECR I-7287, paragraphs 16 to 19; Case C-458/03 *Parking Brixen* [2005] ECR I-8585, paragraphs 46 to 49; and Case C-324/07 *Coditel Brabant* [2008] ECR I-0000, paragraph 25

Under Directive 2004/18/EC public authorities must publish (generally) two **contract notices** in the Official Journal of the European Union and the "TED" (Tenders Electronic Daily) database concerning the public contracts they propose awarding. Public authorities are required to draw up notices according to standard forms and include the information specified in Annex VII A to the Directive[21].

1. The public authorities are obliged to publish a contract notice when the award procedure is about to be launched providing ESCO potential bidders with (a) information they need in order to assess whether the contract is of any interest, and (b) sufficient time for submission of interest and tenders[22].

5. Further, once the contract is awarded the contracting authority must publish a contract award notice setting out the most important points concerning the conditions upon which the contract has been awarded[23].

The public authority may, when using the restricted, negotiated, or competitive dialogue procedures, have a two (or more) stage process where the qualified selected candidates are invited to submit their tender or to take part in the competitive dialogue.[24] - these procedures are discussed in following sections. If only a limited number of qualified candidates are to be selected, the selection of such candidates must be done on the basis of objective criteria. If only a limited number of qualified candidates are to be selected when using the negotiated procedure or competitive dialogue procedure, the public authority must use the contract award criteria (as set out in the published contract notice) for reducing the number of tenderers to negotiate with, or to enter into a dialogue.[25]

As already indicated above, when procuring ESCOs services the public authorities will have to award contracts by following certain procedures mandated by the Directive (assuming the contract is one covered by the Directive). This, includes a **two-stage process for the evaluation of tenders** for the contract[26] - selection of the qualified candidates and then application of the award criteria to the tenders of those qualified candidates. It is important to note that the Court of Justice has held that "while [Directive 2004/18/EC] does not in theory preclude the examination of the tenderers' suitability and the award of the contract from taking place simultaneously, the two procedures [selection and award] are nevertheless distinct and are governed by different rules[27].

The public authority must therefore first assess the **eligibility of tenderer(s)** and to check their suitability. The eligibility test includes assessment of whether or not any candidate or tenderer has been involved in a criminal organization, corruption, financial fraud, or money laundering, and whether or not they are registered or authorized to pursue a professional activity when it is a legal requirement. In case a candidate does not pass this test, they are excluded from the public procurement procedure. The purpose of the suitability test is to produce a list of candidates that have the capability to perform a contract. Suitability of candidates or tenderers are

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[21] Article 36 of Directive 2004/18/EC
[22] Article 35 of Directive 2004/18/EC
[23] Ibid.
[24] Art. 44, Directive 2004/18
[25] Art. 44(4), Directive 2004/18.
[26] Articles 44 to 53 and Articles 28 to 32 of Directive 2004/18/EC
[27] Case C-532/06 *Lianakis and others* [2008] ECR I-251, paragraph 26

checked on the basis of their economic and financial standing and professional and technical knowledge.

In "restricted", "negotiated" (with a prior contract notice) and "competitive dialogue" procedures (discussed further later), after the suitability of candidates are assessed by the contracting authorities, they are only then invited to submit a formal tender. By contrast, if the contracting authority is awarding a public contract by applying an "open" procedure, after the suitability assessment, it will go directly to examining the tenders of the eligible tenderers and the contract award stage.

When awarding a contract, the contracting authority must select the tender which offers either (a) the lowest price or (b) is the "most economically advantageous" to the public authority.

No less important in the public procurement process are the **specifications of the energy service** to be procured. These specifications must be established in general and non-discriminatory terms to provide measurable requirements against which tenders can be evaluated[28]. This can sometimes be a challenge for ESCO contracts but, as discussed later, is a matter of designing appropriate award criteria. Directive 2004/18/EC explicitly allows contracting authorities to choose between specifications based on **technical, performance, or functional requirements**[29].

Performance or functional specifications can potentially allow more scope for market creativity and in some cases can challenge the market into developing innovative technical energy solutions. Performance or functional specifications may therefore, be suitable for procuring ESCOs services. The Directive also stipulates that performance or functional specifications may include environmental characteristics (whereas some technical standards include clauses covering environmental characteristics of products or services), provided they are sufficiently precise[30]. This is not to say that technical as well as performance or functional specification cannot both be used as award evaluation criteria. Contracting authorities may use technical requirements for certain characteristics and the performance or functional requirements for other characteristics for the same contract[31]. Such variation in criteria characteristics may in particular, be relevant for procuring ESCOs services.

Care should be taken when establishing detailed specifications for an ESCO contract. Brand-specific terms or reference to materials or goods of specific origin, or to a particular process or means of production, may only be used exceptionally (where justified by the subject-matter of the contract, or if the subject-matter of the contract cannot otherwise be described to all economic operators in sufficiently precise and intelligible terms) and with the words 'or equivalent'[32]. The use of industry technical standards often have a clear advantage as such technical standards are generally clear, non-discriminatory and developed on a consensus basis.

[28] Article 23 of Directive 2004/18/EC
[29] Article 23 of Directive 2004/18/EC
[30] Article 23 (3) (a) of Directive 2004/18/EC
[31] Article 23 (3) (d) of Directive 2004/18/EC
[32] Article 23(8) of Directive 2004/18/EC

2.4 Pubic Contract Award Procedures for ESCo services

A public contract award procedure describes the entire tendering process from publication of the contract notice in the Official Journal of the EU to the award of the contract, and is not confined only to the process of tender evaluation. In awarding public contracts, public authorities must in general follow one of four types of contract award procedures specified in Directive 2004/18/EC (the procedure chosen must also be identified in the contract notice). Public authorities have a free choice between the open and restricted procedures but the other two procedures – negotiated and competitive dialogue – can be used only in circumstances defined in the Directive.[33]

There is no preference for the use of either the open or restricted procedures – a public authority is free to use either, although some EU Member States may give preference to using the open procedure first.

2.4.1 Open Procedure

In the open procedure, any ESCO interested in the contract may submit a tender to the public authority[34]. The open procedure, although the most simple, can be expensive for both tenderers and contracting authorities. For tenderers it takes time to prepare the tender, although a chance of winning the contract is uncertain, whereas the contracting authority loses control over the number and quality of tenders. The open procedure might, for example, be used for the purchase from an ESCO of specific equipment (e.g. replacement boiler) and its installation. For tenders where the technology to be used is not clear, one of the other procedures would likely be more appropriate.

2.4.2 Restricted Procedure

The feature that distinguishes the restricted procedure from the open procedure, is that the restricted procedure has a pre-qualification stage, whereby only those ESCOs who requested to participate in a public procurement procedure and are selected by a contracting authority, are invited to submit a tender[35].

