



Country Report on EPC Pilot Projects Evaluation and use of Code of Conduct

CZECH REPUBLIC



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1 Introduction

Within the framework of the project TRANSPARENSE, which receives support from the program IEE (Intelligent Energy Europe) of the European Union, European Code of Conduct for EPC (“Code”) has been developed for energy service providers (ESCOs) implementing EPC projects.

The objective of the Code is to increase the transparency of the EPC markets and ensure the high quality of the energy services provided by the ESCO. By adhering to the EPC core values and code of conduct, the ESCOs and customers develop a solid foundation for a working partnerships based on trust and confidence. They are expected to utilise the Code in order to further develop energy efficiency services to meet their goals and expectations which shall be evaluated at a later stage.

This report presents the evaluation of the Code application in the pilot projects in the Czech Republic:

1. Pool of buildings in the City of Moravska Trebova;

2. Prague Congress Center.

The major stakeholders (both on the side of the client and provider) in the pilot projects of the country have been interviewed and asked to supply relevant information. For this, detailed questionnaires have been used, which were the main data source for the analyses included in this report.

2 Barriers and success factors for the pilot projects

2.1 Barriers

The barriers described below include both the ones faced during the selection process and the ones encountered while working on the pilot projects. For each barrier, an explanation of the strategy used to overcome it is mentioned.

Within the pilot project **Prague Congress Center**, there were two major barriers identified during the phase of project preparation:

i. complexity of EPC concept;

ii. quantification of energy baseline (insufficient measurement of the input values and measurement ongoing during the operations).

The barriers mentioned above were overcome in co-operation of the all parties involved in the project:

i. Complexity of EPC and technology equipment in KCP was overcome by a series of negotiations on the details to be solved. The discussions and negotiations were organised among the different specialists – accounting, heating, control system and dispatching. There was a separate meeting with the deputy director and investor manager.

ii. For establishing the baseline, there was a lack of partial measurements, especially for air-conditioning and some other equipments. This barrier was solved so that in the contract, the values were specified based on the expert evaluations. During the first two month of the contract duration, these values will be verified by measurement and the values will be specified appropriately by agreement with the client.

Within the pilot project **Moravska Trebova**, there were two major barriers identified during the phase of project preparation:

i. lack of trust;

ii. quantification of energy baseline

During project preparation all barriers have been discussed with SEVEN and all unclarities have been clarified to increase the trust into the EPC process and its benefits.

2.2 Success factors

The success factors described below include both the ones observed during the selection process and the ones encountered while working on the pilot projects. The success factors in both pilot projects were quite similar as follows:

- Motivation of the building owners to achieve **energy efficient operation of the energy system** in their buildings. Building owners were motivated to save the costs of operation of its buildings.
- Implementation of **effective energy management**, the system management and energy efficient co-ordination of all of the equipment (air-conditioning, ventilation, lighting, heating etc.)

- Communicating to the client that using the Code of Conduct in the pilot project implementation would help ensure that the EPC provider was supplying them with a high-quality EPC.

In addition, in the first pilot, it was a motivation for the client, that the EPC project allowed him to use external financial source to cover the investment costs and saving the financial sources for other investment activities. In the second pilot project, the client used its own financial resources to finance investments.

3 Pilot projects implementation

The tables below summarise the characteristics of the two Transparens pilot projects implemented in the Czech Republic to test the European Code of Conduct for EPC:

1. Pool of buildings in the City of Moravska Trebova;
2. Prague Congress Center.

The first table shows the phases included in the pilot projects; while the second table provides more details around the implementation of the Code within the projects.

Table 1 List of pilot projects and phases included

Project name	Project phases that already STARTED			
	Phase I - Project Preparation and development	Phase II - Procurement Procedure (after client announces call for tenders by publication of contract notice)	Phase III - Implementation and operation phase (after signing of the EPC contract)	Phase IV - Measurement and Verification (based on the first consumption measurement)
Pool of buildings in the City of Moravska Trebova	X	X	X	X
Prague Congress Center	X	X		

Table 2 Overview of the Code of Conduct implementation

Project name	Code of conduct implementation			
	ESCO signed Code	Code included in tender dossier	Code included in contract	Other
Pool of buildings in the City of Moravska Trebova	Yes	Principles not cited but reflected	Principles not cited but reflected	Client endorsed the Code by decision of the City Council
Prague Congress Center	Yes	Principles not cited but reflected	Principles not cited but reflected	

3.1 Pilot project No. 1 Moravska Trebova

Main goal

Main goal of the pilot project was renovation of energy technological equipments and covering investment by savings in the pool of buildings in the ownership of the client – City of Moravska Trebova. Pool of buildings includes:

- two primary schools;
- three administrative buildings.

Measures implemented

Measures implemented within the EPC project included:

- Installation of new efficient heat sources
- Installation of IRC system (control of heat consumption in each room individually)
- Savings in lightning
- Efficient equipment for water consumption.

The ESCO provided financing of the measures to our client through the sell of long term receivables. As the client required help with the payment of VAT from the invoiced measures which wasn't in his budget for this year, the ESCO provided a loan with long term maturity to the client.

Procedure

1. Evaluation of the preliminary analysis of suitability of EPC for selected buildings (9 buildings selected for an analysis, 5 buildings selected for public procurement).
2. Prior information notice published in the Journal of public procurement – preliminary information about the contract.
3. Contract notice published in the Journal of public procurement (binding contract information)
4. All candidates are provided with qualification documentation and invited to submit requests to participate in the selection procedure (documentation published on the official website of the contracting entity).
5. Submitted requests to participate in the selection procedure are evaluated in terms of fulfilment of required qualifications.
6. All candidates that demonstrated the fulfilment of qualifications are provided with tender documentation.
7. All candidates are invited to inspect the place of performance and their questions are answered (all answers are transmitted to all candidates).
8. Tenders are submitted by candidates and subsequently checked for completeness
9. First preliminary evaluation and assessment of the tenders carried out by the evaluation committee; first preliminary ranking of the tenders is established.
10. All tenderers whose tenders have been evaluated and that have not been excluded from the participation are notified of the preliminary ranking of the tenders and required to complete, clarify, or amend their tenders if necessary.
11. The contracting entity negotiates with all tenderers to reach an agreement on the form of the tenders before the second preliminary evaluation of the tenders.
12. Second preliminary evaluation and assessment of the tenders carried out by the evaluation committee; second preliminary ranking of the tenders is established (3 negotiation rounds)
13. The contracting entity negotiates with all tenderers for the last time to reach an agreement on the final form of the tenders.
14. Final evaluation and assessment of the tenders carried out by the evaluation committee; final ranking of the tenders is established; the most suitable tender is recommended.
15. The contracting entity negotiates with the tenderer whose tender has been selected as the most suitable to reach an agreement on the final form of the tender.
16. Statutory bodies of the contracting entity approve the outcome of the procurement process and the final form of the draft contract.
17. A contract is concluded between the contract parties.

