

Almada Workshop, Portugal
October 2018



Public procurement in energy related tenders and technical specifications

Francisco Puente

Escan energy consulting, Director of business development and projects

fpuente@escansa.com

<https://es.linkedin.com/in/energiafranciscopuente>

Escan,s.l. www.escansa.com Avda. El Ferrol 14, 28029 Madrid, Spain Tl.: +34 913 232 643

About this presentation

- The background
- Organizing Public Procurement
- Defining the requirements of the contract
- Selecting suppliers, service providers or contractors
- Awarding the contract
- Contract performance clauses
- Tender process Santander Streetlight-EPC summary

1. The background

The background

The big facts

- Public authorities are major consumers in Europe, spending aprox. 15 % of the EU GDP -> purchasing energy efficiency goods and services make an important contribution
- Energy efficiency purchasing sets up an example which influences other market actors. Public authorities can provide industry and businesses with real incentives for developing energy efficient technologies: lighting, public buildings, transport, etc.
- EED Art. 6: Purchasing by public bodies
 - “1. Member States shall ensure that central governments purchase only products, services and buildings with high energy-efficiency performance, insofar as that is consistent with cost-effectiveness, economical feasibility, wider sustainability, technical suitability, as well as sufficient competition”

2. Organising public procurement

Organising public procurement

General considerations

- Energy efficiency public procurement is similar to private, but should have special caution when awarding the contracts, due money comes from taxpayers.
- This has to be guaranteed by getting best value for money and acting fairly.
- Best value for money might involve i.e. purchasing of green energy, efficiency products or guaranteed energy savings by EPCs.
- Acting fairly includes following the European and national regulation for public purchasing, but mainly the equal treatment for all competitors. Thus, the principle of transparency must be applied.

Organising public procurement

Stages of procurement procedure

1. Political decision on launching the public procurement, usually based on preliminary assessments (as energy study or energy audit)
2. Defining the subject matter of the contract, generally by technical experts and supported with economy and legal experts
3. Defining the technical specifications (including assessment criteria), as the description and technical characteristics of the energy related service/product (i.e. streetlight lamps reducing 50% the power of the current ones, with point-to-point management system, etc.)
4. Defining the economic specifications (including assessment criteria).
5. (in advance it could be useful an RoI = Request of Information process to assure that the technical specifications are in line with current market providers)
6. Defining the administrative specifications (e.g. participation requirements, which characteristics should have the provider, previous references, certifications,...)
7. Launching of the bid for candidates
8. Assessment of the offers and request of clarifications (if needed)
9. Selection of the awarded candidate
10. Preparation of the contract and signature

Organising public procurement

RFI, FRQ or Public tender

- RFI – Request for Information: When you need some further information before launching the public tender, you might ask relevant market actors for some information. This can apply to innovative projects i.e. those related to smart cities, when there are not many surveys available and information on technical parameters is scarce. Electric energy storage for a smart community could be included here.
- RFQ- Request for Quotation (similar to “Price Criterion”): You have a clear picture of the technical description and would like companies to offer a price for the service or product. Maybe just some final technical description might be needed from the companies. Purchasing of specific equipment as solar panels could apply here.
- Public Tender: There are technical specifications provided by the Public Authority but the company has provide a precise description of both the services and budget.

Organising public procurement

Example Lifecycle cost electric vehicle

- Include cost of an electric vehicle purchase for frequent use by public servants (city gardens maintenance)
 - Electric vehicle investment cost 30.000 € + 2.000 for the proportional part of the charging station = 32.000 €
 - Diesel or gasoline vehicle investment costs = 18.000 €
- Include cost of energy and maintenance for 10 years
- Include cost of CO2 reduction
- Savings in 10 years aprox. 20% higher than conventional car
- And reduces the noise....