The restricted procedure can often be more advantageous for both tenderers and contracting authorities. Once invited to submit a tender, the tenderer knows that he has an ascertainable chance of winning, and so may be encouraged to submit a carefully prepared tender. At the same time, the contracting authority is not (potentially) overwhelmed with a large number of tenders. However, neither the open nor restricted procedure do not necessarily provide much room for innovative ideas and developments. Where there are a number of energy saving technologies available, or complex tenders are likely to be submitted, these procedures may not be the most useful for contracting ESCO services.

[33] Article 28 of Directive 2004/18/EC
[34] Article 1 (11) (a) of Directive 2004/18/EC
[35] Article 1 (11) (b) of Directive 2004/18/EC

If calling for tenders for energy performance or "energy savings" contracts, the public authority may not be able to have a good idea of what technical, financial and legal solutions ESCOs can offer, or define in advance the financial and legal make-up of the energy performance project. Further, an Energy Efficiency Service contract that involves an energy savings guarantee, because the exact amount of the saving is unpredictable from year to year, often cannot be based on a fix sum. In such cases a negotiated procedure or competitive dialogue procedure may be more appropriate. However, if overall pricing is possible, then a restricted procedure (or open procedure) could be used rather than using the negotiated procedure or competitive dialogue.

The competitive dialogue or negotiated procedures may be the most relevant for procuring many Energy services as these procedures likely will provide more flexibility in communication and negotiation between the contracting authority and the ESCO. However, these procedures can only be employed if the circumstances allowing their use are justified and the criteria applicable to their use are satisfied.

2.4.3 Negotiated Procedure

The negotiated procedure is a procedure whereby the public authority consults the ESCOs of its choice and negotiates the terms of contract with one or more of those[36]. If the negotiated procedure is chosen and justified, the contracting authority negotiates with ESCOs the tenders submitted by them in order to adapt them to the requirements which the contracting authority sets out in the contract notice, the specifications and additional documents[37]. In the negotiated procedure the ESCO makes their offers of energy costs savings guarantees but can then negotiate some criteria in the framework of the negotiation stage with the public authority.

In the negotiated procedure ESCOs are in principle free to further discuss essential aspects of an Energy Efficiency Service contract (e.g., energy savings, performance measures, allocation of financial and legal risks) after submitting their tender. This is not the case, however, under a competitive dialogue procedure. In the competitive dialogue procedure, any post-tender discussions can take place only at the request of the contracting authority and must be limited to a clarification and fine-tuning of the tender without changes to the basic features of the tender that may distort competition or have a discriminatory effect.[38]

The cases where recourse to a negotiated procedure is justified fall into two categories: those where a contract notice must be published (Article 30 of Directive 2004/18/EC) and those where a contract notice need not be published (Article 31 of Directive 2004/18/EC). The below explains only the negotiated procedure with a prior contract notice. Since it seems likely that only in limited circumstances an Energy Efficiency Service contract might justify using the negotiated procedure <u>without</u> a prior notice, the following deals only with the circumstances where a prior contract notice is required.

[36] Article 1 (11) d of Directive 2004/18/EC
[37] Article 30 (2) of Directive 2004/18/EC
[38] Article 29 (6) of Directive 2004/18/EC

From the circumstances specified in EU Directive 2004/18/EC the following two justifications for using the negotiated procedure are probably the most relevant for ESCOs services, namely:

- **overall pricing is not possible**, that is, where the "nature of the works, supply, or services or the risks attaching thereto do not permit **prior overall pricing**"[39]; and
- in the case of services, inter alia services within category 6 of Annex II A (Financial Services) of Directive 2004/18/EC, and intellectual services such as services involving the design of works, the nature of the services to be provided is such that contract specifications cannot be established with sufficient precision[40].

Services falling within category 6 of Annex II A of the Directive are financial services (i.e., insurance services and banking and investment services with exception of financial services in connection with the issue, sale, purchase or transfer of securities or other financial instruments, and central bank services). This can be relevant when a financial services company is providing finance for an ESCO contract (e.g. bank finance for a boiler).

An ESCO contract may typically involve a guarantee of energy cost saving by a certain percentage, but the actual energy cost saving in any period cannot be determined exactly, and so does not permit overall pricing. Further, the very wide range of potentially different technologies and financing arrangements that may be available from different ESCos make it impossible to establish precise contract specifications, particularly if a proper energy audit and baseline have not been established prior to call for tenders. For these reasons, the negotiated procedure is often used in procurement of energy savings contracts with ESCOs.

2.4.4 Competitive Dialogue

The competitive dialogue procedure can be employed by public authorities in the case of "**particularly complex contracts**". This is where the public authorities are not objectively able to define the technical means capable of satisfying the needs of the project and/or are not objectively able to specify the legal and/or financial make-up of the project[41].

If the competitive dialogue procedure is chosen and justified, the public authority opens a dialogue with the pre-selected ESCOs, the aim of which is to identify and define the means (solutions) best suited to satisfy the authority's needs, and on the basis of which the candidate ESCOs are invited to tender. In effect, the bidders are using their expertise to develop a value-for-money solution for the authority. The public authority may discuss all aspects of the contract with the chosen ESCOs during the procedure, but must ensure that it does not reveal to the other candidates solutions proposed or other confidential information communicated, to the authority

[39] Article 30 (1) (b) of Directive 2004/18/EC
[40] Article 30 (1) (c) of Directive 2004/18/EC
[41] Article 1(11) (c) of Directive 2004/18/EC

during the dialogue[42]. Of course, if the candidate agrees to disclosure of confidential information, this can be done.

In a competitive dialogue procedure post-tender discussions can take place only at the request of the contracting authority and must be limited to a clarification and fine-tuning of the tender without changes to the basic features of the tender that may distort competition or have a discriminatory effect.[43] It is sensible therefore for ESCOs in the competitive dialogue procedure to prepare their tenders as completely as possible.

The practical difference between the competitive dialogue and the negotiated procedure is the point in time of discussions between selected ESCOs and contracting authorities, and the rules on post tender-discussions. In the negotiated procedure, the contracting authority engages in negotiations with ESCOs after the tenders are submitted and pre-selected by the authority. In the competitive dialogue procedure, the interaction between the contracting authority and ESCO takes place at a much earlier stage of the procurement, i.e. before the actual and final tender is submitted by an ESCO. Following expression of interest to take part in the energy service contract, the contracting authority invites for dialogue the short listed ESCOs to set out their ideas and solutions for the contract. Only when the contracting authority is in a position to identify the solution or solutions for the Energy Efficiency Service contract, are ESCOs asked to submit their final tenders on the basis of the solutions discussed and presented during the dialogue with the authority.