18. Contract award notice published in the Journal of public procurement (binding information about the contract's outcome).

Organisational structure

The EPC project has been implemented in co-operation by the following three market players:

- Client: City of Moravska Trebova;
- EPC facilitator: SEVEN – The Energy Efficiency Center (Transparens partner);
- EPC provider: Amper Savings a.s.

All market players filled in one questionnaire to report on the pilot project implementation and Code of Conduct use. The first, general part is attached to this report to provide details on the projects. To report on the project, it was easy to establish instant communication among the project and the Transparens partner SEVEN – The Energy Efficiency Center as it played a role of the EPC project facilitator.

Code of Conduct implementation

The Code of Conduct was presented to the EPC provider as a member of the Association of the energy service providers (APES) in 2014. The company Amper Savings committed itself to comply with the principles of the Code during project implementation. The company confirmed this by signature of the Code on 19 May 2015.

3.2 Pilot project No. 2 Prague Congress Center

Main goal

Main goal of the pilot project in Prague Congress Center was to reconstruct the energy system in the buildings in the ownership of the client. The Prague Congress Center complex includes:

- Prague Congress Center with 20 halls and 50 rooms with capacities from 20 to 2,800 people, and exhibition space covering 13,000m². It is used to host all kinds of events for up to 9,300 participants and visitors (e.g. in 2002 it hosted a NATO summit).
- Vyšehrad Business Centre;
- 4-star Holiday Inn Prague Congress Centre with 251 rooms.

Measures implemented

Measures implemented within the EPC project included:

- installation of cogeneration unit 500 kW_e;
- improvement of control system;
- individual room control (IRC);

- exchange of light bulbs by LED lights;
- frequency control of electric motors;
- installation of new air-conditioning unit.

As the client has foreseen the renovation of the building envelopes in the future, this was reflected already in the EPC contract signed in July 2015. The contract includes a model determining how the baseline energy consumption will be re-calculated in the case of renovation of building envelope in the future.

Procedure

1. Evaluation of the preliminary analysis of suitability of EPC.
2. Prior information on the procurement sent directly to pre-selected companies and published at website of the client.
3. All candidates are provided with qualification documentation and invited to submit requests to participate in the selection procedure.
4. Submitted requests to participate in the selection procedure are evaluated in terms of fulfilment of required qualifications.
5. All candidates that demonstrated the fulfilment of qualifications are provided with tender documentation.
6. All candidates are invited to inspect the place of performance and their questions are answered (all answers are transmitted to all candidates) .
7. Tenders are submitted by candidates and subsequently checked for completeness
8. First preliminary evaluation and assessment of the tenders carried out by the evaluation committee; first preliminary ranking of the tenders is established.
9. All tenderers whose tenders have been evaluated and that have not been excluded from the participation are notified of the preliminary ranking of the tenders and required to complete, clarify, or amend their tenders if necessary.
10. The contracting entity negotiates with all tenderers to reach an agreement on the form of the tenders before the second preliminary evaluation of the tenders.
11. Second preliminary evaluation and assessment of the tenders carried out by the evaluation committee; second preliminary ranking of the tenders is established (2 negotiation rounds as decided by the evaluation committee).
12. The contracting entity negotiates with all tenderers for the last time to reach an agreement on the final form of the tenders.
13. Final evaluation and assessment of the tenders carried out by the evaluation committee; final ranking of the tenders is established; the most suitable tender is recommended.
14. The contracting entity negotiates with the tenderer whose tender has been selected as the most suitable to reach an agreement on the final form of the tender (5 weeks).
15. Statutory bodies of the contracting entity approve the outcome of the procurement process and the final form of the draft contract.
16. A contract is concluded between the contract parties.

Organisational structure

The EPC project has been implemented in co-operation by the following three market players:

- Client: Prague Congress Center a.s. with a legal status of a private joint stock company;
- EPC facilitator: SEVEN Energy s.r.o.;
- EPC provider: ENESA a.s.

All market players filled in one questionnaire to report on the pilot project implementation and Code of Conduct use. The first, general part is attached to this report to provide details on the projects. To report on the project, it was easy to establish instant communication among the project and the Transparens partner SEVEN – The Energy Efficiency Center and the project, as the its sister company SEVEN – Energy Ltd. who was the EPC project facilitator.

Code of Conduct implementation

The Code of Conduct was presented to the EPC provider as a member of the Association of the energy service providers (APES) in 2014. The company ENESA a.s. committed itself to comply with the principles of the Code during project implementation and signed the Code in October 2014 the same month as the prior information on the procurement was sent directly to pre-selected companies and published at website of the client.

The Code of conduct was useful in particular when the benefits of the EPC were explained to the client. The fact that the EPC is a method well established internationally, having the principles of best practice formalised in the principles of the Code of Conduct helped to gain trust of the client in the method.

4 Code of Conduct application and evaluation

4.1 Phase I: Project preparation and development

Pilot project No. 1 Moravska Trebova

According to the evaluation provided by the client, the overall expectations of the customer have been "**almost fully met**" during the preparation phase of the project.

First EPC project implemented in the area of Public lighting in 2012 so the client was aware of the EPC process. The client was supported by the EPC facilitator from the beginning of the project development. The facilitator prepared the preliminary analyses showing suitability for using the EPC method at the buildings owned by the client.

Pilot project No. 2 Prague Congress Center

According to the evaluation provided by the client, the overall expectations of the customer have been "**fully met**" during the preparation phase of the project.

First concrete information on the potential EPC project was received by the client in 2013. However, the client was aware of EPC potential benefits on its property since 1995. The client was supported by the EPC facilitator from the beginning of the project development. The facilitator prepared the preliminary analyses showing suitability for using the EPC method at the buildings owned by the client.