100 km/day	250 days/year					10 years
10 l diesel/100 km	10 l/day	1,3 €/l	3.250 €/year	50.500 €		
40 kWh/100 km	40 kWh/day	8 c€/kW	800 €/year	40.000 €		
			eV 32000	Diesel 18000		

Organising public procurement

Competitive procedure with negotiation and competitive dialogue

- The purpose of the **competitive procedure** with negotiation is to provide public procurers with more flexibility in awarding contracts where readymade solutions are not available on the market but a relatively straightforward, transparent and documented negotiation may enable the adaptation of existing elements or the development of an innovative solution that will meet the needs of the public procurer described in the technical specifications
- The **competitive dialogue** is a two round procedure. The public procurer, first, describes its needs in a descriptive document or contract notice, sets the minimum requirements for candidates and defines the contract award criteria based on Best Price Quality Ratio (BPQR). Participants then present their bids. In the second stage, the public procurer initiates the competitive dialogue with the participants meeting the minimum requirements to finalize the service description. The negotiation takes place individually with each candidate, ensuring confidentiality of each solution, if required by the participants. The public procurer is encouraged to set milestones that help evaluate the progress of negotiations and eventually create a shortlist of the candidates.
- Both of them take usually more resources from all parts and take longer time than usual public tender.

3. Defining the requirements of the contract

Defining the requirements of the contract

Defining the subject

- Contracting authorities have freedom to choose what to procure thus it allows to include energy specific considerations as energy labelling, energy efficiency minimum parameters or minimum energy efficiency to reach with a renovated system
- Energy is related to many other topics and there is need of a balance among all, i.e. streetlight efficiency and safe roads or efficient building and comfort (problems of LED lighting in the offices due to too bright?)
- A market survey should help to detect solutions to the specific public energy needs (i.e. which companies sell energy linked to the market or fixed price)
- Is the issue of “renewable energy” or “minimum energy efficiency target” to be included?
- As a general rule consider the overall life cycle of the service or product, not only the investment in year 0. Energy or maintenance should be assured and cost reasonable compared to investment

4. Technical Specifications

Technical specifications

Aims

- Describe the technical issues related to the contract so the companies can understand if they have the background and capacity needed and if they should compete. Optionally functional description can be done for more innovative services or products.
- Indicate the means of evaluation for the tender: company references and background, curriculum of experts that will work in it, equipment or facilities requirements, etc.

But...

- In technical specifications beyond the current market capacities, the public procurer runs the risk that there will be no response from the market
- If tenders are based on price, it is likely low-quality output will happen and maintenance-operational costs will be high soon

Technical specifications

Performance-based specifications

- Specifications can be based on technical parameters or/and performance based requirements. This last one allows to receive more variety of offers that should be assessed later on – and evaluation has to be fair!.
 - Need to provide streetlight with reduction of 50% in the energy consumption compared to current situation

Technical specifications - Example

Participation conditions

- Participation in this tender procedure is open on equal terms to all natural and legal entities coming within the EU and to all natural and legal persons in a third country which has a special agreement with the Union in the field of public procurement on the conditions laid down in that agreement.

Contractual conditions

- The tenderer should bear in mind the contract provisions which specify the rights and obligations of the contractor, particularly those on payments, performance of the contract, confidentiality, and checks and audits.

Technical specifications - Example

Joint tenders

- A joint tender is a situation where a tender is submitted by a group of economic operators (consortium). Joint tenders may include subcontractors in addition to the joint tenderers.
- In case of joint tender, all economic operators in a joint tender assume joint and several liability towards the Contracting Authority for the performance of the contract as a whole.
- These economic operators shall designate one of them to act as leader with full authority to bind the grouping or the consortium and each of its members. It shall be responsible for the receipt and processing of payments for members of the grouping, for managing the service administration and for coordination. The composition and constitution of the grouping or consortium, and the allocation of the scope of tasks amongst the members, shall not be altered without the prior written consent of the Commission.

Technical specifications - Example

Subcontracting

- Subcontracting is permitted in the tender but the contractor will retain full liability towards the Contracting Authority for performance of the contract as a whole.
- Tenderers must give an indication of the part of the services and proportion of the contract that they intend to subcontract.
- Tenderers are required to identify subcontractors whose share of the contract is above 20%.
- During contract execution, the change of any subcontractor identified in the tender will be subject to prior written approval of the Contracting Authority.