It might be noted that in different EU Member States one or other of either the negotiated procedure or the competitive dialogue procedure tends to predominate when public authorities tender for ESCO contracts.

2.5 ESCo Selection Criteria (Company Based)

As already indicated above, in effect, although they may occur simultaneously, where the number of suitable candidates to tender is limited, the award of a tender is split into (a) verifying the tenderers who have the required capabilities satisfying the "selection criteria", and (b) the "award criteria" of either the lowest price or the most economically advantageous tender (such as quality, price, technical merit, functional characteristics, cost-effectiveness, etc.)

Selection criteria are linked to an ESCO's ability to perform the contract for which it is tendering. At this stage of the procurement procedure, the public authority should produce a short-list of potential ESCOs who are capable of performing the contract (and thus, eliminate unsuitable ones) and invite them to submit a tender. The selection criteria the public authority intends to apply and the minimum number (or where appropriate, maximum number) of candidates it intends to invite to tender, must be identified in the contract notice[44].

The suitability of ESCOs (not excluded from the public procurement procedure, for example, because they have not paid compulsory social security contributions) is to

[42] Article 29 (3) of the Directive 2004/18/EC
[43] Article 29 (6) of Directive 2004/18/EC
[44] Article 44(3) of Directive 2004/18/EC

be checked only in accordance with the criteria of economic and financial standing and of technical capability (the 'qualitative selection criteria') referred to in Articles 47 to 52 of the EU Directive[45]. As the Court of Justice has emphasized, "*the purpose of these articles is not to delimit the power of the Member States to fix the level of financial and economic standing and technical knowledge required in order to take part in procedures for the award […] but to determine the references or evidence which may be furnished in order to establish the contractor' s financial and economic standing and technical knowledge or ability*[46].

Article 45 of Directive 2004/18/EC provides an exhaustive list of the cases where the personal situation of the candidate for the energy service contract can lead to exclusion from the tendering procedure. In most cases it is up to the contracting authority to exclude the tenderer on the grounds prescribed in the EU Procurement Directive, except where the tenderer has been involved in some particular criminal conduct such as corruption or money laundering. To ensure that tenderers have not been involved in such cases, the contracting authority may require ESCOs to produce an extract from the judicial record or an equivalent document[47].

In addition, the contracting authority may require ESCOs to prove that they possess the **necessary authorization or membership of a professional organization** in order to perform the contract in their EU Member State of establishment[48]. To require an ESCO established in another Member State to possess a particular authorization in the public authority's Member State would not only infringe Directive 2004/18/EC, but would also amount to discrimination and a serious infringement of the EU Treaty's requirements of freedom to provide services or establishment[49].

To assess the **economic and financial standing** of the tenderer, the public authority may require the ESCO to provide statements from bank, balance-sheets or a statement of turnover, and must specify in the contract notice (or in the invitation to tender) which of these to provide[50]. However, as the EU Court has held, the list of those means to prove the economic and financial standing is not exhaustive, and therefore, for example, the total value of the works awarded to a contractor at a particular moment may be used in determining the financial and economic standing of a contractor in relation to his obligations[51].

The **technical capacity** to be met in the performance of the contract, depends on the nature, quantity or importance, and use of the contract. In assessing the technical capacity of the ESCO to perform the contract, the contracting authority may require, as an example, a list of the works carried out, principal deliveries or the

[45] Article 44(1) of Directive 2004/18/EC
[46] Case C-31/87 *Beentjes / Netherlands State* [1988] ECR 4635, paragraph 17
[47] Article 45(3) of Directive 2004/18/EC
[48] Article 46 of Directive 2004/18/EC
[49] For example, in Case 76/81 *Transporoute / Ministère des travaux publics* [1982] ECR 417, the Court of Justice held that the contracting authority breached a fundamental principle of free movement of services by requiring the contractor to possess an establishment permit in that contracting authority's state.
[50] Article 47 of Directive 2004/18/EC
[51] Cases C-27, 28, 29/86 *CEI / Association intercommunale pour les autoroutes des Ardennes* [1987] ECR 3347, paragraphs 10, 11, 18

main services provided, or a description of the technical facilities, study and research facilities, the educational and professional qualifications of the ESCOs, office holders and employees, etc[52]. If the object of the ESCO contract is energy supplies requiring sitting or installation work, for example, the ability of the ESCO to execute that installation may be evaluated on the basis of skills, efficiency, experience, and reliability[53]. It should also be noted that environmental technical capacity could be particularly relevant when procuring ESCOs services.

If more than the maximum number of qualified tenderers have the required capabilities satisfying the selection criteria, the public authority can apply the award criteria stated in the contract notice (or specifications or descriptive document) to limit the number of suitable candidates or tenderers.[54]

2.6 Contract Award Criteria (Project Based)

Under Directive 2004/18/EC, public authorities in general must award the contract on the basis of either the lowest price or the most economically advantageous offer from the point of view of the contracting authority (the chosen award criteria must be specified in the contract notice)[55]. If the award criterion of the lowest price is chosen, then only the price provided by ESCO tenderers are taken into consideration and the contract must be awarded to the ESCO bidding the lowest price. For this reason, the award criterion based solely on the price is difficult to apply for many Energy Efficiency Service contracts which must be assessed on multi-criteria considerations (e.g., energy cost savings potential, reduction of energy consumption, period of contract, etc.). The most economically advantageous ESCO would often be chosen using the so-called life-cycle costing (all the cost that will be incurred during the lifetime of the ESCO's service). For example, the costs of energy can be used as one award criteria for determining the most economically advantageous tender.

The most economically advantageous offer typically includes a combination of factors (which must be linked to the subject-matter of the contract) chosen by the public authority. For example, this could include quality, price, technical merit, aesthetic and functional characteristics, environmental characteristics, running costs, cost-effectiveness, after-sales service and technical assistance, delivery date and delivery period or period of completion[56]. This list is not exhaustive, but serves as a guideline for contracting authorities in the weighted evaluation process of the contract award.

As the most economically advantageous offer is determined by a number of criteria, the public authority is obliged to specify in the contract notice or in the contract documents (and in the case of competitive dialogue procedure, in the descriptive document), the relative weighting which it gives to each of the criteria chosen. This must be done in sufficient time for ESCOs to be aware of those criteria when pre-

[52] Article 48 of Directive 2004/18/EC
[53] Article 48 (5) of Directive 2004/18/EC
[54] Article 44 (4) Directive 2004/18
[55] Article 53 of directive 2004/18/EC
[56] Article 53(1) (a) of Directive 2004/18/EC

paring their tenders[57]. In most cases, the weighting can be expressed by providing for a range within an appropriate maximum spread. However, where, in the opinion of the contracting authority, weighting is not possible for demonstrable reasons (e.g., a complex contract), it should indicate those criteria in descending order of importance.