4.2 Phase II: Procurement procedure

Pilot project No. 1 Moravska Trebova

As the client is a municipality, the procurement procedure was implemented as "negotiated procedure with prior publication of a contract notice" according to the public procurement law.

According to the evaluation provided by the client, the overall expectations of the customer have been "**fully met**" during the procurement phase of the project. In particular, the client provided the following information:

- The client had had sufficient information on the EPC process. Similar EPC public procurement has been implemented in Moravska Trebova already in 2012, thus the client was familiar with the general process of EPC procurement. In addition the EPC facilitator SEVEN – The Energy Efficiency Center has supported the client in provision of the information and during the whole procurement process.
- There was a delay in comparison to the planned time schedule of the procurement process caused by the approval process of the procurement by the City council. It took 10 months to sign the contract between ESCO and customer (after the first publication of a contract notice)

- Six EPC providers expressed their interest in the EPC procurement and five offers have been received by the client.
- The ESCOs were required to fulfil standard qualification criteria and to provide reference projects. In addition, the client supported by the EPC facilitator hold negotiation rounds with the ESCOs the conditions of their tenders during the procurement process.
- The final choice of the winning tenderer was made by the City council who also had to approve officially the choice.

Pilot project No. 2 Prague Congress Center

As the client is a private company, the procurement procedure did not have to follow the public procurement law. Thus EPC procurement procedure could be simplified, though followed a similar structure as the procedures applied by the public organisations.

According to the evaluation provided by the client, the overall expectations of the customer have been "**fully met**" during the procurement phase of the project. In particular, the client provided the following information:

- The client had had sufficient information on the EPC process, which was obtained from the EPC facilitator, who has supported the client during the whole procurement process.
- There was a delay in comparison to the planned time schedule of the procurement process by 2 months. It took 10 months to sign the contract between ESCO and customer (after the first publication of a contract notice)
- Five EPC providers expressed their interest in the EPC procurement and three offers have been received by the client.
- The ESCOs were required to fulfil standard qualification criteria and to provide three reference projects. In addition, the client supported by the EPC facilitator hold negotiation rounds with the ESCOs the conditions of their tenders during the procurement process.
- The final choice of the winning tenderer was made by the Board of directors of the Prague Congress Center on the basis of the suggestion of the Selection Committee.

4.3 Phase III: Implementation and operation phase of EPC/Code pilot projects

Pilot project No. 1 Moravska Trebova

According to the evaluation provided by the client, the overall expectations of the customer have been "**fully met**" during the implementation and start of the operation phase of the project. In particular, the client provided the following information:

- The EPC provider introduced and explained the process of energy efficiency measures implementation and M&V to the customer sufficiently.
- The EPC provider verified the up to date statuses of energy systems in the building within the contract.

- The customer did not find any differences in comparison with the tender.
- The provider prepared a design/concept of project documentation for the implementation phase, which was found good and comprehensive by the client.
- The sub-suppliers were found of a good quality and the client did not have to negotiate directly with them.
- The installation of the EE measures started in December 2014 and it was finished in April 2015. Just after that, the installed EE measures were transmitted into property of the client. There were no delays in the EE measures implementation and there were no significant problems to be solved.
- There were six supervisor meetings between the EPC provider and customer during implementation phase.
- The client has only small comment to the EE measures after its finalisation, which have been dealt with promptly by the EPC provider.
- The actual investment costs did not differ from than volume stipulated in the contract.
- The provider provided trainings for the operational personnel of the implemented EE measures sufficiently.
- The provider specified rules and obligations in relation to measurement of energy consumption - clearly to the involved personnel. Measurement of the operation of the installed equipment is provided both by the EPC provider and the client.
- The verification is provided according to the IPMVP (International Performance Measurement and Verification Protocol).

4.4 Overall evaluation of the Code of Conduct

Based on the information and evaluation provided by the market actors, it can be summarised, that 100% of the market actors involved in the pilot projects in the Czech Republic have found it **useful and understandable**.

In both pilot projects, the **EPC providers** confirmed that the Code of Conduct is understandable and they did not propose any changes in its wording.

Both providers have not had any problems with implementation of the Code of Conduct. The EPC providers stated to implement economically efficient savings. They provide full guarantee of achieving contractually agreed savings as it is a standard condition of their EPC contracts. The EPC provider of the first pilot project - Amper Savings - claimed, the long term cooperation with their clients is a priority and because they fully guarantee contractual savings to the clients, they are motivated to use only the high quality equipment to eliminate the need of additional operating costs. The provider of the second pilot project - ENESA - provides a bank guarantee to support the commitment to compensate client in case of deficit savings.

The EPC providers made the following recommendations:

- The motivation of the maintenance staff could be improved, e.g. by a bonus based on additional energy savings achieved. It was also stressed that the staff should be explained on the role of ESCO.
- As the ESCO follows the Code, the client should also be bind to follow the Code of conduct.

The clients reacted to the principles of the Code of conduct very positively and saw them as a very useful tool for formulation of the relationships between the EPC provider and the client. The Clients see the Code as clear and understandable and they have not had any comments to the content of the Code of Conduct. The feedback received from the clients showed that clients have found the Code of Conduct useful in understanding the EPC process and what to expect from the EPC provider. Moreover, the Code was found useful, in particular when the benefits of the EPC were explained to the client of Prague Congress Center. The fact that the EPC is a method well established internationally, helped to gain trust of the client in the method.

The **EPC facilitators** involved in the pilot projects have been involved in formulating the actual wording of the Code of conduct so it is not surprising that they have found it useful and understandable.

Annex: EPC Project Evaluation

Methodology

Basis of the evaluation template and questionnaire is the European EPC Code of Conduct (JSI and SEVEn 2014) conducted in the framework of Transparens. The set of principles and values which are described in the Code of Conduct have been taken over for evaluation:

- Values: Efficiency, Professionalism, Transparency
- Principles: Cost Effectiveness, Sustainability, Relationship, Transparency, Comprehensiveness, Financing, Interest in success, Quality

For each pilot project, relevant information is compiled in 3 parts:

- Basic information on the project will be given in **Part A** - this may be filled in by the **Transparens partner**.
- In **Part B** the pilot project **customers** are enquired about the project with a clear focus also on ESCO (and facilitators) evaluation.
- **Part C** collects information from **ESCOs** how/if they consider the Code useful and appropriate

The templates for parts A, B and C are prepared as **separate documents** so the partners can have them separate when sending out to different persons.