Technical specifications - Example

The tenders must be presented as follows:

Subcontracting is permitted in the tender but the contractor will retain full liability towards the Contracting Authority for performance of the contract as a whole. Typical parts:

- Part A: Identification of the tenderer (see section x.1)
- Part B: Evidence for exclusion criteria (see section x.2)
- Part C: Evidence for selection criteria (see section x.3)
- Part D: Technical offer (see section x.5)
- Part E: Financial offer (see section x.6)
- Part F: Power of attorney (for consortia only)

5. Selection of the final supplier

Selection of the best supplier

General

- The past experience of the company in similar supplies (aim, geographical scope, size of the project, ...)
- The qualification and experience of the staff which will provide the service, not only in technical issues, but also management, writing of reports/project/documentation, ...
- Company fulfilment with social security and taxes, and not speculative accounting balances (could disappear in close future?)
- Providing a sound technical offer (methodology, schedule, etc) which fulfills the requirements
- Providing a balanced budget for the supply

ASSESSMENT MATRIX		Weight	Offer 1	Offer 2	Offer 3
1.	Appropriateness of suggested concept and work plan				
	Interpretation of objectives	5			
	General methodology	10			
	Implementation methods	10			
	Work schedule and time schedule	5			
	Monitoring and evaluation	5			
	Innovation	10			
Total 1.		45			
2	Qualification of proposed staff				
	Team Leader				
	Engineer, MA or equivalent with experience in the energy sector	10			
	10+ years of professional experience in the energy sector and with reference to energy-relevant topics	5			
	Knowledge on energy efficiency technologies	5			
	Industrial and commerce efficiency	5			
	Energy consulting	5			
	Energy efficiency	5			
	Energy efficiency standards	3			
	Energy management and energy audits	4			
	Energy efficiency of within the transport sector, including electric mobility	1			
	Climate change (mitigation)	2			
	Expert				
	3+ years of proven experience	2			
	5+ years of similar projects	3			
	Language skills: English, Spanish	5			
Total 2.		55			
		100			

6. Award Criteria

Award criteria

It has to...

- Have link to the matter of the contract
- Be objectively quantifiable
- Be announced previously
- Respect International, National and Local Law

Award criteria

BPQR = Best Price / Quality Ration

- Term used by the modernised EU rules for expressing any type of criteria that are linked to the subject matter of the public contract and are of specific importance for the public procurer.
- These may include, in particular, qualitative, environmental, social or innovative aspects. Public procurers enjoy a wide range of freedom in formulating these criteria and attributing weight according to their specific use.
- User friendliness, comfort, multiuse, noise level, used of recycled materials, etc-

7. Tender process Santander Streetlight-EPC summary

EPC Tender Streetlight-EPC Santander

Who was involved in the City?

After the need related to buildings and public infrastructures is detected and the analysis of the current status of the infrastructure is performed, it is important to verify that there are funds to undertake the associated project.

These funds have to be included in the annual municipal budget (as a specific allocated budget associated to this need), which is fixed one year in advance, more accurately in September. Therefore, the annual municipal budget for the current year, 2016, was approved in September 2015.

EPC Tender Streetlight-EPC Santander

Who was involved in the City?

- Then, the tender documentation is prepared:
 - The technical department is in charge of writing up technical bid, including main technical features and conditions to be fulfilled, together with technical evaluation criteria.
 - The contracting department is in charge of writing up administrative bids.

EPC Tender Streetlight-EPC Santander

Who was involved in the City?

- Once both bids are elaborated, the Municipal board meeting, as the executive governing body, validates both bids and also, the start of the public tender. Tender is published and at this moment, bidders may deliver their proposals.
- The Local Government Authority Tender Board is set up in order to evaluate the proposals received.
- It is checked that companies fulfil the legal and administrative conditions required to participate
- The contracting department prepares the award proposal for the bidder with the maximum score and delivers it to the controller service, which will be in charge of analyzing and preparing the associated award decision.
- Finally, the Municipal board meeting shall approve the award decision.
- From this moment, the process to sign the contract between the best bidder and the Municipality may start.

EPC Tender Streetlight-EPC Santander

What were procurement practices?

- Preparation work:
 - A need related to buildings and/or public infrastructures is detected.
 - An analysis of the current status of the infrastructure is required.
 - Funds to undertake the associated project shall be included in the annual municipal budget of the previous year
 - The tender documentation is prepared:
 - The technical department is in charge of writing up technical bid, including main technical features and conditions to be fulfilled, together with technical evaluation criteria.
 - The contracting department is in charge of writing up administrative bids.
 - Municipal board meeting, as the executive governing body, validates both bids and the public tender.