Environmental award criteria (e.g., environmentally friendly technologies) could very well play a role when choosing the most economically advantageous tender submitted by an ESCO. Directive 2004/18/EC allows environmental considerations to be included in award criteria provided four conditions are met:

1. environmental award criteria are linked to the subject-matter of the contract;
2. environmental award criteria do not confer an unrestricted freedom of choice on the authority, i.e. award criteria must be specific and objectively quantifiable;
3. are expressly mentioned in the contract documents or the tender notice; and
4. environmental award criteria comply with all the fundamental principles of EU law, in particular the principle of non-discrimination[58].

Environmental award criteria can be of qualitative (e.g., emission level) or economical nature (e.g., energy consumption)[59].

Some practical examples of how environmental considerations should be or should not be integrated in the contract award criteria can be found in the case law of the European Court of Justice. In the *Concordia Bus* case, the Court of Justice considered that award criteria relating to the level of nitrogen oxide emissions and the noise level for buses, to be used to provide the public transport service, did meet the requirement of being linked to the subject matter of the contract.[60] In the same case, the Court also considered a system for awarding extra points for certain levels of noise and emissions to be adequately specific and measurable, and thus not conferring an unrestricted freedom of choice on the contracting authority.[61]

The *Concordia Bus* case can be contrasted to the *Wienstrom* case[62], in which the European Court of Justice did not find the environmental award criterion to be linked to the subject matter of the contract nor that criterion to be specific and measurable. In the *Wienstrom* case, the Court recognized the possibility of an award criterion related to the amount of electricity stemming from renewable energy sources as part of the electricity effectively supplied to the public authority. Further, it has also stated that a weighting of 45% attributed to this criterion would not prevent the contracting authority from making the necessary evaluation of the award criteria in order to identify the economically most advantageous offer. However, the Court stated that an award criterion relating solely to the amount of electricity produced from renewable energy sources in <u>*excess*</u> of the expected annual

[57] Article 53(2) of Directive 2004/18/EC
[58] C-513/99 *Concordia Bus Findland* [2001] ECR I-07213, paragraph 64
[59] http://ec.europa.eu/environment/gpp/faq_en.htm
[60] *Concordia Bus Findland,* paragraph 65
[61] *Concordia Bus Finland* paragraphs 23 and 66. Extra points were awarded among other things, for " the use of buses with nitrogen oxide emissions below 4 g/kWh (+2.5 points/bus) or below 2 g/kWh (+3.5 points/bus) and with external noise levels below 77 dB (+1 point/bus)".
[62] Case C-448/01 *EVN and Wienstrom* [2003] ECR I-14527

consumption by the contracting authority cannot be related to the subject matter of the contract (i.e., the supply of an amount of electricity to the contracting authority corresponding to its expected annual consumption) as it is related to the amount of electricity that tenderers have supplied, or will supply, to other customers.[63] It had no relationship to the amount of renewable or "green" electricity to be supplied to the public authority itself.

At the same time, the EU Court ruled in the *Wienstrom* case that an award criterion which is not accompanied by requirements which permit the information provided by the tenderers to be effectively verified by the public authority (i.e., no technical ability to verify whether electricity supplied has actually been generated from renewable energy sources nor any requirement to supply proof of actual supply obligations or existing electricity supply contracts), then such a criterion does not ensure the transparency and objectivity of the tender procedure[64].

Environmental considerations can also be stipulated in contract performance clauses, provided they are:

1. compatible with EU law (i.e., are not directly or indirectly discriminatory by favouring ESCOs from a particular Member State) and
2. are indicated in the contract notice or in the specifications so that tenderers could reflect their compliance with these provisions in the price of their bids.[65]

The clauses may, for example, include the method of transport for supply and work contracts, requiring the product to be delivered in bulk delivery, or requiring that the supplier takes back (and recycles or reuses) any packaging, etc. However, in drafting the contract performance clauses the public authority must ensure they are not disguised technical specifications, selection or award criteria that are discriminatory. In other words, contract clauses (as distinct from selection criteria or award criteria) should not play a role in determining which tenderer is awarded the contract. If contract clauses are not complied with, their breach is a basis for a claim of breach of contract but would not be a basis for rejecting a tender since they are not part of the award criteria. Of course, they could be made part of the award criteria in appropriate circumstances. For example, the contracting authority would normally not use contract clauses to require a particular production process for supplies (e.g. photovoltaic production for supply of electricity), since these are conditions that normally relate to the selection of the contractor.

2.7 Legal Challenge Opportunities for an Unsuccessful ESCO Tenderer

If a public authority fails to comply with Directive 2004/18/EC, there are now more effective means to prevent signature of the contract and to challenge the award of the contract. The EU Public Procurement Remedies Directive 2007/66/EC sets out legal remedies available for an unsuccessful tenderer wishing to challenge the

[63] *EVN and Wienstrom*, paragraphs 67-68
[64] *EVN and Wienstrom* 44, 50-52
[65] Article 26 of Directive 2004/18/EC

award of a public contract in the EU Member States. It effectively prevents public authorities from proceeding immediately with the illegal (direct) awarding of contracts[66].

The EU Remedies Directive ensures both (a) a pre-contractual remedy seeking primarily to correct, in time, infringements of EU law on public procurement, and (b) post-contractual remedies which are not limited to mere damages, but may go as far as declaring a contract ineffective or penalizing public authorities.

The EU Remedies Directive 2007/66/EC requires public authorities to wait at least ten calendar days after the notification of the decision to award the contract (fifteen days if the notice is not faxed or sent electronically). This is known as a 'standstill period', before concluding a public contract[67]. This gives rejected ESCOs the opportunity to examine the contract award decision and to assess whether it is appropriate to initiate a review procedure of the award at a time when unfair decisions can still be corrected. When the award decision is notified to the tenderers, the public authorities are required to give them a "summary of the relevant reasons" for the rejection of the tender. Such a mechanism is regarded as essential to seek effective review of the tender process. In case an ESCO lodges an application for review of a contract award decision, this results in an automatic suspension of the possibility to conclude a contract (the suspension of the contract award cannot end earlier then the standstill period) [68]. Directive 2007/66/EC requires EU Member States to provide in national law for interim measures that can be taken during review procedures "at the earliest possibility and by way of interlocutory procedures"[69]. This means an ESCO that has been unsuccessful with its tender, has ten calendar days to seek an injunction or similar court order suspending or preventing signature of the ESCO contract.