The evaluation template request feed-back information during different phases of an EPC project on how effective and practical the EPC Code of Conduct was and also on how the pilot projects were carried out.

The four phases have been outlined in the Code of Conduct document as:

Phase I: Project preparation and development

Phase II: Procurement procedure

Phase III: Implementation and operation phase of EPC/Code pilot projects

Phase IV: Measurement and Verification

These phases form the structure of the Part B questionnaire - whereas the above mentioned values and principles will form the criteria and indicators. Each phase has its role in providing the feedback on the proposed EU Code and the pilot projects. The user of this evaluation template will have to decide if all phases are applicable for his/her procedure.

In all four phases a *quantitative evaluation* is foreseen in which data information will be collected – giving also a technical overview of the project. The data will be derived from the selected building(s). As the most important criteria for the selection of a suitable EPC projects are various effective measures and the subsequent calculation of savings these are included as well in the questionnaire. In addition, it also focuses on the amount of investments as well as the method through which the project is financed.

More evaluative and subjective questions (*qualitative evaluation*) are also part of the evaluation. The goal of this qualitative evaluation is to select those parameters which have the most significant impact on the quality. At the same time, qualitative evaluation should reflect the satisfaction of the client in respect of the taken actions, technical solutions and the results achieved.

All three questionnaires of each project form the basis for the evaluation in the context of the country reports.

The evaluation questionnaires are attached to this report for the pilot projects as follows:

- 1. Pool of buildings in the City of Moravska Trebova (part A, B, C);**
- 2. Prague Congress Center (only part A, C is attached as the part B is confidential).**

Pilot Project Evaluation Pool of buildings in the City of Moravska Trebova

In the following, please find attached the filled in evaluation questionnaires of pilot project Pool of buildings in the City of Moravska Trebova.

PART A: Basic information on the project

Questionnaire filled in by

Name of the person	Vladimir Sochor
Organisation name	SEVEn

Project description	
Pilot project name i.e. facility name	Pool of buildings in the city of Moravska Trebova
Location (city, region)	Moravská Třebová
Country code	CZ
Type of customer (<i>choose correct category</i>)	<ul style="list-style-type: none"> • <u>Municipality</u> • Public – private partnership
Sector (<i>choose correct category</i>)	<ul style="list-style-type: none"> • <u>Schools</u> • Hospitals • Other public organisations (culture, sport, etc.): • Industry: _____ • <u>Tertiary sector</u> (trade, services): <u>administrative buildings</u> • Residential housing sector
Number of buildings of each type <i>(e.g. 25 schools, 11 healthcare facilities, etc.)</i>	<ul style="list-style-type: none"> • 2 primary schools • 3 administrative buildings
Main goal of the project <i>(e.g. comprehensive reconstruction of the energy system during six months by implementing measures saving heat, electricity and water)</i>	Renovation of energy technological equipments and covering investment by savings
Measures (short description – max. 5 points)	<ul style="list-style-type: none"> • Installation of new efficient heat sources • Installation of IRC system (control of heat consumption in each room individually) • Savings in lightning • Efficient equipment for water consumption
If there are other important aspects of the project, innovations and client's advantages, not mentioned above, please, describe here	

Timing	From	Till	Duration
	[YYYY-MM]	[YYYY-MM]	[No. of months]
Project identification	August 2013	December 2013	5

Acquisition time span of the project <i>(time needed to pursue the client or ESCO to agree on testing the CoC within a pilot project)</i>			
Procurement procedure	January 2014	October 2014	10
Installation of energy efficiency measures	November 2014	June 2015	8
Contract duration	November 2014	December 2024	122
Period of repayment	January 2015	December 2024	120

Financing	
Total investment [EUR] <i>(if not available estimate)</i>	430 000
Co-financing <i>(if project is co-financed by the customer or public funds explain and provide real or estimated volumes in EUR)</i>	None
Guarantee of savings <i>(explain how it is defined)</i>	Specific quantification of savings achievable for different types of energy in the contract

Quantitative evaluation		Baseline <i>(initially before the project)</i>	Annual savings	
			Guaranteed	Achieved <i>(yearly average of available data for 2014-15)</i>
Final consumption of heat	[MWh/a]	6080	1363	
Final consumption of power	[MWh/a]	596	60	
Primary energy	[MWh/a]	6676	1423	
GHG emissions	[tCO ₂ e/a]	1337	285	
Total operational costs <i>(energy costs, water costs, maintenance etc. – fill in what is available)</i>	[EUR/a]	420000	80000	

Part B: Questionnaire for Clients (or Facilitators or ESCOs)

Within the framework of the project TRANSPARENSE, which receives support from the program IEE (Intelligent Energy Europe) of the European Union, European EPC Code of Conduct has been developed (hereinafter Code) for energy service providers (ESCOs) implementing EPC projects. The objective of the Code is to increase the transparency of the EPC markets and ensure the high quality of the energy services provided by the ESCO. By adhering to the EPC core values and code of conduct, the ESCOs and customers develop a solid foundation for a working partnerships based on trust and confidence. They are expected to utilise the Code in order to further develop energy efficiency services to meet their goals and expectations which shall be evaluated at a later stage.

In addition, the developed EPC Code of Conduct will be tested and evaluated in EPC pilot projects. The outcome and results of this questionnaire will provide feedback on the Code and its usefulness.

Questionnaire filled in by

Name of the person	Viera Mazalová
Organisation name	Městský úřad Moravská Třebová
Role in the project (client, facilitator etc.)	Client

Pilot project name i.e. facility name	Pool buildings in the city of Moravska Trebova
Location (city, region)	Moravská Třebová
Country code	CZ

4.5 Phase I: Project preparation and development

1	How was the first information on the EPC project obtained?	<i>(free text)</i> First EPC project implemented in the area of Public lifting in 2012	
2	Were the above mentioned information sufficient and clear?	Yes <input checked="" type="checkbox"/> X	No <input type="checkbox"/> <i>If no, please comment why not:</i>
3	Did you have assistance for the energy efficiency project preparation?	Yes <input checked="" type="checkbox"/> X <i>SEVEn</i>	No <input type="checkbox"/>
4	Who prepared the preliminary analyses of suitability for using the EPC method for implementing the energy efficiency project?	<i>SEVEn</i>	