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- As part of the preparation work, it is required to know the current situation of the buildings or public infrastructure. In this particular case, an investment-grade energy audit of streetlight infrastructure and public buildings was performed, which allowed to:
 - know the current status of the whole streetlight (aprox. 23,000 light-points), electric boxes (310) and municipal buildings and facilities (73);
 - estimate the required investment and the return on investment;
 - establish type of tender: street lighting management instead of competitive dialogue.
 - Elaborate the Street lighting Director Plan which ensures a more efficient street lighting, by including the improvements from economic, energy, environmental and even touristic points of view (Non-energy benefits).
- In terms of funding, the Municipality will be in charge of paying the energy supply during the lifetime of the EPC project (as it was done before the EPC project), therefore, energy supply costs are included in the annual municipal budget. Additionally, the investment will be borne by the ESCO (11mio€).

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- The tender documentation is prepared. Municipal departments shall ensure that tender specifications which define the requirements of the contract are drawn up in a manner which meets the government procurement principle of maintaining open and fair competition. The tender documentation consists of technical and administrative bids:
 - The technical department is in charge of writing up technical bid, including main technical features and conditions to be fulfilled, together with technical evaluation criteria, taking into account results from the investment-level energy audit.
 - The contracting department is in charge of writing up administrative bids, which includes, among others, the following sections:
 - objective of the contract, a brief description of the main services (P1 (Energy management), P2 (Maintenance), P3 (Full guarantee) and P4 (Improvement and renewal of Streetlight infrastructures and ornamental lights)
 - legal regulation, Spanish (Royal Legislative Decree 3/2011 of 14 November approving the Consolidated text of the Public Sector Contracts Act (TRLCS)) and EU regulations (Directive 2012/27/UE).
 - appeals and complaints, TRLCS;

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- subsidies and funding, the successful bidder should inform the Municipality;
- requirements for bidders which should be fulfilled by the applicants;
- contract price and financing, per each service (P1, P2 & P3):
 - P2+P3: 1,136m€/year (+VAT: 1,374m€/year).
 - P1: Savings 1,354m€/year (including energy savings =65% and reduction of installed power =50%), (+VAT, 1,638m€/year).
 - P1+P2+P3: 2,49m€/year (+VAT, 3,013m€/year).
 - Total (length of contract: 15 years): 37,35m€ (+VAT, 45m€).
- payment method,
 - P2&P3: monthly receipt.
 - P1: four-monthly receipts, from the second year of the contract.
 - Energy savings shall be at least 65%:
 - Energy savings = 65%: ESCO receives 100% from the Municipality.
 - Energy savings > 65%: ESCO receives 100% from the Municipality. If savings exceed the guaranteed level, then the Municipality pays an agreed upon percentage of the savings to the ESCO (from the extra savings: 60% is for the ESCO and 40% for the Municipality).

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- proposals: each bidder shall justify its financial and technical solvency
- bid deadline, place, date and opening the bids;
- award procedures and award criteria;
- deadline for this awarding is three months from opening the bids;
- period of concession, 15 years from the formalization of the contract, and P4 shall be executed in 12 months;
- signature of the contract, more than 15 days from the announcement of the best bidder;
- definitive guarantee, a 5% of the awarding budget shall be deposited in the Municipal Cash Register;
- contract compliance;
- responsibility of successful bidder;
- breach of contract penalties, there are three categories: minor, serious and very serious penalties;
- end of the contract, if the bidder does not accomplish the minimum energy savings (65%);
- duties of the Municipality: be in charge of contracting, paying the energy supply, supervising the contract compliance.