The interim measures granted by a national body reviewing the award decision include measures suspending the contract award procedure, or suspending the implementation of any decisions taken by the public authority in order to correct the alleged infringement or prevent further damage. The review body can then take the following decisions:

1. to dismiss the application;
2. set aside a contract signed unlawfully, including the removal of discriminatory technical, economic or financial specifications in the invitation to tender or the contract documents (in this case the contract award should be re-tendered); and
3. award damages to persons harmed by an infringement[70].

One of the most powerful remedies available in the case of illegal award of the contract provided for in the Directive, is that national courts, under certain conditions,

[66] Directive 2007/66/EC of the European Parliament and of the Council of 11 December 2007 amending Council Directives 89/665/EEC and 92/13/EEC with regard to improving the effectiveness of review procedures concerning the award of public contracts
[67] Article 2a of Directive 2007/66/EC
[68] Article 1(5) of Directive 2007/66/EC
[69] Article 2 of Directive 2007/66/EC
[70] Article 1(a), (b), (c) of Directive 2007/66/EC

are able to render the contract "ineffective" in accordance with national law[71]. The national law of each of the 27 EU Member States determines the consequences of an ineffective contract. National law determines whether all contractual obligations can be declared ineffective or whether only those obligations which still remain to be performed, are ineffective. The ineffectiveness of a contract is automatic when the contract is awarded without prior publication in the EU Official Journal (direct awards) or is concluded in breach of a standstill period or suspension period, unless there are overriding reasons of general interest (not economic reasons) for maintaining the contract in effect. In such a case, national courts are empowered to impose the so-called "alternative penalties" that include an imposition of a fine on the public authority or the shortening of the duration of the contract (damages are not considered to be an alternative penalty) [72].

It should be noted that the Remedies Directive not only benefits unsuccessful ESCOs in providing mechanism for redress, but it also has important repercussions on a successful ESCO in case his tender is selected and awarded the contract. First and foremost, it is in the interest of the successful ESCO to ensure that the contract is properly tendered and awarded to avoid a finding of ineffectiveness and/or other remedies such as the shortening of the duration of the contract. Second, the successful ESCO should ensure that the ten (or fifteen) day standstill period between notification to unsuccessful tenderers is respected, before the ESCO signs the final contract. If not, the contract could very well be declared "ineffective".

[71] Article 2d of Directive 2007/66/EC
[72] Article 2d (2) of Directive 2007/66/EC

3 Negotiated Procedure Step by Step

3.1 Introduction and Goals

Complex energy services (like EPC and similar models) are mostly tendered in a negotiated procedure in Austria and other European countries (e.g. Germany, Czech Republic), being the favourite method to procure ES – like described in chapter 3.4.4.

In this chapter it will be described, how the decision to perform the negotiated procedure has to be fortified (see 0, Figure 3), including all steps in the tender preparation phase, which steps have to be respected during tender procedure and how the criteria for awarding can be set to provide an optimized result for a successful project.

As a result the procedure for procurement of complex energy services in conformity with the law is described for the negotiated procedure, serving as a guideline for energy service purchasers.

3.1.1 Overview: (Negotiated) Procedure Flow Chart

The following figure gives a step-by-step overview of the negotiated procedure. The steps are outlined by the main tasks carried out by the client and his project facilitator/consultant (tasks coloured in blue) and by the ESCo (tasks coloured in red). There is an indication of the period of time on the left side, which should be foreseen for each step.

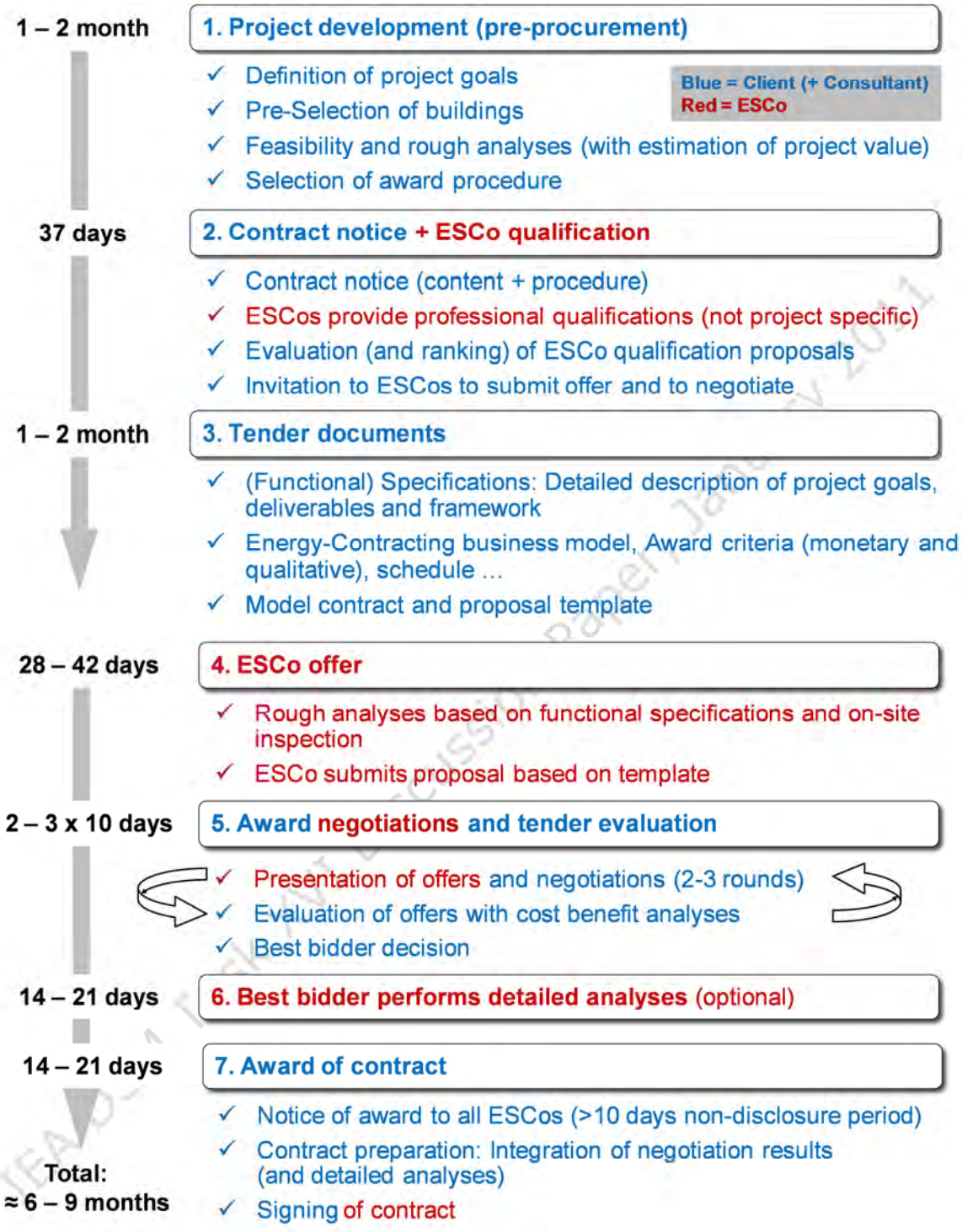

Figure 1 - Overview (negotiated) procedure flow chart

3.2 Project Development (Pre-Procurement)

3.2.1 Definition of project goals

In general the project initiator/facility owner has to define the project goals and check the initial situation with regard to type of building(s) or facility(s), necessities and priorities of energy efficiency/refurbishment measures, financing options, time schedule, legal framework etc. He can gain support from a professional project facilitator (also named energy consultant). A functioning energy management to get registered energy consumption and costs is one of the most important prerequisites for a successful project preparation and development.