5	Was the planned time schedule of the project preparation kept - or were there any delays?	Yes <input type="checkbox"/> <i>If yes, how long was the major delay?.....</i>	No <input checked="" type="checkbox"/>
6	When it comes to the project preparation: were the customer expectations met?	on 1 to 5 scale: 1 = no 2 = almost not 3 = partly 4 = almost fully 5 = yes, fully	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5 <input type="checkbox"/>
7	What was the value of expected energy saving potential?	15 % of baseline/original consumption	
8	What was the (approx.) volume of investment costs for implementing energy efficiency measures?	330,000€	
9	What were the biggest barriers in the phase of project preparation?	complexity of EPC concept lack of information lack of trust quantify energy baseline raising finance other	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> please specify:
	How were the barriers chosen above overcome?	<i>Within the project preparation all barriers have been discussed with SEVEN and all inclarities have been clarified</i>	

4.6 Phase II – Procurement Procedure

1	How did the obtain information for preparation of the EPC project procurement?	<i>Similiar public procurement have been implemented in 2012 in our City, thus we knew the process. In addition we were supported by EPC facilitator SEVEN.</i>	
2	Were the above mentioned information sufficient and clear?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/> <i>If no, please comment why not:</i>
3	Did you have preparation assistance for the EPC procurement?	Yes <input checked="" type="checkbox"/> <i>If yes, please specify who assisted:</i> SEVEN	No <input type="checkbox"/>
4	Was the planned time schedule of the procurement process kept - or were there any delays?	Yes <input type="checkbox"/> <input checked="" type="checkbox"/> <i>If yes, how long was the major delay?</i> <i>Delay has been caused by the approval process of the procurement by the City council.</i>	No <input type="checkbox"/>
5	How long did it take to sign the contract between ESCO and customer (after the first publication of a contract notice)?	10	Months
6	How many ESCOs expressed their interest in the EPC procurement?	6 companies	
	How many ESCOs submitted their tenders (i.e. offers)?	5 offers	

7	Were ESCOs required to fulfil any qualification criteria?	Yes <input checked="" type="checkbox"/> <i>If yes, which ones?</i> <i>Standard formal qualification criteria plus providing reference projects.</i>	No <input type="checkbox"/>
8	Did the customer negotiate with the ESCOs the conditions of their tenders during the procurement process?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
9	What was the volume of savings provided by the winning tenderer (ESCO)?	19 % of baseline consumption	
10	How guarantees the winning tenderer the expected volume of savings?	<i>ESCO specific in the contract the achievable savings for different type soft energy.</i>	
11	What was the volume of the investment costs proposed in the winning tender?	430 000 €	
12	Who decided that the procurement procedure will be implemented?	City council	
	Was there an official approval required (e.g. by the City council etc.)?	Yes <input checked="" type="checkbox"/> <i>If yes, by whom?</i> <i>City council</i>	No <input type="checkbox"/>
13	Who decided on the final choice of the winning tenderer?	City council	
	Was there an official approval required (e.g. by the City council etc.) and if yes, by whom?	Yes <input checked="" type="checkbox"/> <i>If yes, by whom?</i> <i>City council</i>	No <input type="checkbox"/>
14	What were the biggest barriers during the procurement process?	<i>To decide between 2 - 3 good quality offers.</i>	
	How were the above mentioned barriers overcome?	<i>Detailed analysis and discussion of the all characteristics of the offers.</i>	
15	Were the expectations of the customer met within the procurement process?	on 1 to 5 scale: 1 = no 2 = almost not 3 = partly 4 = almost fully 5 = yes, fully	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input checked="" type="checkbox"/>

4.7 Phase III – Implementation and Operation

1	Did the ESCO introduce and explain the process of energy efficiency measures implementation to the customer sufficiently?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2	Did the ESCO verify the up to date statuses of energy systems in the building within the contract?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3	Did the customer find any differences in comparison with the tender, which was necessary to solve?	Yes <input type="checkbox"/> <i>If yes, how was it solved?</i>	No <input checked="" type="checkbox"/>
4	Did the ESCO prepare a design/concept of project documentation for the implementation phase?	Yes <input type="checkbox"/> <i>If yes, how was the quality (on 1 to 3 scale):</i> 1 <input checked="" type="checkbox"/> good, comprehensive	No <input type="checkbox"/>

		2 <input type="checkbox"/> substantial 3 <input type="checkbox"/> not substantial/unclear	
5	Was the project documentation for implementation of EE measures checked by an external expert company?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
6	If the ESCO had any sub-suppliers, how was the quality of those?	on 1 to 3 scale: 1 = good 2 = moderate 3 = poor	1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>
	Was it necessary to negotiate directly with the sub-suppliers?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
7	How long lasted the EE measures implementation phase?	12/2014 – 04/2015	
8	Time schedule of the EE measures implementation was kept or were there any delays?	Yes <input type="checkbox"/> <i>If yes, what was the lengths of major delay?</i>	No <input checked="" type="checkbox"/>
9	Was the implementation of EE measures checked by an external expert company?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
10	Were there any supervisor meetings between the ESCO and customer during implementation phase?	Yes <input checked="" type="checkbox"/> <i>If yes, how many?</i> 6	No <input type="checkbox"/>
11	Were there any significant problem(s) in relation to the EE measures implementation?	Yes <input type="checkbox"/> <i>If yes, what kind of problem and how was it solved?</i>	No <input checked="" type="checkbox"/>
12	Were installed EE measures transmitted into property of customer?	Yes <input checked="" type="checkbox"/> <i>If yes, if when?</i> 04/2015	No <input type="checkbox"/>
13	Had the client any comments to the EE measures implementation after its finalisation?	Yes <input checked="" type="checkbox"/> <i>If yes, what were kind of comments?</i> <i>Small comments.</i> <i>How were these reflected by ESCO?</i> <i>They were dealt with promptly by ESCO.</i>	No <input type="checkbox"/>
14	Were the actual investment costs different from than volume stipulated in the contract?	Yes <input type="checkbox"/> <i>If yes, what was the difference and the reason of it?</i> <i>How was the inconsistency solved?</i>	No <input checked="" type="checkbox"/>
15	Did the ESCO provide trainings for the operational personnel of the implemented EE measures sufficiently?	on 1 to 5 scale: 1 = no 2 = almost not 3 = partly 4 = almost fully 5 = yes	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input checked="" type="checkbox"/>
16	Were the overall expectations of the customer met – especially during the process of the EE measures	on 1 to 5 scale: 1 = no 2 = almost not 3 = partly 4 = almost fully	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>

	implementation?	5 = yes	5 <input checked="" type="checkbox"/>
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4.8 Phase IV - Measurement and Verification