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- Technical and economic bids are validated by the office of the controller.
- After this, tender is approved to be to public by a Municipal board meeting, as the executive governing body.
- The public tender announcement together with both bids are issued at the Official Journal of the European Union, at the Official State Gazette (BOE), at the Official Gazette of Cantabria (BOC) and also, at the contracting party portal allocated at the municipal website. From that moment, each bidder may deliver its proposal.
- A multiple envelope systems was used in order to evaluate independently: the technical proposal (envelope “B”) is evaluated and bids ranked before the financial offer (envelope “C”) is opened. A third envelope (envelope “A”) contains legal and other requirements data. All envelopes should be submitted at once, sealed and signed. No amendments to the proposals are accepted after the bid deadline. Evaluators of the technical proposals should not have access to the financial proposals until the technical evaluation is concluded. This approach is preferred in the case of complex contracts, as it is the case of an EPC contract.
- Once the bid deadline is over, the Local Government Authority Tender Board is set up, being in charge of opening of the bids and evaluating the proposals. This board includes the Chairman (Mayor), deputy Chairman (councilor or civil servant), Secretary, head of contracting department and the following chairpersons: maintenance councilor, general director of innovation department, head of engineering department, head of legal department and municipal controller.

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- The evaluation of the bid follows these steps:
 - Envelopes "A" are opened. The economic, financial and technical solvency and capacity to contract of each bidder is evaluated. If any document is missing, it may be requested. If any solvency criterion is not fixed, the associated proposal is rejected. From the nine received proposals, only one was regarded as invalid (it was received after the due time).
 - Envelopes "B" are opened. The technical proposal is evaluated in two stages, therefore, each envelope "B" contains two envelopes, named "B1" and "B2", respectively.
 - First stage: envelopes "B1" are opened first. Each envelope "B1" contains P1, P2 & P3 proposals. The tender board may ask for technical reports to evaluate these proposals. Therefore, envelopes "B1" are delivered to the technical department to be assessed and marked. This procedure, indicated in the administrative bid, states a maximum score of 29 points, which are distributed as follows: 10 points to P1, 13 points to P2 and 6 points to P3. The minimum threshold is 15 points (under 15 points are rejected). Once this report is ready the tender board is set up and the score of each proposal is announced. Four bidders were rejected by not exceeding the threshold.

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- Second stage: envelopes “B2”, which contain P4 proposal, are opened. As in the first stage, the tender board asks for technical reports, therefore, envelopes “B2” are delivered to the technical department. This stage shall be scored with a maximum of 20 points, being the threshold 10 points. Once this report is ready the tender board is set up and the score of each proposal is announced. Those proposals which do not exceed the threshold (10 points), shall be rejected.
- Envelopes “C” are opened. Once tenders have assessed against the technical criteria, a financial evaluation of the prices tendered can then be undertaken. The results of the financial assessment are to be documented before moving onto the next stage of the evaluation. Therefore, the tender board asks for a financial report to the contracting department, which receives envelopes “C”. The maximum score, stated in the administrative bid, is 51 points, where Guaranteed energy savings & Reduction of installed power is scored with a maximum of 27 points while, P2 & P3 economic proposals are scored with a maximum of 24 points. A threshold of 10 points shall be achieved in order not to be rejected. Additionally, each financial proposal shall be accompanied by an economic and financial report which proves its feasibility.

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- The tender board undertakes the assessment of the overall “technical” and “economic” offers in accordance with the criteria established in the tender document, to determine which tender represents the best combined offer. This stage will establish the final ranking of the tenders.
- Once the final ranking has been established, the contracting department elaborates the award proposition to the bidder with the highest score.
- This award proposition will be analyzed (validating the feasibility of the economic and financial report) by the controller service. This service will be in charge of elaborating the award decision.
- This award decision shall be validated by the Municipal board meeting, as the executive governing body, and then, the process to sign the contract may start.
- Finally, the Municipality will be in charge not only to monitor the contract compliance, but also, to contract and pay the energy supply.

EPC Tender Streetlight-EPC Santander

How the EPC tender process was developed for EPC Streetlight?

- To summarize, technical bid has been elaborated based on the 4P model:
- P1: Energy management. The contractor shall use data retrieved by deployed sensors and compare them with current contracts of the energy supply, in order to optimize energy consumption and adapt contracts of the energy supply.
- P2 & P3: Comprehensive facility maintenance and full guarantee of the streetlight shall be ensured.
- P4: Improvement and renewal of Streetlight infrastructures and ornamental lights.

Francisco Puente

fpuente@escansa.com
EMBA, PhD

Director of business
development and projects
Escan energy consulting

This presentation is owned by Escan s.l.
Copyright (c) 2018 Escan s.l. All rights reserved



Thank you!