Project goals, which could be defined:

- Reduction of energy consumption, energy costs, green house gases, air or water pollution
- Efficient and/or renewable energy supply, innovative and sustainable energy supply technologies
- Energy efficiency of energy (building) technologies, energy distribution systems, building envelope
- Building/facility refurbishment or renewal
- Cost efficiency of operation & maintenance

Framework conditions:

- Time schedule of procurement procedure and project duration
- Definition of performance borders and interfaces
- Check of financing possibilities, pre-selection of financing options
- Check of legal framework
- ...

3.2.2 Pre-Selection of buildings

First step is the inspection of data availability and the selection of suitable buildings and facilities for the EES-project. The owner selects one or some of his buildings/facilities and regroups them into a pool (pool of public office/service buildings, of multifamily houses, of facilities). Again he can gain support from a professional project facilitator to get an optimal selection. A heterogeneous composition of pools in terms of different saving potentials, structure, equipment, refurbishment needs etc. reduces calculation risks and allows less attractive buildings/facilities to benefit from modernization measures, as well. On the basis of energy specific data buildings/facilities can be selected and the pool can be composed.

A helpful tool can be the "Calculation Tool for Estimation and Visualization of Monetary Saving Potentials" aiming at a rough calculation and a graphical visualization of monetary energy saving potentials as well as the opportunity costs, which occurs if

no energy saving measures are taken. There are only a few input data necessary for a first rough calculation on the basis of estimated saving potentials. The results are graphical shown in some diagrams and additional summarized with some explanations at the input data sheet:

- Visualization of the development of the energy costs at present state without the realization of saving measures (calculated with the average yearly cost increase factors);
- Accumulated energy savings potentials at cost categories between minimum and maximum margins as well as an average value, over the planning term – also called opportunity costs; and
- Comparison of the energy cost development without a realization of saving measures and with the realization of minimum and maximum saving potentials; the net present values of the minimum and maximum potentials over the planning term are also shown in this diagram.

3.2.3 Feasibility and rough analyses

Thus the basic element of the project development process is a rough technical commercial feasibility analyses for each building/facility of the pool, executed by the project facilitator with support of the owner. The results of this audit indicate the technical scope of the energy efficiency measures, the scope of the reduction on energy consumption and cost, the scope of total costs and an amortization comparison with the business as usual. This feasibility analyses aims at the **owner's final decision for the project** and is the starting point for the preliminary planning.

This feasibility and rough analyses includes:

1. Comparison of business as usual with some possible modernization/efficiency concepts. The initial data of the buildings/facilities and the commercial calculation parameter (project duration, interest rates, price increase factors ...) are defined by the owner with the support of the project facilitator.
2. The inspection of possible cost and energy efficiency potentials (with benchmarks or energy efficiency indicators) and the scope of necessary measures and costs provide an on-site energy audit based on checklists.
3. The commercial feasibility analyses calculates the total costs including capital, operation & maintenance, consumption and other costs on basis of a standardised calculation method according to ÖN 7140. Price indications and estimated costs provide the input data.

3.2.4 Preliminary planning (with estimation of project value)

The preliminary planning deals with the development of the energy efficiency service model. An Energy Service Company (ESCO) is able to implement a customized Energy Efficiency Service (EES) package, consisting of project development, planning, building, operation & maintenance, optimisation, fuel/power purchase, (co-)financing, user motivation and quality assurance. The contract between ESCO

and building/facility owner contains guarantees for energy/cost savings and shifts commercial and technical risks of implementation and operation for the entire project duration to the ESCO.

The project facilitator in cooperation with the building/facility owner elaborates the EES-model, including:

- Energy and cost baseline calculation
- Guarantee and risk definition
- Determination of project goals
- Definition of scope of modernization and efficiency measures
- Selection of EES-modules provided by ESCO and definition of interfaces
- Revision and definition of framework conditions: time schedule of procurement procedure, project duration, pre-selection of financing options, legal framework
- ...

Energy Efficiency Services are often not separable, because of interdependence (integrated service). That means, there is no separation in different contracts possible (construction, service or supply contract). To determine the main deliverable of the whole package, all estimated payments of the deliverables must be summarized over the project lifetime. The deliverable with the highest amount indicates the type of the contract. The next figure shows a project example:

Deliverables	**Payments**	**Project total** (over 15 years)
Construction works: e.g. HVAC, equipment, insulation	total investments 2-3 million	2-3 million
Service: e.g. concept, optimization, o&m	concept/opt. 150,000 o&m 20,000/a	0.45 million
Supply: e.g. heat, electricity	heat 700,000/a electricity 300,000/a	15.0 million

⇨ **Main deliverable: Supply with project total of 15 mill.**
=> Supply contract

Figure 2 - Example to determine main deliverable of project

3.2.5 Selection of procurement procedure

In any case after the preliminary planning (0.) of the Energy-Efficiency-Service-project the selection of the suitable procurement procedure is necessary. For an easier selection the flowchart below can be used by the client and his consultant as a guide.