1	Did the ESCO introduce and explain the process of measurement and verification to customer sufficiently?	on 1 to 5 scale: 1 = no 2 = almost not 3 = partly 4 = sufficient 5 = very sufficient	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5 <input type="checkbox"/>
2	Did the ESCO specify rules and obligations - in relation to measurement of energy consumption - clearly to the involved personnel?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3	Who is providing measurement of the operation of the installed equipment?	1 <input checked="" type="checkbox"/> ESCO (via data-transmission) 2 <input type="checkbox"/> ESCO (directly on site) 3 <input checked="" type="checkbox"/> Customer / caretaker of building	
4	Who is providing verification of energy consumption and savings?	
5	Is verification of consumption and savings provided according to guidelines stipulated in the tender?	Yes <input type="checkbox"/>	No <input type="checkbox"/> <i>If no, how was a change in the guidelines approved?</i>
6	Is verification provided according to the IPMVP (International Performance Measurement and Verification Protocol) or another standard?	1 <input checked="" type="checkbox"/> IPMVP 2 <input type="checkbox"/> ASHRAE Guideline 3 <input type="checkbox"/> FEMP Guideline 4 <input type="checkbox"/> National M&V Protocol 5 <input type="checkbox"/> Other – specify: 6 <input type="checkbox"/> Don't know	
7	How often is the verification of consumption and savings provided?	<i>Every year</i>	
8	How often is the customer informed on the energy savings achieved?	
9	Has the ESCO submitted to the customer a report on the achieved energy savings?	Yes <input type="checkbox"/> <i>If yes, how often?.....</i>	No <input checked="" type="checkbox"/>
10	What was the value of the achieved energy savings? % of baseline/original consumption	
11	Was the volume of energy savings reached <u>higher</u> than the guaranteed level of savings stipulated in the contract?	Yes <input type="checkbox"/> <i>If yes, how were the excess savings shared between ESCO and the customer?</i>	No <input type="checkbox"/>
12	Was the volume of savings reached <u>below</u> the guaranteed level of savings stipulated in the contract?	Yes <input type="checkbox"/> <i>If yes, was the difference compensated by ESCO and how?</i>	No <input type="checkbox"/>
13	Which main problems appeared during the measurement and verification phase?	

	How were these issues solved by the ESCO?	
14	Were the overall expectations of the customer met with respect to the actions taken by ESCO during the measurement and verification phase?	on 1 to 5 scale: 1 = no 2 = almost not 3 = partly 4 = almost fully 5 = yes	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>

Part C: Questionnaire for ESCO

Within the framework of the project TRANSPARENSE, which receives support from the program IEE (Intelligent Energy Europe) of the European Union, European EPC Code of Conduct has been developed (hereinafter Code) for energy service providers (ESCOs) implementing EPC projects. The objective of the Code is to increase the transparency of the EPC markets and ensure the high quality of the energy services provided by the ESCO. By adhering to the EPC core values and code of conduct, the ESCOs and customers develop a solid foundation for a working partnerships based on trust and confidence. They are expected to utilise the Code in order to further develop energy efficiency services to meet their goals and expectations which shall be evaluated at a later stage.

In addition, the developed EPC Code of Conduct will be tested and evaluated in EPC pilot projects. The outcome and results of this questionnaire will provide feedback on the Code and its usefulness.

Questionnaire filled in by

Name of the person	Martin Nádeníček
Organisation name	Amper Savings

Pilot project name i.e. facility name	Pool of buildings in the city of Moravska Trebova
Location (city, region)	Moravská Třebová
Country code	CZ

Below are listed the principles of the Code of Conduct for EPC. Please answer the questions for each principle:

1. The EPC provider delivers economically efficient savings

The EPC provider aims at an economically efficient combination of energy efficiency improvement measures. This combination maximises the net present value of an EPC project for the Client defined as the sum of all the discounted costs and benefits (especially operational cost savings) associated with implementing the project.

- A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

In our offer we tried to optimize our suggested measures in relation to reached energy savings and costs of purchase of this measures and to maximalise the NPV of our EPC project.

2. The EPC provider takes over the performance risks

The EPC provider assumes the contractually agreed performance risks of the project during the whole duration of the EPC contract (the "contract"). These include the risks of not achieving contractually agreed savings as described below as well as design risks, implementation risks and risks related to the operation of installed measures.

A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

We fully overtake the risks of not achieving contractually agreed savings. It's a standard condition of our EPC contracts.

3. Savings are guaranteed by the EPC provider and determined by M&V

The EPC provider guarantees that the contractually agreed level of savings will be achieved. If an EPC project fails to achieve performance specified in the contract, the EPC provider is obligated by the contract to compensate savings shortfalls that occurred over the life of the contract. The excess savings should be shared in a fair manner according to the methodology defined in the contract.

Contractually agreed savings as well as achieved savings are determined in a fair and transparent manner by Measurement and Verification (M&V) using appropriate methodology (such as IPMVP) as defined in the contract. The contractually agreed savings are determined based on data provided by the Client and realistic assumptions. The achieved savings are calculated as the difference between energy consumption and/or related costs before and after the implementation of energy efficiency improvement measures.

A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

We didn't encounter any problems or barriers with contractual methodology of measurement and verification of savings by using IPMVP. All of the key values of calculation of reference costs are exactly described and verified with the client.

4. The EPC provider supports long-term use of energy management

The EPC provider actively supports the Client in the implementation of an energy management system during the contract period and eventually after the contract period by agreement. This helps sustain the benefits from the project even after the contract period.

- A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

There is sometimes a partly unwillingness to cooperate from the maintenance staff of some customer's buildings with ESCO. Probably it's caused by fear of the loss of their job or just an absence of the will to do some new work.

Recommendation – to briefly describe purpose of the EPC project and the role of ESCO and try to get the staff on one boat e.g. through some motivation bonus program depending on additional energy savings in the building.

5. The relationship between the EPC provider and the Client is long-term, fair and transparent

The EPC provider works closely with the Client as partners with the common objective of achieving the contractually agreed level of savings. The EPC provider strives to keep its relationship long-term, fair and transparent.

Both the EPC provider and the Client provide access to their project-relevant information in a clear manner and both fulfil their obligations according to the contract terms. For instance, the EPC provider is committed to informing the Client about the results of measurement and verification of the savings, while the Client is committed to informing the EPC provider about any changes in the use and operation of its facilities during the contract duration that could affect energy demand.

- A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

The ratio of the participation of both contracting parties is 50:50, so there is a high motivation to cooperate in the long-term period and to keep trying to find some additional savings of energy or operating costs continuously.

6. All steps in the process of the EPC project are conducted lawfully and with integrity

The EPC provider and the Client comply with all laws and regulations that apply to the EPC project in the country in which it is implemented. The EPC provider and the Client avoid conflicts of interest and have a zero-tolerance policy to corruption and self-dealing.

A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

The tender for ESCO was fully under the law of public procurement and the client had a support in a facilitator so there was no possibility of any problems with laws or regulations.

7. The EPC provider supports the Client in financing of EPC project

The EPC provider supports the Client in finding the most suitable solution providing for project financing taking into account the relevant conditions of both parties. The capital to finance the EPC project can either be supplied out of the Client's own funds, by the EPC provider or by a third party. Provision of financing by the EPC provider is an option, not a necessary part of the EPC project.

A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

We provided financing of the measures to our client through the sell of our long term receivable which is the best way of financing of EPC project at present. Our client required help with the payment of VAT from the invoiced measures which wasn't in the budget of the client for this year so we provided him a loan with long term maturity.

8. The EPC provider ensures qualified staff for EPC project implementation

The EPC provider maintains a qualified staff in order to provide the right technical, commercial, legal and financial know-how and skills. It ensures that its experts have the adequate qualifications and capacities related to the preparation and implementation of the EPC project. Less experience on the Client's side can be balanced by a specialised advisory company (such as an EPC facilitator) that will steer it toward the correct implementation and procurement of the EPC project.

- A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Our company employs energy auditors with huge experiences with EPC projects, energy savings and their financing and in cooperation with the client's facilitator and maintenance staff is secured the optimal technical solution and implementation of the EPC project.

9. The EPC provider focuses on high quality and care in all phases of project implementation

The EPC provider uses well-designed procedures, high-quality and reliable equipment and products, and works with reliable sub-suppliers. It adheres to the principles of ethical business conduct, meets its obligations towards sub-suppliers, and conducts itself responsibly with respect to the Client and its representatives.

- A) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- B) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Our main priority is the long term cooperation with our clients and because we fully guarantee contractual savings to the clients, we use only the high quality equipment in our projects which eliminates the need of additional operating costs.

10. General Question about the Code of Conduct

- a) Was the Code of Conduct formulated in a clear and understandable way?

① fully

- b) If not, please describe suggestions for improvement:

The Code is clearly defined and reflects all requirements on ESCOs and clients in EPC projects.

Pilot Project Evaluation Pool of Prague Congress Center

In the following, please find attached the filled in evaluation questionnaires of pilot project Prague Congress Center.

PART A: Basic information on the project

Questionnaire filled in by

Name of the person	Jaroslav Marousek
Organisation name	SEVEn – The Energy Efficiency Center

Project description			
Pilot project name	Prague Congress Center		
Location (city, region)	Prague		
Country code	CZ		
Type of customer	<ul style="list-style-type: none"> Private 		
Sector	<ul style="list-style-type: none"> Other public organisations (culture, sport, etc.): culture 		
Number of buildings of each type	<ul style="list-style-type: none"> 1 congress center 1 hotel 1 administrative building 		
Main goal of the project	Reconstruction of energy system		
Measures (short description – max. 5 points)	<ul style="list-style-type: none"> Installation of cogeneration unit 500 kWe Improvement of control system ICR Exchange of light bulbs by LED lights Frequency control of electric motors Installation of new air-conditioning unit 		
If there are other important aspects of the project, innovations and client's advantages, not mentioned above, please, describe here	The contract includes model determining how the baseline energy consumption will be re-calculated in the case of building insulation in the future (which is foreseen now by the client).		
Timing	From	Till	Duration
	[YYYY-MM]	[YYYY-MM]	[No. of months]
Project identification	2013-10	2014-09	12
Acquisition time span of the project (<i>time needed to pursue the client or ESCO to agree on testing the CoC within a pilot project</i>)	2014-09	2014-09	1
Procurement procedure	2014-10	2015-07	10
Installation of energy efficiency measures	2015-07	2016-06	12
Contract duration	2015-07	2025-06	132
Period of repayment	2016-07	2025-06	120

Financing	
Total investment [EUR] <i>(without VAT)</i>	4,614,370
Co-financing <i>(if project is co-financed by the customer or public funds explain and provide real or estimated volumes in EUR)</i>	Customer is financing the whole amount of investment (energy management costs will be paid from the savings)
Guarantee of savings [EUR] <i>(without VAT)</i>	7,258,478

Quantitative evaluation		Baseline <i>(initially before the project)</i>	Annual savings	
			Guaranteed	Achieved <i>(yearly average of available data for 2014-15)</i>
Final consumption of heat	[MWh/a]	21,006	2,387	
Final consumption of power	[MWh/a]	15,026	7,382	
Primary energy	[MWh/a]	70,621	25,616	
GHG emissions	[tCO ₂ e/a]	15,254	5,533	
Total operational costs <i>(energy costs, water costs, maintenance etc.)</i>	[EUR/a]	2 678 473	898 499	

Part C: Questionnaire for ESCO

Within the framework of the project TRANSPARENSE, which receives support from the program IEE (Intelligent Energy Europe) of the European Union, European EPC Code of Conduct has been developed (hereinafter Code) for energy service providers (ESCOs) implementing EPC projects. The objective of the Code is to increase the transparency of the EPC markets and ensure the high quality of the energy services provided by the ESCO. By adhering to the EPC core values and code of conduct, the ESCOs and customers develop a solid foundation for a working partnerships based on trust and confidence. They are expected to utilise the Code in order to further develop energy efficiency services to meet their goals and expectations which shall be evaluated at a later stage.

In addition, the developed EPC Code of Conduct will be tested and evaluated in EPC pilot projects. The outcome and results of this questionnaire will provide feedback on the Code and its usefulness.

Questionnaire filled in by

Name of the person	Ivo Slavotínek
Organisation name	ENESA, a.s.