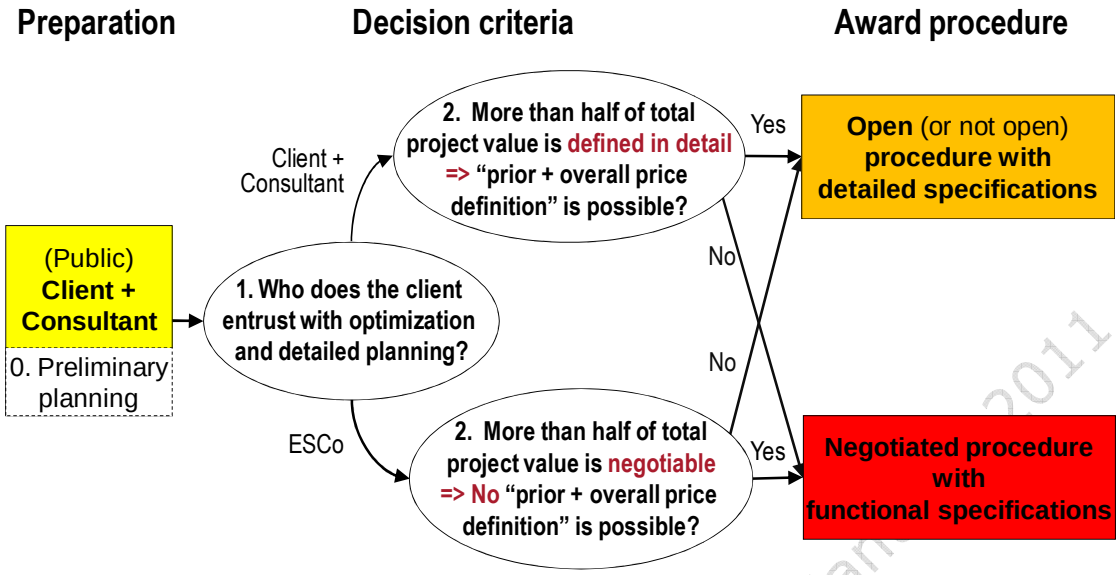

Figure 3 - Award procedure decision flow chart

At first the client has to decide (1.) who he would like to entrust with the optimization and detailed planning of the project. If he decides, that an ESCO with its experience in Energy Efficiency Services should do this, than he has to decide (2.) if more than half of the total project value is negotiable, for the calculation formula please refer to chapter 3.2.7. If the client finds out that, more than the half of the total project value is negotiable and so no overall price definition possible, so the preconditions of the negotiated procedure with functional specifications are met.

If the client decides to do the optimization and detailed planning with his consultant (1.), he is also faced by the question (2.) if more than the half of the total project value is defined in detail or is negotiable. If this question is answered by defined in detail and an overall price definition possible, only the open (or not open) procedure with detailed specifications is possible. Otherwise the client has to choose the negotiated procedure.

3.2.6 Prerequisites for Applying Negotiated Procedure

A remark with regard to prerequisites for the applicability of negotiated procurement procedures is appropriate here. In Austria, for example, the procurement law states that the execution of a negotiated procedure is the exception and not the rule. This exception is subject to prerequisites defined in the Austrian public procurement laws. For Energy Efficiency Services the following prerequisites have to be fulfilled: "A prior and overall pricing is not possible, because of the nature or because of the risks associated with the delivery of the services."[73]

This translates into procurement practice as follows:

1. The bidder must be allowed sufficient freedom of scope in formulating his proposal (e.g. selection of Energy Efficiency-measures to be implemented). "Sufficient freedom of scope" requires that a minimum of 50 % of the project cost

[73] BVergG 2006 § 30 (2) Austrian public procurement law (translation by authors)

must be subject to negotiations. Project costs are calculated on the basis of preliminary planning (For formula see chapter 3.2.7).

2. In order to provide sufficient freedom of scope, the tender documents must be formulated predominately as functional specifications (as opposed to detailed technical specifications). The project must be defined predominately by technical, financial, organizational, legal and economic performance requirements and framework conditions for the implementation of the measures, with hardly any fixed solutions or detailed specifications.
3. The negotiated procurement procedure must actually allow negotiations both for the bidder and the contracting authority of the measures implemented and the contract.

For example in Austria and Germany, if these requirements cannot be met, public authorities are required to procure the project with an open or restricted procedure.

3.2.7 Calculating the value of negotiable measures

In order to calculate the value of the measures that allow for negotiations, the value of the building construction and other measures described in detail must be subtracted from the total project value (over the duration of the project). This is done using the following formula:

Net payments to contractor:	**Detailed spec. deliverables: e.g.**
+ ∑ Contracting rates (over project term, excl. interest)	+ Demolition work
+ Co-financing by building owner	+ Building and roof construction
+ Third party financing by finance institute (excl. interest)	+ Doors and windows
+ Subsidies	+ Thermal and acoustic insulation
	+ Plastering and painting
	+ ... other detailed specifications
∑ Total project value	**– ∑ Detailed specifications**

= ∑ Negotiable measures
(described with functional specifications)

Figure 4 – Calculation formula for value of negotiable measures

In Austria, the total cost of works and services tendered with functional specifications must account for more than half of the total project value, to meet the legal requirements for a negotiated tendering procedure. The calculation is done on the basis of the preliminary planning results.

3.3 Contract Notice

Public Sector procurements that fall within the scope of the EU regulations require that the intention to contract is advertised in the Official Journal of the European

Union (OJEU). Standard forms of OJEU are mandatory to use and are available at the EU Commission's website http://simap.europa.eu.

If the thresholds of the EU regulations are not met and an EU wide publication is not necessary, the publication of the contract notice on national level within an appropriate medium is required, in Austria e.g. via the website http://www.lieferanzeiger.at of the "Wiener Zeitung".

The contract notice must include the following main topics:

- Contact details of the contracting authority.
- The award procedure chosen (negotiated procedure) and the reasons for use of this procedure.
- Content of the contract: e.g. Energy Performance Contract or Energy Supply Contract.
- Public works/supply/service contract, according to the estimation of main project deliverable in chapter 0.
- If the contracts are subdivided into lots and indication of the possibility of tendering for one, for several or for all the lots.
- Approximate duration of the contract.
- Contact details from which tender documents can be requested, with the time limit for submission of such requests and cost obtaining these documents.
- Time schedule of the procurement procedure. Especially the time limit for receipt of request to participate and the language in which they must be drawn up.
- Criteria to be used for award of the contract: 'lowest price' or 'most economically advantageous tender'. Criteria representing the most economically advantageous tender as well as their weighting shall be mentioned in the additional tender documents.

The complete list can be seen in the annex VII A of the EU-directive on public procurement[74].

3.4 ESCO Qualification

The contract notice can include an ESCO qualification stage to limit the number of bidders. It is recommended to limit to e.g. 5 to 8 bidders for avoiding too high procurement efforts. The period for the ESCO's applications should not be less than 37 days after the publication of the contract notice. The definition of the selection and evaluation criteria should be done by the building/facility owner in cooperation with his project facilitator.

The contract notice must include additionally, if appropriate, according to Article 44 (4) EU Directive 18/2004:

[74] Reference to directive 2004/18/EC on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts

- Selection criteria regarding the personal situation of ESCOs that may lead to their exclusion, and required information proving that they do not fall within the cases justifying exclusion. Selection criteria and information concerning the ESCOs personal situation, information and any necessary formalities for assessment of the minimum economic and technical standards required of the ESCOs. Minimum level(s) of standards possibly required.
- Indicate the recourse to a staged procedure in order gradually to reduce the number of ESCOs.
- Indicate the option of reducing the number of ESCOs to be invited to submit tenders, minimum and maximum number and objective criteria to be used to choose that number of ESCOs.