Pilot project name i.e. facility name	Kongresové centrum Praha – KCP
Location (city, region)	Prague
Country code	CZ

Below are listed the principles of the European Code of Conduct for EPC. Please answer the questions for each principle:

11. The EPC provider delivers economically efficient savings

The EPC provider aims at an economically efficient combination of energy efficiency improvement measures. This combination maximises the net present value of an EPC project for the Client defined as the sum of all the discounted costs and benefits (especially operational cost savings) associated with implementing the project.

- C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

No problems, this is our typical practice.

12. The EPC provider takes over the performance risks

The EPC provider assumes the contractually agreed performance risks of the project during the whole duration of the EPC contract (the "contract"). These include the risks of not achieving contractually agreed savings as described below as well as design risks, implementation risks and risks related to the operation of installed measures.

C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① *fully*

D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

NO barriers.

13. Savings are guaranteed by the EPC provider and determined by M&V

The EPC provider guarantees that the contractually agreed level of savings will be achieved. If an EPC project fails to achieve performance specified in the contract, the EPC provider is obligated by the contract to compensate savings shortfalls that occurred over the life of the contract. The excess savings should be shared in a fair manner according to the methodology defined in the contract.

Contractually agreed savings as well as achieved savings are determined in a fair and transparent manner by Measurement and Verification (M&V) using appropriate methodology (such as IPMVP) as defined in the contract. The contractually agreed savings are determined based on data provided by the Client and realistic assumptions. The achieved savings are calculated as the difference between energy consumption and/or related costs before and after the implementation of energy efficiency improvement measures.

C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① *fully*

D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

We provide the bank guarantee to support our commitment to compensate client in case of deficit savings

14. The EPC provider supports long-term use of energy management

The EPC provider actively supports the Client in the implementation of an energy management system during the contract period and eventually after the contract period by agreement. This helps sustain the benefits from the project even after the contract period.

- C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

We provide the energy management over contract term

15. The relationship between the EPC provider and the Client is long-term, fair and transparent

The EPC provider works closely with the Client as partners with the common objective of achieving the contractually agreed level of savings. The EPC provider strives to keep its relationship long-term, fair and transparent.

Both the EPC provider and the Client provide access to their project-relevant information in a clear manner and both fulfil their obligations according to the contract terms. For instance, the EPC provider is committed to informing the Client about the results of measurement and verification of the savings, while the Client is committed to informing the EPC provider about any changes in the use and operation of its facilities during the contract duration that could affect energy demand.

- C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

This is standard part of all EPC contracts in Czech Republic. I cannot imagine that these matters are not part of the contract. How we can guarantee savings if we do not have the access to the client premises. It does not have any sense.

16. All steps in the process of the EPC project are conducted lawfully and with integrity

The EPC provider and the Client comply with all laws and regulations that apply to the EPC project in the country in which it is implemented. The EPC provider and the Client avoid conflicts of interest and have a zero-tolerance policy to corruption and self-dealing.

- C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

No other way.

17. The EPC provider supports the Client in financing of EPC project

The EPC provider supports the Client in finding the most suitable solution providing for project financing taking into account the relevant conditions of both parties. The capital to finance the EPC project can either be supplied out of the Client's own funds, by the EPC provider or by a third party. Provision of financing by the EPC provider is an option, not a necessary part of the EPC project.

- C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

18. The EPC provider ensures qualified staff for EPC project implementation

The EPC provider maintains a qualified staff in order to provide the right technical, commercial, legal and financial know-how and skills. It ensures that its experts have the adequate qualifications and capacities related to the preparation and implementation of the EPC project. Less experience on the Client's side can be balanced by a specialised advisory company (such as an EPC facilitator) that will steer it toward the correct implementation and procurement of the EPC project.

- C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

19. The EPC provider focuses on high quality and care in all phases of project implementation

The EPC provider uses well-designed procedures, high-quality and reliable equipment and products, and works with reliable sub-suppliers. It adheres to the principles of ethical business conduct, meets its obligations towards sub-suppliers, and conducts itself responsibly with respect to the Client and its representatives.

- C) Have you implemented the principle within the pilot project /Scale Fully 1-5 Not at all

① fully

- D) What kind of problems/barriers have you encountered when implementing the pilot project and what is your recommendation to overcome them?

Free text box

KCP is very knowledgeable and experience client, therefore they required high quality equipment

20. General Question about the Code of Conduct

- c) Was the Code of Conduct formulated in a clear and understandable way?

① fully

- d) If not, please describe suggestions for improvement:

Free text box

We (ENESA) follow the Code of Conduct. The client should also be bind to follow the Code of conduct.

5 Appendix: Definitions and Glossary

Term	Definition
Client	means any natural or legal person to whom an EPC provider delivers energy service in the form of EPC
Energy Efficiency Directive (EED)	means Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency
energy efficiency improvement*	means increase in energy efficiency as a result of technological, behavioural and/or economic changes
energy efficiency*	means the ratio of output of performance, service, goods or energy, to input of energy
energy management system*	means a set of interrelated or interacting elements of a plan which sets an energy efficiency objective and a strategy to achieve that objective
energy performance contracting* (EPC)	means a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measure, verified and monitored during the whole term of the contract, where investments (work, supply or service) in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion, such as financial savings
energy savings*	means an amount of saved energy determined by measuring and/or estimating consumption before and after implementation of an energy efficiency improvement measure, whilst ensuring normalisation for external conditions that affect energy consumption
energy service*	the physical benefit, utility or good derived from a combination of energy with energy-efficient technology or with action, which may include the operations, maintenance and control necessary to deliver the service, which is delivered on the basis of a contract and in normal circumstances has proven to result in verifiable and measurable or estimable energy efficiency improvement or primary energy savings
energy service provider*	means a natural or legal person who delivers energy services or other energy efficiency improvement measures in a final customer's facility or premises
energy*	means all forms of energy products, combustible fuels, heat, renewable energy, electricity, or any other form of energy, as defined in Article 2(d) of Regulation (EC) No 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics
EPC provider	means an energy service provider who delivers energy services in the form of Energy Performance Contracting
savings	means energy savings and/or related financial savings; the financial savings include the costs of energy provision and can also include other operational costs, such as the costs of maintenance and workforce
The International Performance Measurement and Verification Protocol (IPMVP)	is the widely referenced framework for "measuring" energy or water savings and is available at www.evo-world.org

Notes:

*Definitions according to the Energy Efficiency Directive