3.4.1 Selection Criteria

ESCOs have to prove its professional qualification (not project specific) by criteria, which questions the ESCO's authorisation, reliability and professional capability to execute the announced contract. The criteria are knockout criteria, which define minimum requirements. If ESCOs don't meet these criteria, they are excluded from the tendering process, which is different to other criteria like for evaluating or awarding. Criteria to select capable ESCOs

- Are not discriminating minimum requirements on bidders (ESCOs),
- Must be strictly related to the bidder (ESCO) and not to the project,
- Can only be achieved or not, and
- Cannot used twice as criteria for evaluating or awarding.

3.4.2 Evaluation Criteria

In this first stage the ESCOs are evaluated on the basis of these criteria, ranked and chosen to be invited to take part of the tendering process in the second stage. These criteria enable to choose the most capable ESCOs for the tendering process from the total qualified ESCOs. These evaluation criteria must be

- Ranked according to their relevance,
- Not discriminating, and
- Related to the ESCOs proving their capability of executing this contract.

Some evaluation criteria can be:

- Referenzes,
- Qualification and experience of personnel, or
- Technical resources.

This stage comes to an end with the invitation to ESCOs to submit offers and to negotiate.

3.5 Tender Documents

The tender documents are an essential part of the tendering procedure and consist of a number of separate documents. These include:

- Energy-Contracting business model, schedule, awarding criteria (in line with the specifications in chapter 2.5)
- (Functional) Specifications: Detailed description of project goals, deliverables and framework.
- Energy audit
- Data on energy consumption (ranging 3 years back) in technical and monetary terms
- Copies of invoices for consumption (at least for 1 year)
- A detailed description of the current condition of energy system and management
- Specification and calculation method for a referential energy consumption
- Draft contract
- Proposal template

The documents can also be combined in fewer documents and – this has to be evaluated separately – in certain cases derivations from this structure might be useful

3.6 Award Negotiations and Tender Evaluation

The negotiated procurement procedure must actually allow negotiations both for the bidder and the contracting authority of the measures implemented and the contract. The procedure of the presentation of the offers and the negotiations are:

- Bidders are invited to present their offers and to negotiate the details with the contracting authority.
- Contracting authority proves the offer formally: deadline, completeness, accuracy of calculations, correct signature etc.
- Bidders are invited to explain details by questions of the contracting authority.
- 2-3 negotiation rounds should be foreseen for all bidders.
- Minutes must be taken from all results from each negotiation round and the must be confirmed by all participants!

- The contracting authorities may evaluate the offers after each round of negotiations with a cost benefit analyses (interim and final evaluations possible).

3.6.1 Award criteria

The award criteria, defined by the client with support of the project facilitator, must be mentioned in the tender documents, so that the ESCOs can take account of their contribution of the different criteria to the final evaluation result.

On the basis of these criteria, the contracting authority identifies the technically and economically best offer. The award criteria must be determined

- not discriminating and related to the scope of service and
- by their weight contributing to the final evaluation result or ranked according to their relevance.

Possible award criteria are:

- Total cost (investment cost, energy cost, operation & maintenance cost) or price
- Quality of services (e.g. extent, energy savings, customizing, feasibility ...)
- Environmental impacts (e.g. CO_2 emissions, air pollution ...)
- Technical value
- Practicality
- Return of investment
- Aesthetics
- Service conditions of maintenance
- Duration or time of delivery
- …

3.6.2 Recommendations for the evaluation by a commission

- The evaluation method must be described in the tendering docs. It must include the clear evaluation criteria and the names of the commission members. The commission should always consists of more than 2 members at an impair number. The members should have professional or stakeholder relation with the project.
- The evaluation must be objective, independent, non-discriminating, comprehensible.
- The evaluation values should be clear, like: 100%, 90%, 80%, … 0% of goal achieved.
- The values can be determined by consensus, voting or in average (with or without elimination of highest and lowest value).
- The evaluation must be documented (without inconsistent statements).

- An evaluation method for difficult parameters is the Delphi-method: parameters are defined by the direction of quality; that means the more/less the better ...

The best bidder decision is based on a **cost benefit analyses:**

- Final documentation of bidders and evaluation results are a must.
- The project facilitator makes recommendations for the client or the decision maker. But it is the client who decides!
- Possible criteria and example weighting are:

1. **Lowest total cost of heat supply including investment 65 points**
   Award criteria: Net present value of project cash flow over 15 years.
2. **Demand side efficiency measures 20 points**
   Award criteria: quality, extent, saving potential, customizing, feasibility. Evaluation conducted by a commission.
3. **Environmental friendly technologies 15 points**
   Award criteria: lowest CO_2-emissions of heat supply.
   Calculation method provided in tendering documents.

3.7 Award of Contract

3.7.1 Notice of award of contract

This notice must be submitted to all bidders (ESCOs) after the best bidder's decision. It indicates the intention of award the best bidder and includes a summary of relevant reasons for the awarding. The notice of award of contract must include the following main topics:

- Date of contract award.
- Contract award criteria (summary of relevant reasons).
- Number of tenders received.
- Name and address of the successful ESCO(s) (bidders).
- Where appropriate, value and proportion of contract likely to be subcontracted to third parties.
- Contact details of the body responsible for appeal and precise information concerning the deadline for lodging appeals.
- End of non-disclosure period of 10 days (15 days if the notice is not faxed or sent electronically).

3.7.2 Signing of contract

After the non-disclosure period, the final-preparation of the contract between the client and the ESCO could start, parallel to the elaboration of the detailed analyses

of the ESCO. The contract integrates the outcomes of the negotiations (and detailed analyses) with the ESCO and must be signed accurately timed to the construction schedule.

4 Conclusions and Recommendations

Based on the previous chapters, the following conclusions can be drawn:

Procuring comprehensive energy service packages will typically require applying more flexible procedures than a standard "open procedure". In continental Europe, e.g. in Germany or Austria, most often the "negotiated procedure" and sometimes also the "competitive dialogue" are applied, which are provided in the EU legislative framework on procurement.

Often, building owners, who wish to outsource energy services, engage with project "facilitators" to support them with the procurement. These consultancies typically encompass the project development and structuring of the tendering procedure.

As typical building owners are no regular purchasers of complex energy services it is recommended to make good use of project facilitators. For regular purchasers of energy services it is recommended to develop at least an in-house-competence center for energy services for the pre-steps of the procurement (detection of project opportunities, decision for outsourcing, understanding of pros and cons of energy services,…) and to come back to a dedicated project facilitator for his support in the main phase of the procurement procedure.

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